**Subpart B—Table of Hazardous Materials and Special Provisions**

**§ 172.101 Purpose and use of hazardous materials table.**

(a) The Hazardous Materials Table (Table) in this section designates the materials listed therein as hazardous materials for the purpose of transportation of those materials. For each listed material, the Table identifies the hazard class or specifies that the material is forbidden in transportation, and gives the proper shipping name or directs the user to the preferred proper shipping name. In addition, the Table specifies or references requirements in this subchapter pertaining to labeling, packaging, quantity limits aboard aircraft and stowage of hazardous materials aboard vessels.

(b) *Column 1: Symbols.* Column 1 of the Table contains six symbols ("+", "A", "D", "G", "I" and "W") as follows:

(1) The plus (+) sign fixes the proper shipping name, hazard class and packing group for that entry without regard to whether the material meets the definition of that class, packing group or any other hazard class definition. When the plus sign is assigned to a proper shipping name in Column (1) of the §172.101 Table, it means that the material is known to pose a risk to humans. When a plus sign is assigned to mixtures or solutions containing a material where the hazard to humans is significantly different from that of the pure material or where no hazard to humans is posed, the material may be described using an alternative shipping name that represents the hazards posed by the material. An appropriate alternate proper shipping name and hazard class may be authorized by the Associate Administrator.

(2) The letter "A" denotes a material that is subject to the requirements of this subchapter only when offered or intended for transportation by aircraft, unless the material is a hazardous substance or a hazardous waste. A shipping description entry preceded by an "A" may be used to describe a material for other modes of transportation provided all applicable requirements for the entry are met.

(3) The letter "D" identifies proper shipping names which are appropriate for describing materials for domestic transportation but may be inappropriate for international transportation under the provisions of international regulations (e.g., IMO, ICAO). An alternate proper shipping name may be selected when either domestic or international transportation is involved.

(4) The letter "G" identifies proper shipping names for which one or more technical names of the hazardous material must be entered in parentheses, in association with the basic description. (See §172.203(k).)

(5) The letter "I" identifies proper shipping names which are appropriate for describing materials in international transportation. An alternate proper shipping name may be selected when only domestic transportation is involved.

(6) The letter "W" denotes a material that is subject to the requirements of this subchapter only when offered or intended for transportation by vessel, unless the material is a hazardous substance or a hazardous waste. A shipping description entry preceded by a "W" may be used to describe a material for other modes of transportation provided all applicable requirements for the entry are met.

(c) *Column 2: Hazardous materials descriptions and proper shipping names.* Column 2 lists the hazardous materials descriptions and proper shipping names of materials designated as hazardous materials. Modification of a proper shipping name may otherwise be required or authorized by this section. Proper shipping names are limited to those shown in Roman type (not italics).

(1) Proper shipping names may be used in the singular or plural and in either capital or lower case letters. Words may be alternatively spelled in the same manner as they appear in the ICAO Technical Instructions or the IMDG Code. For example “aluminum” may be spelled “aluminium” and “sulfur” may be spelled “sulphur”. However, the word “inflammable” may not be used in place of the word “flammable”.

(2) Punctuation marks and words in italics are not part of the proper shipping name, but may be used in addition to the proper shipping name. The word “or” in italics indicates that terms in the sequence may be used as the proper shipping name, as appropriate.

(3) The word “poison” or “poisonous” may be used interchangeably with the word “toxic” when only domestic transportation is involved. The abbreviation “n.o.i.” or “n.o.i.b.n.” may be used interchangeably with “n.o.s.”.

(4) Except for hazardous wastes, when qualifying words are used as part of the proper shipping name, their sequence in the package markings and shipping paper description is optional. However, the entry in the Table reflects the preferred sequence.

(5) When one entry references another entry by use of the word “see”, if both names are in Roman type, either name may be used as the proper shipping name (e.g., Ethyl alcohol, *see* Ethanol).

(6) When a proper shipping name includes a concentration range as part of the shipping description, the actual concentration, if it is within the range stated, may be used in place of the concentration range. For example, an aqueous solution of hydrogen peroxide containing 30 percent peroxide may be described as “Hydrogen peroxide, aqueous solution *with not less than 20 percent but not more than 40 percent hydrogen peroxide”* or “Hydrogen peroxide, aqueous solution *with 30 percent hydrogen peroxide”.*

(7) Use of the prefix “mono” is optional in any shipping name, when appropriate. Thus, Iodine monochloride may be used interchangeably with Iodine chloride. In “Glycerol alpha-monochlorohydrin” the term “mono” is considered a prefix to the term “chlorohydrin” and may be deleted.

(8) Use of the word “liquid” or “solid”. The word “liquid” or “solid” may be added to a proper shipping name when a hazardous material specifically listed by name may, due to differing physical states, be a liquid or solid. When the packaging specified in Column 8 is inappropriate for the physical state of the material, the table provided in paragraph (i)(4) of this section should be used to determine the appropriate packaging section.

(9) *Hazardous wastes.* If the word “waste” is not included in the hazardous material description in Column 2 of the Table, the proper shipping name for a hazardous waste (as defined in §171.8 of this subchapter), shall include the word “Waste” preceding the proper shipping name of the material. For example: Waste acetone.

(10) *Mixtures and solutions.* (i) A mixture or solution not identified specifically by name, comprised of a hazardous material identified in the Table by technical name and non-hazardous material, shall be described using the proper shipping name of the hazardous material and the qualifying word “mixture” or “solution”, as appropriate, unless—

(A) Except as provided in §172.101(i)(4) the packaging specified in Column 8 is inappropriate to the physical state of the material;

(B) The shipping description indicates that the proper shipping name applies only to the pure or technically pure hazardous material;

(C) The hazard class, packing group, or subsidiary hazard of the mixture or solution is different from that specified for the entry;

(D) There is a significant change in the measures to be taken in emergencies;

(E) The material is identified by special provision in Column 7 of the §172.101 Table as a material poisonous by inhalation; however, it no longer meets the definition of poisonous by inhalation or it falls within a different hazard zone than that specified in the special provision; or

(F) The material can be appropriately described by a shipping name that describes its intended application, such as “Coating solution”, “Extracts, flavoring” or “Compound, cleaning liquid”.

(ii) If one or more of the conditions specified in paragraph (c)(10)(i) of this section is satisfied, then a proper shipping name shall be selected as prescribed in paragraph (c)(12)(ii) of this section.

(iii) A mixture or solution not identified in the Table specifically by name, comprised of two or more hazardous materials in the same hazard class, shall be described using an appropriate shipping description (e.g., “Flammable liquid, n.o.s.”). The name that most appropriately describes the material shall be used; e.g., an alcohol not listed by its technical name in the Table shall be described as “Alcohol, n.o.s.” rather than “Flammable liquid, n.o.s.”. Some mixtures may be more appropriately described according to their application, such as “Coating solution” or “Extracts, flavoring liquid” rather than by an n.o.s. entry. Under the provisions of subparts C and D of this part, the technical names of at least two components most predominately contributing to the hazards of the mixture or solution may be required in association with the proper shipping name.

(11) Except for a material subject to or prohibited by §173.21, 173.54, 173.56(d), 173.56(e), 173.224(c) or 173.225(b) of this subchapter, a material that is considered to be a hazardous waste or a sample of a material for which the hazard class is uncertain and must be determined by testing may be assigned a tentative proper shipping name, hazard class, identification number and packing group, if applicable, based on the shipper's tentative determination according to:

(i) Defining criteria in this subchapter;

(ii) The hazard precedence prescribed in §173.2a of this subchapter;

(iii) The shipper's knowledge of the material;

(iv) In addition to paragraphs (c)(11)(i) through (iii) of this section, for a sample of a material other than a waste, the following must be met:

(A) Except when the word “Sample” already appears in the proper shipping name, the word “Sample” must appear as part of the proper shipping name or in association with the basic description on the shipping paper.

(B) When the proper shipping description for a sample is assigned a “G” in Column (1) of the §172.101 Table, and the primary constituent(s) for which the tentative classification is based are not known, the provisions requiring a technical name for the constituent(s) do not apply; and

(C) A sample must be transported in a combination packaging that conforms to the requirements of this subchapter that are applicable to the tentative packing group assigned, and may not exceed a net mass of 2.5 kg (5.5 pounds) per package.

Note to paragraph(c)(11): For the transportation of samples of self-reactive materials, organic peroxides, explosives or lighters, *see* §§173.224(c)(3), 173.225(c)(2), 173.56(d) or 173.308(b)(2) of this subchapter, respectively.

(12) Except when the proper shipping name in the Table is preceded by a plus (+)—

(i) If it is specifically determined that a material meets the definition of a hazard class, packing group or hazard zone, other than the class, packing group or hazard zone shown in association with the proper shipping name, or does not meet the defining criteria for a subsidiary hazard shown in Column 6 of the Table, the material shall be described by an appropriate proper shipping name listed in association with the correct hazard class, packing group, hazard zone, or subsidiary hazard for the material.

(ii) *Generic or n.o.s. descriptions.* If an appropriate technical name is not shown in the Table, selection of a proper shipping name shall be made from the generic or n.o.s. descriptions corresponding to the specific hazard class, packing group, hazard zone, or subsidiary hazard, if any, for the material. The name that most appropriately describes the material shall be used; e.g., an alcohol not listed by its technical name in the Table shall be described as “Alcohol, n.o.s.” rather than “Flammable liquid, n.o.s.”. Some mixtures may be more appropriately described according to their application, such as “Coating solution” or “Extracts, flavoring, liquid”, rather than by an n.o.s. entry, such as “Flammable liquid, n.o.s.” It should be noted, however, that an n.o.s. description as a proper shipping name may not provide sufficient information for shipping papers and package markings. Under the provisions of subparts C and D of this part, the technical name of one or more constituents which makes the product a hazardous material may be required in association with the proper shipping name.

(iii) *Multiple hazard materials.* If a material meets the definition of more than one hazard class, and is not identified in the Table specifically by name (e.g., acetyl chloride), the hazard class of the material shall be determined by using the precedence specified in §173.2a of this subchapter, and an appropriate shipping description (e.g., “Flammable liquid, corrosive n.o.s.”) shall be selected as described in paragraph (c)(12)(ii) of this section.

(iv) If it is specifically determined that a material is not a forbidden material and does not meet the definition of any hazard class, the material is not a hazardous material.

(13) *Self-reactive materials and organic peroxides.* A generic proper shipping name for a self-reactive material or an organic peroxide, as listed in Column 2 of the Table, must be selected based on the material's technical name and concentration, in accordance with the provisions of §§173.224 or 173.225 of this subchapter, respectively.

(14) A proper shipping name that describes all isomers of a material may be used to identify any isomer of that material if the isomer meets criteria for the same hazard class or division, subsidiary risk(s) and packing group, unless the isomer is specifically identified in the Table.

(15) Unless a hydrate is specifically listed in the Table, a proper shipping name for the equivalent anhydrous substance may be used, if the hydrate meets the same hazard class or division, subsidiary risk(s) and packing group.

(16) Unless it is already included in the proper shipping name in the §172.101 Table, the qualifying words “liquid” or “solid” may be added in association with the proper shipping name when a hazardous material specifically listed by name in the §172.101 Table may, due to the differing physical states of the various isomers of the material, be either a liquid or a solid (for example “Dinitrotoluenes, liquid” and “Dinitrotoluenes, solid”). Use of the words “liquid” or “solid” is subject to the limitations specified for the use of the words “mixture” or “solution” in paragraph (c)(10) of this section. The qualifying word “molten” may be added in association with the proper shipping name when a hazardous material, which is a solid in accordance with the definition in §171.8 of this subchapter, is offered for transportation in the molten state (for example, “Alkylphenols, solid, n.o.s., molten”).

(d) *Column 3: Hazard class or Division.* Column 3 contains a designation of the hazard class or division corresponding to each proper shipping name, or the word “Forbidden”.

(1) A material for which the entry in this column is “Forbidden” may not be offered for transportation or transported. This prohibition does not apply if the material is diluted, stabilized or incorporated in a device and it is classed in accordance with the definitions of hazardous materials contained in part 173 of this subchapter.

(2) When a reevaluation of test data or new data indicates a need to modify the “Forbidden” designation or the hazard class or packing group specified for a material specifically identified in the Table, this data should be submitted to the Associate Administrator.

(3) A basic description of each hazard class and the section reference for class definitions appear in §173.2 of this subchapter.

(4) Each reference to a Class 3 material is modified to read “Combustible liquid” when that material is reclassified in accordance with §173.150(e) or (f) of this subchapter or has a flash point above 60 °C (140 °F) but below 93 °C (200 °F).

(e) *Column 4: Identification number.* Column 4 lists the identification number assigned to each proper shipping name. Those preceded by the letters “UN” are associated with proper shipping names considered appropriate for international transportation as well as domestic transportation. Those preceded by the letters “NA” are associated with proper shipping names not recognized for international transportation, except to and from Canada. Identification numbers in the “NA9000” series are associated with proper shipping names not appropriately covered by international hazardous materials (dangerous goods) transportation standards, or not appropriately addressed by international transportation standards for emergency response information purposes, except for transportation between the United States and Canada.

(f) *Column 5: Packing group.* Column 5 specifies one or more packing groups assigned to a material corresponding to the proper shipping name and hazard class for that material. Class 2, Class 7, Division 6.2 (other than regulated medical wastes), and ORM-D materials, do not have packing groups. Packing Groups I, II and III indicate the degree of danger presented by the material is either great, medium or minor, respectively. If more than one packing group is indicated for an entry, the packing group for the hazardous material is determined using the criteria for assignment of packing groups specified in subpart D of part 173. When a reevaluation of test data or new data indicates a need to modify the specified packing group(s), the data should be submitted to the Associate Administrator. Each reference in this column to a material which is a hazardous waste or a hazardous substance, and whose proper shipping name is preceded in Column 1 of the Table by the letter “A” or “W”, is modified to read “III” on those occasions when the material is offered for transportation or transported by a mode in which its transportation is not otherwise subject to requirements of this subchapter.

(g) *Column 6: Labels.* Column 6 specifies codes which represent the hazard warning labels required for a package filled with a material conforming to the associated hazard class and proper shipping name, unless the package is otherwise excepted from labeling by a provision in subpart E of this part, or part 173 of this subchapter. The first code is indicative of the primary hazard of the material. Additional label codes are indicative of subsidiary hazards. Provisions in §172.402 may require that a label other than that specified in Column 6 be affixed to the package in addition to that specified in

Column 6. No label is required for a material classed as a combustible liquid or for a Class 3 material that is reclassed as a combustible liquid. For “Empty” label requirements, see §173.428 of this subchapter. The codes contained in Column 6 are defined according to the following table:

**Label Substitution Table**

| Label code | Label name |
|---|---|
| 1 | Explosive |
| 1.1[1] | Explosive 1.1[1] |
| 1.2[1] | Explosive 1.2[1] |
| 1.3[1] | Explosive 1.3[1] |
| 1.4[1] | Explosive 1.4[1] |
| 1.5[1] | Explosive 1.5[1] |
| 1.6[1] | Explosive 1.6[1] |
| 2.1 | Flammable Gas |
| 2.2 | Non-Flammable Gas |
| 2.3 | Poison Gas |
| 3 | Flammable Liquid |
| 4.1 | Flammable Solid |
| 4.2 | Spontaneously Combustible |
| 4.3 | Dangerous When Wet |
| 5.1 | Oxidizer |
| 5.2 | Organic Peroxide |
| 6.1 (inhalation hazard, Zone A or B) | Poison Inhalation Hazard |
| 6.1 (other than inhalation hazard, Zone A or B)[2] | Poison |
| 6.2 | Infectious substance |
| 7 | Radioactive |
| 8 | Corrosive |
| 9 | Class 9 |

[1]Refers to the appropriate compatibility group letter.

[2]The packing group for a material is indicated in column 5 of the table.

(h) *Column 7: Special provisions.* Column 7 specifies codes for special provisions applicable to hazardous materials. When Column 7 refers to a special provision for a hazardous material, the meaning and requirements of that special provision are as set forth in §172.102 of this subpart.

(i) *Column 8: Packaging authorizations.* Columns 8A, 8B and 8C specify the applicable sections for exceptions, non-bulk packaging requirements and bulk packaging requirements, respectively, in part 173 of this subchapter. Columns 8A, 8B and 8C are completed in a manner which indicates that "§173." precedes the designated numerical entry. For example, the entry "202" in Column 8B associated with the proper shipping name "Gasoline" indicates that for this material conformance to non-bulk packaging requirements prescribed in §173.202 of this subchapter is required. When packaging requirements are specified, they are in addition to the standard requirements for all packagings prescribed in §173.24 of this subchapter and any other applicable requirements in subparts A and B of part 173 of this subchapter.

(1) Exceptions. Column 8A contains exceptions from some of the requirements of this subchapter. The referenced exceptions are in addition to those specified in subpart A of part 173 and elsewhere in this subchapter. A "None" in this column means no packaging exceptions are authorized, except as may be provided by special provisions in Column 7.

(2) Non-bulk packaging. Column 8B references the section in part 173 of this subchapter which prescribes packaging requirements for non-bulk packagings. A "None" in this column means non-bulk packagings are not authorized, except as may be provided by special provisions in Column 7. Each reference in this column to a material which is a hazardous waste or a hazardous substance, and whose proper shipping name is preceded in Column 1 of the Table by the letter "A" or "W", is modified to include "§173.203" or "§173.213", as appropriate for liquids and solids, respectively, on those occasions when the material is offered for transportation or transported by a mode in which its transportation is not otherwise subject to the requirements of this subchapter.

(3) *Bulk packaging.* Column (8C) specifies the section in part 173 of this subchapter that prescribes packaging requirements for bulk packagings, subject to the limitations, requirements, and additional authorizations of Columns (7) and (8B). A "None" in Column (8C) means bulk packagings are not authorized, except as may be provided by special provisions in Column (7) and in packaging authorizations Column (8B). Additional authorizations and limitations for use of UN portable tanks are set forth in Column 7. For each reference in this column to a material that is a hazardous waste or a hazardous substance, and whose proper shipping name is preceded in Column 1 of the Table by the letter "A" or "W" and that is offered for transportation or transported by a mode in which its transportation is not otherwise subject to the requirements of this subchapter:

(4) For a hazardous material which is specifically named in the Table and whose packaging sections specify packagings not applicable to the form of the material (e.g., packaging specified is for solid material and the material is being offered for transportation in a liquid form) the following table should be used to determine the appropriate packaging section:

| Packaging section reference for solid materials | Corresponding packaging section for liquid materials |
|---|---|
| §173.187 | §173.181 |
| §173.211 | §173.201 |
| §173.212 | §173.202 |
| §173.213 | §173.203 |
| §173.240 | §173.241 |
| §173.242 | §173.243 |

(5) *Cylinders.* For cylinders, both non-bulk and bulk packaging authorizations are set forth in Column (8B). Notwithstanding a designation of "None" in Column (8C), a bulk cylinder may be used when specified through the section reference in Column (8B).

(j) *Column 9: Quantity limitations.* Columns 9A and 9B specify the maximum quantities that may be offered for transportation in one package by passenger-carrying aircraft or passenger-carrying rail car (Column 9A) or by cargo aircraft only (Column 9B), subject to the following:

(1) "Forbidden" means the material may not be offered for transportation or transported in the applicable mode of transport.

(2) The quantity limitation is “net” except where otherwise specified, such as for “Consumer commodity” which specifies “30 kg gross.”

(3) When articles or devices are specifically listed by name, the net quantity limitation applies to the entire article or device (less packaging and packaging materials) rather than only to its hazardous components.

(4) A package offered or intended for transportation by aircraft and which is filled with a material forbidden on passenger-carrying aircraft but permitted on cargo aircraft only, or which exceeds the maximum net quantity authorized on passenger-carrying aircraft, shall be labelled with the CARGO AIRCRAFT ONLY label specified in §172.448 of this part.

(5) The total net quantity of hazardous material for an outer non-bulk packaging that contains more than one hazardous material may not exceed the lowest permitted maximum net quantity per package as shown in Column 9A or 9B, as appropriate. If one material is a liquid and one is a solid, the maximum net quantity must be calculated in kilograms. *See* §173.24a(c)(1)(iv).

(k) *Column 10: Vessel stowage requirements.* Column 10A [Vessel stowage] specifies the authorized stowage locations on board cargo and passenger vessels. Column 10B [Other provisions] specifies codes for stowage requirements for specific hazardous materials. The meaning of each code in Column 10B is set forth in §176.84 of this subchapter. Section 176.63 of this subchapter sets forth the physical requirements for each of the authorized locations listed in Column 10A. (For bulk transportation by vessel, see 46 CFR parts 30 to 40, 70, 98, 148, 151, 153 and 154.) The authorized stowage locations specified in Column 10A are defined as follows:

(1) Stowage category “A” means the material may be stowed “on deck” or “under deck” on a cargo vessel and on a passenger vessel.

(2) Stowage category “B” means—

(i) The material may be stowed “on deck” or “under deck” on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and

(ii) “On deck only” on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

(3) Stowage category “C” means the material must be stowed “on deck only” on a cargo vessel and on a passenger vessel.

(4) Stowage category “D” means the material must be stowed “on deck only” on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers or one passenger per each 3 m of overall vessel length, but the material is prohibited on passenger vessels in which the limiting number of passengers is exceeded.

(5) Stowage category “E” means the material may be stowed “on deck” or “under deck” on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length, but is prohibited from carriage on passenger vessels in which the limiting number of passengers is exceeded.

(6) Stowage category “01” means the material may be stowed “on deck” or “under deck” on a cargo vessel (up to 12 passengers) and on a passenger vessel.

(7) Stowage category “02” means the material may be stowed “on deck” or “under deck” on a cargo vessel (up to 12 passengers) and “on deck” in closed cargo transport units or “under deck” in closed cargo transport units on a passenger vessel.

(8) Stowage category “03” means the material may be stowed “on deck” or “under deck” on a cargo vessel (up to 12 passengers) and “on deck” in closed cargo transport units on a passenger vessel.

(9) Stowage category “04” means the material may be stowed “on deck” or “under deck” on a cargo vessel (up to 12 passengers) but the material is prohibited on a passenger vessel.

(10) Stowage category “05” means the material may be stowed “on deck” in closed cargo transport units or “under deck” on a cargo vessel (up to 12 passengers) and on a passenger vessel.

(11) Stowage category “06” means the material may be stowed “on deck” in closed cargo transport units or “under deck” on a cargo vessel (up to 12 passengers) and “on deck” in closed cargo transport units or “under deck” in closed cargo transport units on a passenger vessel.

(12) Stowage category “07” means the material may be stowed “on deck” in closed cargo transport units or “under deck” on a cargo vessel (up to 12 passengers) and “on deck” only in closed cargo transport units on a passenger vessel.

(13) Stowage category “08” means the material may be stowed “on deck” in closed cargo transport units or “under deck” on a cargo vessel (up to 12 passengers) but the material is prohibited on a passenger vessel.

(14) Stowage category “09” means the material may be stowed “on deck only” in closed cargo transport units or “under deck” in closed cargo transport units on a cargo vessel (up to 12 passengers) and on a passenger vessel.

(15) Stowage category “10” means the material may be stowed “on deck” in closed cargo transport units or “under deck” in closed cargo transport units on a cargo vessel (up to 12 passengers) and “on deck” only in closed cargo transport units on a passenger vessel.

(16) Stowage category “11” means the material may be stowed “on deck” in closed cargo transport units or “under deck” in magazine stowage type “c” on a cargo vessel (up to 12 passengers) and “on deck” only in closed cargo transport units on a passenger vessel.

(17) Stowage category “12” means the material may be stowed “on deck” in closed cargo transport units or “under deck” in magazine stowage type “c” on a cargo vessel (up to 12 passengers) but the material is prohibited on a passenger vessel.

(18) Stowage category “13” means the material may be stowed “on deck” in closed cargo transport units or “under deck” in magazine stowage type “A” on a cargo vessel (up to 12 passengers) and “on deck” only in closed cargo transport units on a passenger vessel.

(19) Stowage category “14” means the material may be stowed “on deck” in closed cargo transport units on a cargo vessel (up to 12 passengers) but the material is prohibited on a passenger vessel.

(20) Stowage category “15” means the material may be stowed “on deck” in closed cargo transport units or “under deck” in closed cargo transport units on a cargo vessel (up to 12 passengers) but the material is prohibited on a passenger vessel.

(l) *Changes to the Table.* (1) Unless specifically stated otherwise in a rule document published in theFederal Registeramending the Table—

(i) Such a change does not apply to the shipment of any package filled prior to the effective date of the amendment; and

(ii) Stocks of preprinted shipping papers and package markings may be continued in use, in the manner previously authorized, until depleted or for a one-year period, subsequent to the effective date of the amendment, whichever is less.

(2) Except as otherwise provided in this section, any alteration of a shipping description or associated entry which is listed in the §172.101 Table must receive prior written approval from the Associate Administrator.

(3) The proper shipping name of a hazardous material changed in the May 6, 1997 final rule, in effect on October 1, 1997, only by the addition or omission of the word “compressed,” “inhibited,” “liquefied” or “solution” may continue to be used to comply with package marking requirements, until January 1, 2003.

**§172.101 Hazardous Materials Table**

| Symbols | Hazardous materials descriptions and proper shipping names | Hazard class or Division | Identification Numbers | PG | Label Codes | Special provisions (§172.102) | (8) | (9) | (10) Vessel stowage | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Location | Other |
| | | | | | | | Packaging | Quantity limitations | | |

| | | | | | | | (§173.***) | | | (see §§173.27 and 175.75) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Exceptions | Non-bulk | Bulk | Passenger aircraft/rail | Cargo aircraft only | | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8A) | (8B) | (8C) | (9A) | (9B) | (10A) | (10B) |
| | *Accellerene, see* p-Nitrosodimethylaniline | | | | | | | | | | | | |
| | *Accumulators, electric, see* Batteries, wet *etc* | | | | | | | | | | | | |
| | *Accumulators, pressurized, pneumatic or hydraulic (containing non-flamable gas), see* Articles pressurized, pneumatic *or* hydraulic (containing non-flamable gas) | | | | | | | | | | | | |
| | Acetal | 3 | UN1088 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | E | |
| | Acetaldehyde | 3 | UN1089 | I | 3 | A3, B16, T11, TP2, TP7 | None | 201 | 243 | Forbidden | 30 L | E | |
| A | Acetaldehyde ammonia | 9 | UN1841 | III | 9 | IB8, IP3, IP7, T1, TP33 | 155 | 204 | 240 | 200 kg | 200 kg | A | 34 |
| | Acetaldehyde oxime | 3 | UN2332 | III | 3 | B1, IB3, T4, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Acetic acid, glacial *or* Acetic acid solution, *with more than 80 percent acid, by mass* | 8 | UN2789 | II | 8, 3 | A3, A6, A7, A10, B2, IB2, T7, TP2 | 154 | 202 | 243 | 1 L | 30 L | A | |
| | Acetic acid solution, *not less than 50 percent but not more than 80 percent acid, by mass* | 8 | UN2790 | II | 8 | A3, A6, A7, A10, B2, IB2, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | A | |
| | Acetic acid solution, *with more than 10 percent and less than 50 percent acid, by mass* | 8 | UN2790 | III | 8 | IB3, T4, TP1 | 154 | 203 | 242 | 5 L | 60 L | A | |
| | Acetic anhydride | 8 | UN1715 | II | 8, 3 | A3, A6, A7, A10, B2, IB2, T7, TP2 | 154 | 202 | 243 | 1 L | 30 L | A | 40 |
| | Acetone | 3 | UN1090 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Acetone cyanohydrin, stabilized | 6.1 | UN1541 | I | 6.1 | 2, B9, B14, B32, B76, B77, N34, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 25, 40, 52, 53 |
| | Acetone oils | 3 | UN1091 | II | 3 | IB2, T4, TP1, TP8 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Acetonitrile | 3 | UN1648 | II | 3 | IB2, T7, TP2 | 150 | 202 | 242 | 5 L | 60 L | B | 40 |
| | *Acetyl acetone peroxide with more than 9 percent by mass active oxygen* | Forbidden | | | | | | | | | | | |
| | *Acetyl benzoyl peroxide, solid, or with more than 40 percent in solution* | Forbidden | | | | | | | | | | | |
| | Acetyl bromide | 8 | UN1716 | II | 8 | B2, IB2, T8, TP2, TP12 | 154 | 202 | 242 | 1 L | 30 L | C | 40 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Acetyl chloride | 3 | UN1717 | II | 3, 8 | A3, A6, A7, IB1, N34, T8, TP2, TP12 | 150 | 202 | 243 | 1 L | 5 L | B | 40 |
| | *Acetyl cyclohexanesulfonyl peroxide, with more than 82 percent wetted with less than 12 percent water* | Forbidden | | | | | | | | | | | |
| | Acetyl iodide | 8 | UN1898 | II | 8 | B2, IB2, T7, TP2, TP13 | 154 | 202 | 242 | 1 L | 30 L | C | 40 |
| | Acetyl methyl carbinol | 3 | UN2621 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *Acetyl peroxide, solid, or with more than 25 percent in solution* | Forbidden | | | | | | | | | | | |
| | Acetylene, dissolved | 2.1 | UN1001 | | 2.1 | N86, N88 | None | 303 | None | Forbidden | 15 kg | D | 25, 40, 57 |
| | *Acetylene (liquefied)* | Forbidden | | | | | | | | | | | |
| | *Acetylene silver nitrate* | Forbidden | | | | | | | | | | | |
| | *Acetylene, solvent free* | Forbidden | | | | | | | | | | | |
| | *Acetylene tetrabromide, see* Tetrabromoethane | | | | | | | | | | | | |
| | *Acid butyl phosphate, see* Butyl acid phosphate | | | | | | | | | | | | |
| | Acid, sludge, *see* Sludge acid | | | | | | | | | | | | |
| | Acridine | 6.1 | UN2713 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Acrolein dimer, stabilized | 3 | UN2607 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | 40 |
| | Acrolein, stabilized | 6.1 | UN1092 | I | 6.1, 3 | 1, B9, B14, B30, B42, B72, B77, T22, TP2, TP7, TP13, TP38, TP44 | None | 226 | 244 | Forbidden | Forbidden | D | 40 |
| | Acrylamide, solid | 6.1 | UN2074 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 12 |
| | Acrylamide solution | 6.1 | UN3426 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | 12 |
| | Acrylic acid, stabilized | 8 | UN2218 | II | 8, 3 | B2, IB2, T7, TP2 | 154 | 202 | 243 | 1 L | 30 L | C | 25, 40 |
| | Acrylonitrile, stabilized | 3 | UN1093 | I | 3, 6.1 | B9, T14, TP2, TP13 | None | 201 | 243 | Forbidden | 30 L | E | 40 |
| | *Actuating cartridge, explosive, see* Cartridges, power device | | | | | | | | | | | | |
| | Adhesives, *containing a flammable liquid* | 3 | UN1133 | I | 3 | B42, T11, TP1, TP8, TP27 | 150 | 201 | 243 | 1 L | 30 L | B | |
| | | | | II | 3 | 149, B52, IB2, T4, TP1, TP8 | 150 | 173 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, B52, IB3, T2, TP1 | 150 | 173 | 242 | 60 L | 220 L | A | |
| | Adiponitrile | 6.1 | UN2205 | III | 6.1 | IB3, T3, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Aerosols, *corrosive, Packing Group II or III, (each not exceeding 1 L capacity)* | 2.2 | UN1950 | | 2.2, 8 | A34 | 306 | None | None | 75 kg | 150 kg | A | 48, 87, 126 |
| | Aerosols, *flammable, (each not exceeding 1 L capacity)* | 2.1 | UN1950 | | 2.1 | N82 | 306 | None | None | 75 kg | 150 kg | A | 48, 87, 126 |
| | Aerosols, flammable, n.o.s. *(engine starting fluid) (each not exceeding 1 L capacity)* | 2.1 | UN1950 | | 2.1 | N82 | 306 | 304 | None | Forbidden | 150 kg | A | 48, 87, 126 |
| | Aerosols, *non-flammable,(each not exceeding 1 L capacity)* | 2.2 | UN1950 | | 2.2 | | 306 | None | None | 75 kg | 150 kg | A | 48, 87, 126. |
| | Aerosols, *poison, (each not exceeding 1 L capacity)* | 2.2 | UN1950 | | 2.2, 6.1 | | 306 | None | None | Forbidden | Forbidden | A | 48, 87, 126 |
| I | Air bag inflators, *or* Air bag modules, *or* Seat-belt pretensioners. | 1.4G | UN0503 | II | 1.4G | 161 | None | 62 | None | Forbidden | 75 kg | 02 | |
| | Air bag inflators, *or* Air bag modules, *or* Seat-belt pretensioners. | 9 | UN3268 | III | 9 | 160 | 166 | 166 | 166 | 25 kg | 100 kg | A | |
| | Air, compressed | 2.2 | UN1002 | | 2.2 | 78 | 306, 307 | 302 | 302 | 75 kg | 150 kg | A | |
| | Air, refrigerated liquid, *(cryogenic liquid)* | 2.2 | UN1003 | | 2.2, 5.1 | T75, TP5, TP22 | 320 | 316 | 318, 319 | Forbidden | 150 kg | D | 51 |
| | Air, refrigerated liquid, *(cryogenic liquid) non-pressurized* | 2.2 | UN1003 | | 2.2, 5.1 | T75, TP5, TP22 | 320 | 316 | 318, 319 | Forbidden | Forbidden | D | 51 |
| | *Aircraft engines (including turbines), see* Engines, internal combustion | | | | | | | | | | | | |
| | *Aircraft evacuation slides, see* Life saving appliances *etc* | | | | | | | | | | | | |
| | Aircraft hydraulic power unit fuel tank *(containing a mixture of anhydrous hydrazine and monomethyl hydrazine) (M86 fuel)* | 3 | UN3165 | I | 3, 6.1, 8 | | None | 172 | None | Forbidden | 42 L | E | |
| | *Aircraft survival kits, see* Life saving appliances *etc* | | | | | | | | | | | | |
| G | Alcoholates solution, n.o.s., *in alcohol* | 3 | UN3274 | II | 3, 8 | IB2 | 150 | 202 | 243 | 1 L | 5 L | B | |
| | Alcoholic beverages | 3 | UN3065 | II | 3 | 24, 149, B1, IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | A | |
| | | | | III | 3 | 24, B1, IB3, N11, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Alcohols, n.o.s. | 3 | UN1987 | I | 3 | 172, T11, TP1, TP8, TP27 | None | 201 | 243 | 1 L | 30 L | E | |
| | | | | II | 3 | 172, IB2, T7, TP1, TP8, TP28 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | 172, B1, IB3, T4, TP1, TP29 | 150 | 203 | 242 | 60 L | 220 L | A. | |
| G | Alcohols, flammable, toxic n.o.s | 3 | UN1986 | I | 3, 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | Forbidden | 30 L | E | 40 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | II | 3, 6.1 | IB2, T11, TP2, TP27 | 150 | 202 | 243 | 1 L | 60 L | B | 40 |
| | | | | III | 3, 6.1 | B1, IB3, T7, TP1, TP28 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Aldehydes, n.o.s. | 3 | UN1989 | I | 3 | T11, TP1, TP27 | None | 201 | 243 | 1 L | 30 L | E | |
| | | | | II | 3 | IB2, T7, TP1, TP8, TP28 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, IB3, T4, TP1, TP29 | 150 | 203 | 242 | 60 L | 220 L | A | |
| G | Aldehydes, flammable, toxic, n.o.s. | 3 | UN1988 | I | 3, 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | Forbidden | 30 L | E | 40 |
| | | | | II | 3, 6.1 | IB2, T11, TP2, TP27 | 150 | 202 | 243 | 1 L | 60 L | B | 40 |
| | | | | III | 3, 6.1 | B1, IB3, T7, TP1, TP28 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Aldol | 6.1 | UN2839 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | 12 |
| G | Alkali metal alcoholates, self-heating, corrosive, n.o.s. | 4.2 | UN3206 | II | 4.2, 8 | 64, A7, IB5, IP2, T3, TP33 | None | 212 | 242 | 15 kg | 50 kg | B | |
| | | | | III | 4.2, 8 | 64, A7, IB8, IP3, T1, TP33 | None | 213 | 242 | 25 kg | 100 kg | B | |
| | Alkali metal alloys, liquid, n.o.s. | 4.3 | UN1421 | I | 4.3 | A2, A3, A7, B48, N34 | None | 201 | 244 | Forbidden | 1 L | D | 52 |
| | Alkali metal amalgam, liquid | 4.3 | UN1389 | I | 4.3 | A2, A3, A7, N34 | None | 201 | 244 | Forbidden | 1 L | D | 40, 52 |
| | Alkali metal amalgam, solid | 4.3 | UN3401 | I | 4.3 | IB4, IP1, N40, T9, TP7, TP33 | None | 211 | 242 | Forbidden | 15 kg | D | 52 |
| | Alkali metal amides | 4.3 | UN1390 | II | 4.3 | A6, A7, A8, A19, A20, IB7, IP2, T3, TP33 | 151 | 212 | 241 | 15 kg | 50 kg | E | 40, 52 |
| | Alkali metal dispersions, *or* Alkaline earth metal dispersions | 4.3 | UN1391 | I | 4.3 | A2, A3, A7 | None | 201 | 244 | Forbidden | 1 L | D | 52 |
| | *Alkaline corrosive liquids, n.o.s., see* Caustic alkali liquids, n.o.s. | | | | | | | | | | | | |
| G | Alkaline earth metal alcoholates, n.o.s. | 4.2 | UN3205 | II | 4.2 | 65, A7, IB6, IP2, T3, TP33 | None | 212 | 241 | 15 kg | 50 kg | B | |
| | | | | III | 4.2 | 65, A7, IB8, IP3, T1, TP33 | None | 213 | 241 | 25 kg | 100 kg | B | |
| | Alkaline earth metal alloys, n.o.s. | 4.3 | UN1393 | II | 4.3 | A19, IB7, IP2, T3, TP33 | 151 | 212 | 241 | 15 kg | 50 kg | E | 52 |
| | Alkaline earth metal amalgams, liquid | 4.3 | UN1392 | I | 4.3 | A19, N34, N40 | None | 201 | 244 | Forbidden | 1 L | E | 40, 52 |
| | Alkaline earth metal amalgams, solid | 4.3 | UN3402 | I | 4.3 | A19, N34, N40, T9, | None | 211 | 242 | Forbidden | 15 kg | D | 52 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | TP7, TP33 | | | | | | | |
| G | Alkaloids, liquid, n.o.s., *or* Alkaloid salts, liquid, n.o.s. | 6.1 | UN3140 | I | 6.1 | A4, T14, TP2, TP27 | None | 201 | 243 | 1 L | 30 L | A | |
| | | | | II | 6.1 | IB2, T11, TP2, TP27 | 153 | 202 | 243 | 5 L | 60 L | A | |
| | | | | III | 6.1 | IB3, T7, TP1, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | |
| G | Alkaloids, solid, n.o.s. *or* Alkaloid salts, solid, n.o.s. *poisonous* | 6.1 | UN1544 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Alkyl sulfonic acids, liquid *or* Aryl sulfonic acids, liquid *with more than 5 percent free sulfuric acid* | 8 | UN2584 | II | 8 | B2, IB2, T8, TP2, TP12, TP13 | 154 | 202 | 242 | 1 L | 30 L | B | |
| | Alkyl sulfonic acids, liquid *or* Aryl sulfonic acids, liquid *with not more than 5 percent free sulfuric acid* | 8 | UN2586 | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | B | |
| | Alkyl sulfonic acids, solid *or* Aryl sulfonic acids, solid, *with more than 5 percent free sulfuric acid* | 8 | UN2583 | II | 8 | IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | |
| | Alkyl sulfonic acids, solid *or* Aryl sulfonic acids, solid *with not more than 5 percent free sulfuric acid* | 8 | UN2585 | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | |
| | Alkylphenols, liquid, n.o.s. *(including C2-C12 homologues)* | 8 | UN3145 | I | 8 | A6, T14, TP2 | None | 201 | 243 | 0.5 L | 2.5 L | B | |
| | | | | II | 8 | IB2, T11, TP2, TP27 | 154 | 202 | 242 | 1 L | 30 L | B | |
| | | | | III | 8 | IB3, T7, TP1, TP28 | 154 | 203 | 241 | 5 L | 60 L | A | |
| | Alkylphenols, solid, n.o.s. *(including C2-C12 homologues)* | 8 | UN2430 | I | 8 | IB7, IP1, T6, TP33 | None | 211 | 242 | 1 kg | 25 kg | B | |
| | | | | II | 8 | IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | B | |
| | | | | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | |
| | Alkylsulfuric acids | 8 | UN2571 | II | 8 | B2, IB2, T8, TP2, TP12, TP13, TP28 | 154 | 202 | 242 | 1 L | 30 L | C | 14 |
| | *Allethrin, see* Pesticides, liquid, toxic, n.o.s. | | | | | | | | | | | | |
| | Allyl acetate | 3 | UN2333 | II | 3, 6.1 | IB2, T7, TP1, TP13 | 150 | 202 | 243 | 1 L | 60 L | E | 40 |
| | Allyl alcohol | 6.1 | UN1098 | I | 6.1, 3 | 2, B9, B14, B32, B74, B77, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 40 |
| | Allyl bromide | 3 | UN1099 | I | 3, 6.1 | T14, TP2, TP13 | None | 201 | 243 | Forbidden | 30 L | B | 40 |
| | Allyl chloride | 3 | UN1100 | I | 3, 6.1 | T14, TP2, TP13 | None | 201 | 243 | Forbidden | 30 L | E | 40 |
| | *Allyl chlorocarbonate, see* Allyl chloroformate | | | | | | | | | | | | |
| | Allyl chloroformate | 6.1 | UN1722 | I | 6.1, 3, | 2, B9, B14, B32, B74, | None | 227 | 244 | Forbidden | Forbidden | D | 40 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 8 | N41, T20, TP2, TP13, TP38, TP45 | | | | | | | |
| | Allyl ethyl ether | 3 | UN2335 | II | 3, 6.1 | IB2, T7, TP1, TP13 | 150 | 202 | 243 | 1 L | 60 L | E | 40 |
| | Allyl formate | 3 | UN2336 | I | 3, 6.1 | T14, TP2, TP13 | None | 201 | 243 | Forbidden | 30 L | E | 40 |
| | Allyl glycidyl ether | 3 | UN2219 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Allyl iodide | 3 | UN1723 | II | 3, 8 | A3, A6, IB1, N34, T7, TP2, TP13 | 150 | 202 | 243 | 1 L | 5 L | B | 40 |
| | Allyl isothiocyanate, stabilized | 6.1 | UN1545 | II | 6.1, 3 | A3, A7, IB2, T7, TP2 | None | 202 | 243 | Forbidden | 60 L | D | 40 |
| | Allylamine | 6.1 | UN2334 | I | 6.1, 3 | 2, B9, B14, B32, B74, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 40 |
| | Allyltrichlorosilane, stabilized | 8 | UN1724 | II | 8, 3 | A7, B2, B6, IB2, N34, T7, TP2, TP13 | None | 202 | 243 | Forbidden | 30 L | C | 40 |
| | Aluminum alkyl halides, liquid | 4.2 | UN3052 | I | 4.2, 4.3 | 173, B9, B11, T21, TP2, TP7 | None | 181 | 244 | Forbidden | Forbidden | D | 134 |
| | Aluminum alkyl halides, solid | 4.2 | UN3461 | I | 4.2, 4.3 | 173, T21, TP7, TP33 | None | 181 | 244 | Forbidden | Forbidden | D | 134 |
| | Aluminum alkyl hydrides | 4.2 | UN3076 | I | 4.2, 4.3 | 173, B9, B11, T21, TP2, TP7 | None | 181 | 244 | Forbidden | Forbidden | D | |
| | Aluminum alkyls | 4.2 | UN3051 | I | 4.2, 4.3 | 173, B9, B11, T21, TP2, TP7 | None | 181 | 244 | Forbidden | Forbidden | D | |
| | Aluminum borohydride *or* Aluminum borohydride in devices | 4.2 | UN2870 | I | 4.2, 4.3 | B11, T21, TP7, TP33 | None | 181 | 244 | Forbidden | Forbidden | D | |
| | Aluminum bromide, anhydrous | 8 | UN1725 | II | 8 | IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | 40 |
| | Aluminum bromide, solution | 8 | UN2580 | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | |
| | Aluminum carbide | 4.3 | UN1394 | II | 4.3 | A20, IB7, IP2, N41, T3, TP33 | 151 | 212 | 242 | 15 kg | 50 kg | A | 52 |
| | Aluminum chloride, anhydrous | 8 | UN1726 | II | 8 | IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | 40 |
| | Aluminum chloride, solution | 8 | UN2581 | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | |
| | *Aluminum dross, wet or hot* | Forbidden | | | | | | | | | | | |
| | Aluminum ferrosilicon powder | 4.3 | UN1395 | II | 4.3, 6.1 | A19, IB5, IP2, T3, TP33 | 151 | 212 | 242 | 15 kg | 50 kg | A | 39, 40, 52, 53, 85, 103 |
| | | | | III | 4.3, 6.1 | A19, A20, IB4 | 151 | 213 | 241 | 25 kg | 100 kg | A | 39, 40, 52, 53, 85, 103 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Aluminum hydride | 4.3 | UN2463 | I | 4.3 | A19, N40 | None | 211 | 242 | Forbidden | 15 kg | E | |
| D | Aluminum, molten | 9 | NA9260 | III | 9 | IB3, T1, TP3 | None | None | 247 | Forbidden | Forbidden | D | |
| | Aluminum nitrate | 5.1 | UN1438 | III | 5.1 | A1, A29, IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | |
| | *Aluminum phosphate solution, see* Corrosive liquids, *etc* | | | | | | | | | | | | |
| | Aluminum phosphide | 4.3 | UN1397 | I | 4.3, 6.1 | A8, A19, N40 | None | 211 | 242 | Forbidden | 15 kg | E | 40, 52, 85 |
| | Aluminum phosphide pesticides | 6.1 | UN3048 | I | 6.1 | A8, IB7, IP1, T6, TP33 | None | 211 | 242 | Forbidden | 15 kg | E | 40, 85 |
| | Aluminum powder, coated | 4.1 | UN1309 | II | 4.1 | IB8, IP2, IP4, T3, TP33 | 151 | 212 | 240 | 15 kg | 50 kg | A | 13, 39, 52, 53, 74, 101 |
| | | | | III | 4.1 | IB8, IP3, T1, TP33 | 151 | 213 | 240 | 25 kg | 100 kg | A | 13, 39, 52, 53, 74, 101 |
| | Aluminum powder, uncoated | 4.3 | UN1396 | II | 4.3 | A19, A20, IB7, IP2, T3, TP33 | 151 | 212 | 242 | 15 kg | 50 kg | A | 39, 52, 53 |
| | | | | III | 4.3 | A19, A20, IB8, IP4, T1, TP33 | 151 | 213 | 241 | 25 kg | 100 kg | A | 39, 52, 53 |
| | Aluminum resinate | 4.1 | UN2715 | III | 4.1 | IB6, T1, TP33 | 151 | 213 | 240 | 25 kg | 100 kg | A | |
| | Aluminum silicon powder, uncoated | 4.3 | UN1398 | III | 4.3 | A1, A19, IB8, IP4, T1, TP33 | 151 | 213 | 241 | 25 kg | 100 kg | A | 39, 40, 52, 53, 85, 103 |
| | Aluminum smelting by-products *or* Aluminum remelting by-products | 4.3 | UN3170 | II | 4.3 | 128, B115, IB7, IP2, T3, TP33 | None | 212 | 242 | 15 kg | 50 kg | B | 85, 103 |
| | | | | III | 4.3 | 128, B115, IB8, IP4, T1, TP33 | None | 213 | 241 | 25 kg | 100 kg | B | 85, 103 |
| | *Amatols, see* Explosives, blasting, type B | | | | | | | | | | | | |
| G | Amines, flammable, corrosive, n.o.s. *or* Polyamines, flammable, corrosive, n.o.s. | 3 | UN2733 | I | 3, 8 | T14, TP1, TP27 | None | 201 | 243 | 0.5 L | 2.5 L | D | 40 |
| | | | | II | 3, 8 | IB2, T11, TP1, TP27 | 150 | 202 | 243 | 1 L | 5 L | B | 40 |
| | | | | III | 3, 8 | B1, IB3, T7, TP1, TP28 | 150 | 203 | 242 | 5 L | 60 L | A | 40 |
| G | Amines, flammable, corrosive, n.o.s. *or* Polyamines, flammable, corrosive, n.o.s. | 3 | UN2733 | I | 3, 8 | T14, TP1, TP27 | None | 201 | 243 | 0.5 L | 2.5 L | D | 40, 52. |
| | | | | II | 3, 8 | IB2, T11, TP1, TP27 | 150 | 202 | 243 | 1 L | 5 L | B | 40, 52. |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | III | 3, 8 | B1, IB3, T7, TP1, TP28 | 150 | 203 | 242 | 5 L | 60 L | A | 40, 52. |
| | | | | II | 8, 3 | IB2, T11, TP2, TP27 | None | 202 | 243 | 1 L | 30 L | A | 52 |
| G | Amines, liquid, corrosive, n.o.s., *or* Polyamines, liquid, corrosive, n.o.s. | 8 | UN2735 | I | 8 | A3, A6, B10, N34, T14, TP2, TP27 | None | 201 | 243 | 0.5 L | 2.5 L | A | 52 |
| | | | | II | 8 | B2, IB2, T11, TP1, TP27 | 154 | 202 | 242 | 1 L | 30 L | A | 52 |
| | | | | III | 8 | IB3, T7, TP1, TP28 | 154 | 203 | 241 | 5 L | 60 L | A | 52 |
| G | Amines, solid, corrosive, n.o.s., *or* Polyamines, solid, corrosive n.o.s. | 8 | UN3259 | I | 8 | IB7, IP1, T6, TP33 | None | 211 | 242 | 1 kg | 25 kg | A | 52 |
| | | | | II | 8 | IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | 52 |
| | | | | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | 52 |
| | 2-Amino-4-chlorophenol | 6.1 | UN2673 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | 2-Amino-5-diethylaminopentane | 6.1 | UN2946 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | 2-Amino-4,6-Dinitrophenol, wetted *with not less than 20 percent water by mass* | 4.1 | UN3317 | I | 4.1 | 23, A8, A19, A20, N41 | None | 211 | None | 1 kg | 15 kg | E | 28, 36 |
| | 2-(2-Aminoethoxy) ethanol | 8 | UN3055 | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | |
| | N-Aminoethylpiperazine | 8 | UN2815 | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | 12 |
| + | Aminophenols (o-; m-; p-) | 6.1 | UN2512 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | *Aminopropyldiethanolamine, see* Amines, *etc* | | | | | | | | | | | | |
| | *n-Aminopropylmorpholine, see* Amines, *etc* | | | | | | | | | | | | |
| | Aminopyridines *(o-; m-; p-)* | 6.1 | UN2671 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | B | 12, 40, 52. |
| I | Ammonia, anhydrous | 2.3 | UN1005 | | 2.3, 8 | 4, N87, T50 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40, 52, 57 |
| D | Ammonia, anhydrous | 2.2 | UN1005 | | 2.2 | 13, T50 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40, 52, 57 |
| I | Ammonia solution, *relative density less than 0.880 at 15 degrees C in water, with more than 50 percent ammonia* | 2.3 | UN3318 | | 2.3, 8 | 4, N87, T50 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40, 52, 57 |
| D | Ammonia solution, *relative density less than 0.880 at 15 degrees C in water, with more than 50 percent ammonia* | 2.2 | UN3318 | | 2.2 | 13, T50 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40, 52, 57 |
| | Ammonia solutions, *relative density less than 0.880 at 15 degrees C in water, with more than 35 percent but not more than 50 percent ammonia* | 2.2 | UN2073 | | 2.2 | N87 | 306 | 304 | 314, 315 | Forbidden | 150 kg | E | 40, 52, 57 |
| | Ammonia solution, *relative density between 0.880 and 0.957 at 15 degrees C in water, with more than 10 percent but not more than 35* | 8 | UN2672 | III | 8 | IB3, IP8, T7, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | 40, 52, 85 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *percent ammonia* | | | | | | | | | | | | |
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| | * * * * * * * | | | | | | | | | | | | |
| | Ammonium arsenate | 6.1 | UN1546 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 53 |
| | *Ammonium azide* | Forbidden | | | | | | | | | | | |
| | *Ammonium bifluoride, solid, see* Ammonium hydrogen difluoride, solid | | | | | | | | | | | | |
| | *Ammonium bifluoride solution, see* Ammonium hydrogen difluoride, solution | | | | | | | | | | | | |
| | *Ammonium bromate* | Forbidden | | | | | | | | | | | |
| | *Ammonium chlorate* | Forbidden | | | | | | | | | | | |
| | Ammonium dichromate | 5.1 | UN1439 | II | 5.1 | IB8, IP2, IP4, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 52 |
| | Ammonium dinitro-o-cresolate, solid | 6.1 | UN1843 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | B | 36, 65, 66, 77 |
| | Ammonium dinitro-o-cresolate solution | 6.1 | UN3424 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | B | 36, 66, 78, 91 |
| | | | | III | 6.1 | IB2, T7, TP2 | 153 | 203 | 241 | 60 L | 220 L | A | 36, 66, 78, 91 |
| | Ammonium fluoride | 6.1 | UN2505 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 52 |
| | Ammonium fluorosilicate | 6.1 | UN2854 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 52 |
| | *Ammonium fulminate* | Forbidden | | | | | | | | | | | |
| | Ammonium hydrogen sulfate | 8 | UN2506 | II | 8 | IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | 40 |
| | Ammonium hydrogendifluoride, solid | 8 | UN1727 | II | 8 | IB8, IP2, IP4, N34, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | 25, 40, 52 |
| | Ammonium hydrogendifluoride, solution | 8 | UN2817 | II | 8, 6.1 | IB2, N34, T8, TP2, TP12, TP13 | 154 | 202 | 243 | 1 L | 30 L | B | 40 |
| | | | | III | 8, 6.1 | IB3, N3, T4, TP1, TP12, TP13 | 154 | 203 | 241 | 5 L | 60 L | B | 40, 95 |
| | *Ammonium hydrosulfide, solution, see* Ammonium sulfide solution | | | | | | | | | | | | |
| D | Ammonium hydroxide, *see* Ammonia solutions, *etc* | | | | | | | | | | | | |
| | Ammonium metavanadate | 6.1 | UN2859 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 44, 89, 100, 141 |
| | Ammonium nitrate based fertilizer | 5.1 | UN2067 | III | 5.1 | 52, 150, IB8, IP3, T1, | 152 | 213 | 240 | 25 kg | 100 kg | B | 48, 59, 60, |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | TP33 | | | | | | | 66, 117 |
| A W | Ammonium nitrate based fertilizer | 9 | UN2071 | III | 9 | 132, IB8, IP3 | 155 | 213 | 240 | 200 kg | 200 kg | A | |
| | Ammonium nitrate emulsion *or* Ammonium nitrate suspension *or* Ammonium nitrate gel, *intermediate for blasting explosives* | 5.1 | UN3375 | II | 5.1 | 147, 163 | None | 214 | 214 | Forbidden | Forbidden | D | 48, 59, 60, 66, 124 |
| D | Ammonium nitrate-fuel oil mixture *containing only prilled ammonium nitrate and fuel oil* | 1.5D | NA0331 | II | 1.5D | | None | 62 | None | Forbidden | Forbidden | 10 | 19E |
| | Ammonium nitrate, liquid *(hot concentrated solution)* | 5.1 | UN2426 | | 5.1 | B5, T7 | None | None | 243 | Forbidden | Forbidden | D | 59, 60 |
| | Ammonium nitrate, *with more than 0.2 percent combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance* | 1.1D | UN0222 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | 19E |
| | Ammonium nitrate, *with not more than 0.2% total combustible material, including any organic substance, calculated as carbon to the exclusion of any other added substance* | 5.1 | UN1942 | III | 5.1 | A1, A29, IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | 48, 59, 60, 116 |
| | *Ammonium nitrite* | Forbidden | | | | | | | | | | | |
| | Ammonium perchlorate | 1.1D | UN0402 | II | 1.1D | 107 | None | 62 | None | Forbidden | Forbidden | 10 | 19E |
| | Ammonium perchlorate | 5.1 | UN1442 | II | 5.1 | 107, A9, IB6, IP2, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | E | 58, 69 |
| | *Ammonium permanganate* | Forbidden | | | | | | | | | | | |
| | Ammonium persulfate | 5.1 | UN1444 | III | 5.1 | A1, A29, IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | |
| | Ammonium picrate, *dry or wetted with less than 10 percent water, by mass* | 1.1D | UN0004 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | 5E, 19E |
| | Ammonium picrate, wetted *with not less than 10 percent water, by mass* | 4.1 | UN1310 | I | 4.1 | 23, A2, N41 | None | 211 | None | 0.5 kg | 0.5 kg | D | 28, 36 |
| | Ammonium polysulfide, solution | 8 | UN2818 | II | 8, 6.1 | IB2, T7, TP2, TP13 | 154 | 202 | 243 | 1 L | 30 L | B | 12, 40, 52 |
| | | | | III | 8, 6.1 | IB3, T4, TP1, TP13 | 154 | 203 | 241 | 5 L | 60 L | B | 12, 40, 52 |
| | Ammonium polyvanadate | 6.1 | UN2861 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 44, 89, 100, 141 |
| | *Ammonium silicofluoride, see* Ammonium fluorosilicate | | | | | | | | | | | | |
| | Ammonium sulfide solution | 8 | UN2683 | II | 8, 6.1, 3 | IB1, T7, TP2, TP13 | 154 | 202 | 243 | 1 L | 30 L | B | 12, 22, 52, 100 |
| | *Ammunition, blank, see* Cartridges for weapons, blank | | | | | | | | | | | | |
| | Ammunition, illuminating *with or without burster, expelling charge or propelling charge* | 1.2G | UN0171 | II | 1.2G | | | 62 | None | Forbidden | Forbidden | 03 | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ammunition, illuminating *with or without burster, expelling charge or propelling charge* | 1.3G | UN0254 | II | 1.3G | | | 62 | None | Forbidden | Forbidden | 03 | |
| | Ammunition, illuminating *with or without burster, expelling charge or propelling charge* | 1.4G | UN0297 | II | 1.4G | | | 62 | None | Forbidden | 75 kg | 02 | |
| | Ammunition, incendiary *liquid or gel, with burster, expelling charge or propelling charge* | 1.3J | UN0247 | II | 1.3J | | | 62 | None | Forbidden | Forbidden | 04 | 23E |
| | *Ammunition, incendiary (water-activated contrivances) with burster, expelling charge or propelling charge, see* Contrivances, water-activated, etc. | | | | | | | | | | | | |
| | Ammunition, incendiary, white phosphorus, *with burster, expelling charge or propelling charge* | 1.2H | UN0243 | II | 1.2H | | | 62 | None | Forbidden | Forbidden | 08 | 8E, 14E, 15E, 17E |
| | Ammunition, incendiary, white phosphorus, *with burster, expelling charge or propelling charge* | 1.3H | UN0244 | II | 1.3H | | | 62 | None | Forbidden | Forbidden | 08 | 8E, 14E, 15E, 17E |
| | Ammunition, incendiary *with or without burster, expelling charge, or propelling charge* | 1.2G | UN0009 | II | 1.2G | | | 62 | None | Forbidden | Forbidden | 03 | |
| | Ammunition, incendiary *with or without burster, expelling charge, or propelling charge* | 1.3G | UN0010 | II | 1.3G | | | 62 | None | Forbidden | Forbidden | 03 | |
| | Ammunition, incendiary *with or without burster, expelling charge or propelling charge* | 1.4G | UN0300 | II | 1.4G | | | 62 | None | Forbidden | 75 kg | 02 | |
| | Ammunition, practice | 1.4G | UN0362 | II | 1.4G | | | 62 | None | Forbidden | 75 kg | 02 | |
| | Ammunition, practice | 1.3G | UN0488 | II | 1.3G | | | 62 | None | Forbidden | Forbidden | 03 | |
| | Ammunition, proof | 1.4G | UN0363 | II | 1.4G | | | 62 | None | Forbidden | 75 kg | 02 | |
| | *Ammunition, rocket, see* Warheads, rocket *etc* | | | | | | | | | | | | |
| | *Ammunition, SA (small arms), see* Cartridges for weapons, *etc* | | | | | | | | | | | | |
| | *Ammunition, smoke (water-activated contrivances), white phosphorus, with burster, expelling charge or propelling charge, see* Contrivances, water-activated, etc. (UN 0248) | | | | | | | | | | | | |
| | *Ammunition, smoke (water-activated contrivances), without white phosphorus or phosphides, with burster, expelling charge or propelling charge, see* Contrivances, water-activated, etc. (UN 0249) | | | | | | | | | | | | |
| | Ammunition smoke, white phosphorus *with burster,expelling charge, or propelling charge* | 1.2H | UN0245 | II | 1.2H | | | 62 | None | Forbidden | Forbidden | 08 | 8E, 14E, 15E, 17E |
| | Ammunition, smoke, white phosphorus *with burster, expelling charge, or propelling charge* | 1.3H | UN0246 | II | 1.3H | | | 62 | None | Forbidden | Forbidden | 08 | 8E, 14E, 15E, 17E |
| | Ammunition, smoke *with or without burster, expelling charge or* | 1.2G | UN0015 | II | 1.2G | | | 62 | None | Forbidden | Forbidden | | 8E, 17E, |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *propelling charge* | | | | | | | | | | | | 20E |
| | Ammunition, smoke *with or without burster, expelling charge or propelling charge* | 1.3G | UN0016 | II | 1.3G | | | 62 | None | Forbidden | Forbidden | | 8E, 17E, 20E |
| | Ammunition, smoke *with or without burster, expelling charge or propelling charge* | 1.4G | UN0303 | II | 1.4G | | | 62 | None | Forbidden | 75 kg | | 7E, 8E, 14E, 15E, 17E |
| | *Ammunition, sporting, see* Cartridges for weapons, etc. (UN 0012; UN 0328; UN 0339) | | | | | | | | | | | | |
| | Ammunition, tear-producing, non-explosive, *without burster or expelling charge, non-fuzed* | 6.1 | UN2017 | II | 6.1, 8 | | None | 212 | None | Forbidden | 50 kg | E | 13, 40 |
| | Ammunition, tear-producing *with burster, expelling charge or propelling charge* | 1.2G | UN0018 | II | 1.2G, 8, 6.1 | | | 62 | None | Forbidden | Forbidden | | 8E, 17E, 20E |
| | Ammunition, tear-producing *with burster, expelling charge or propelling charge* | 1.3G | UN0019 | II | 1.3G, 8, 6.1 | | | 62 | None | Forbidden | Forbidden | | 8E, 17E, 20E |
| | Ammunition, tear-producing *with burster, expelling charge or propelling charge* | 1.4G | UN0301 | II | 1.4G, 8, 6.1 | | | 62 | None | Forbidden | 75 kg | | 7E, 8E, 14E, 15E, 17E |
| | Ammunition, toxic, non-explosive, *without burster or expelling charge, non-fuzed* | 6.1 | UN2016 | II | 6.1 | | None | 212 | None | Forbidden | 100 kg | E | 13, 40 |
| | *Ammunition, toxic (water-activated contrivances), with burster, expelling charge or propelling charge, see* Contrivances, water-activated, *etc* | | | | | | | | | | | | |
| G | Ammunition, toxic *with burster, expelling charge, or propelling charge* | 1.2K | UN0020 | II | 1.2K, 6.1 | | | 62 | None | Forbidden | Forbidden | 08 | 8E, 14E, 15E, 17E |
| G | Ammunition, toxic *with burster, expelling charge, or propelling charge* | 1.3K | UN0021 | II | 1.3K, 6.1 | | | 62 | None | Forbidden | Forbidden | 08 | 8E, 14E, 15E, 17E |
| | Amyl acetates | 3 | UN1104 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Amyl acid phosphate | 8 | UN2819 | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | |
| | Amyl butyrates | 3 | UN2620 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Amyl chlorides | 3 | UN1107 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Amyl formates | 3 | UN1109 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Amyl mercaptans | 3 | UN1111 | II | 3 | A3, A6, IB2, T4, TP1 | None | 202 | 242 | 5 L | 60 L | B | 95, 102 |
| | n-Amyl methyl ketone | 3 | UN1110 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Amyl nitrate | 3 | UN1112 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | 40 |
| | Amyl nitrites | 3 | UN1113 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | E | 40 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Amylamines | 3 | UN1106 | II | 3, 8 | IB2, T7, TP1 | 150 | 202 | 243 | 1 L | 5 L | B | |
| | | | | III | 3, 8 | B1, IB3, T4, TP1 | 150 | 203 | 242 | 5 L | 60 L | A | |
| | Amyltrichlorosilane | 8 | UN1728 | II | 8 | A7, B2, B6, IB2, N34, T7, TP2, TP13 | None | 202 | 242 | Forbidden | 30 L | C | 40 |
| | Anhydrous ammonia, *see* Ammonia, anhydrous | | | | | | | | | | | | |
| | *Anhydrous hydrofluoric acid, see* Hydrogen fluoride, anhydrous | | | | | | | | | | | | |
| + | Aniline | 6.1 | UN1547 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | 40, 52 |
| | Aniline hydrochloride | 6.1 | UN1548 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | *Aniline oil, see* Aniline | | | | | | | | | | | | |
| | Anisidines | 6.1 | UN2431 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | Anisole | 3 | UN2222 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Anisoyl chloride | 8 | UN1729 | II | 8 | B2, B4, IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | |
| | *Anti-freeze, liquid, see* Flammable liquids, n.o.s. | | | | | | | | | | | | |
| | *Antimonous chloride, see* Antimony trichloride | | | | | | | | | | | | |
| | Antimony compounds, inorganic, liquid, n.o.s. | 6.1 | UN3141 | III | 6.1 | 35, IB3, T7, TP1, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | Antimony compounds, inorganic, solid, n.o.s. | 6.1 | UN1549 | III | 6.1 | 35, IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Antimony lactate | 6.1 | UN1550 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Antimony pentachloride, liquid | 8 | UN1730 | II | 8 | B2, IB2, T7, TP2 | None | 202 | 242 | 1 L | 30 L | C | 40 |
| | Antimony pentachloride, solutions | 8 | UN1731 | II | 8 | B2, IB2, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | C | 40 |
| | | | | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | C | 40 |
| | Antimony pentafluoride | 8 | UN1732 | II | 8, 6.1 | A3, A6, A7, A10, IB2, N3, N36, T7, TP2 | None | 202 | 243 | Forbidden | 30 L | D | 44, 89, 100, 141 |
| | Antimony potassium tartrate | 6.1 | UN1551 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Antimony powder | 6.1 | UN2871 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | *Antimony sulfide and a chlorate, mixtures of* | Forbidden | | | | | | | | | | | |
| | *Antimony sulfide, solid, see* Antimony compounds, inorganic, n.o.s. | | | | | | | | | | | | |
| | Antimony trichloride, liquid | 8 | UN1733 | II | 8 | B2, IB2 | 154 | 202 | 242 | 1 L | 30 L | C | 40 |
| | Antimony trichloride, solid | 8 | UN1733 | II | 8 | IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | 40. |
| | *Aqua ammonia, see* Ammonia solution, *etc* | | | | | | | | | | | | |

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| | Argon, compressed | 2.2 | UN1006 | | 2.2 | | 306 | 302 | 314, 315 | 75 kg | 150 kg | A | |
| | Argon, refrigerated liquid *(cryogenic liquid)* | 2.2 | UN1951 | | 2.2 | T75, TP5 | 320 | 316 | 318 | 50 kg | 500 kg | B | |
| | Arsenic | 6.1 | UN1558 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Arsenic acid, liquid | 6.1 | UN1553 | I | 6.1 | T20, TP2, TP7, TP13 | None | 201 | 243 | 1 L | 30 L | B | 46 |
| | Arsenic acid, solid | 6.1 | UN1554 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Arsenic bromide | 6.1 | UN1555 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 12, 40 |
| | *Arsenic chloride, see* Arsenic trichloride | | | | | | | | | | | | |
| | Arsenic compounds, liquid, n.o.s. *inorganic, including arsenates, n.o.s.; arsenites, n.o.s.; arsenic sulfides, n.o.s.; and organic compounds of arsenic, n.o.s.* | 6.1 | UN1556 | I | 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40, 137 |
| | | | | II | 6.1 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40, 137 |
| | | | | III | 6.1 | IB3, T7, TP2, TP28 | 153 | 203 | 241 | 60 L | 220 L | B | 40, 137 |
| | Arsenic compounds, solid, n.o.s. *inorganic, including arsenates, n.o.s.; arsenites, n.o.s.; arsenic sulfides, n.o.s.; and organic compounds of arsenic, n.o.s.* | 6.1 | UN1557 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | 137 |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 137 |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 137 |
| | Arsenic pentoxide | 6.1 | UN1559 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | *Arsenic sulfide and a chlorate, mixtures of* | Forbidden | | | | | | | | | | | |
| | Arsenic trichloride | 6.1 | UN1560 | I | 6.1 | 2, B9, B14, B32, B74, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | B | 40 |
| | Arsenic trioxide | 6.1 | UN1561 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | *Arsenic, white, solid, see* Arsenic trioxide | | | | | | | | | | | | |
| | Arsenical dust | 6.1 | UN1562 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Arsenical pesticides, liquid, flammable, toxic, *flash point less than 23 degrees C* | 3 | UN2760 | I | 3, 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | Forbidden | 30 L | B | 40 |
| | | | | II | 3, 6.1 | IB2, T11, TP2, TP13, TP27 | 150 | 202 | 243 | 1 L | 60 L | B | 40 |
| | Arsenical pesticides, liquid, toxic | 6.1 | UN2994 | I | 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1 | IB2, T11, TP2, TP13, | 153 | 202 | 243 | 5 L | 60 L | B | 40 |

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| | | | | | | TP27 | | | | | | | |
| | | | | III | 6.1 | IB3, T7, TP2, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | 40 |
| | Arsenical pesticides, liquid, toxic, flammable, *flash point not less than 23 degrees C* | 6.1 | UN2993 | I | 6.1, 3 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1, 3 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1, 3 | B1, IB3, T7, TP2, TP28 | 153 | 203 | 242 | 60 L | 220 L | A | 40 |
| | Arsenical pesticides, solid, toxic | 6.1 | UN2759 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | 40 |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 40 |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 40 |
| | *Arsenious acid, solid, see* Arsenic trioxide | | | | | | | | | | | | |
| | *Arsenious and mercuric iodide solution, see* Arsenic compounds, liquid, n.o.s. | | | | | | | | | | | | |
| | Arsine | 2.3 | UN2188 | | 2.3, 2.1 | 1 | None | 192 | 245 | Forbidden | Forbidden | D | 40 |
| | Articles, explosive, extremely insensitive *or* Articles, EEI | 1.6N | UN0486 | II | 1.6N | | None | 62 | None | Forbidden | Forbidden | 07 | |
| G | Articles, explosive, n.o.s | 1.4S | UN0349 | II | 1.4S | | None | 62 | None | 25 kg | 100 kg | 05 | |
| G | Articles, explosive, n.o.s | 1.4B | UN0350 | II | 1.4B | | None | 62 | None | Forbidden | Forbidden | 06 | |
| G | Articles, explosive, n.o.s | 1.4C | UN0351 | II | 1.4C | | None | 62 | None | Forbidden | 75 kg | 06 | |
| G | Articles, explosive, n.o.s | 1.4D | UN0352 | II | 1.4D | | None | 62 | None | Forbidden | 75 kg | 06 | |
| G | Articles, explosive, n.o.s | 1.4G | UN0353 | II | 1.4G | | None | 62 | None | Forbidden | 75 kg | 06 | |
| G | Articles, explosive, n.o.s | 1.1L | UN0354 | II | 1.1L | | None | 62 | None | Forbidden | Forbidden | 08 | 8E, 14E, 15E, 17E. |
| G | Articles, explosive, n.o.s | 1.2L | UN0355 | II | 1.2L | | None | 62 | None | Forbidden | Forbidden | 08 | 8E, 14E, 15E, 17E. |
| G | Articles, explosive, n.o.s | 1.3L | UN0356 | II | 1.3L | | None | 62 | None | Forbidden | Forbidden | 08 | 8E, 14E, 15E, 17E. |
| G | Articles, explosive, n.o.s | 1.1C | UN0462 | II | 1.1C | | None | 62 | None | Forbidden | Forbidden | 07 | |
| G | Articles, explosive, n.o.s | 1.1D | UN0463 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 07 | |
| G | Articles, explosive, n.o.s | 1.1E | UN0464 | II | 1.1E | | None | 62 | None | Forbidden | Forbidden | 07 | |
| G | Articles, explosive, n.o.s | 1.1F | UN0465 | II | 1.1F | | None | 62 | None | Forbidden | Forbidden | 08 | |
| G | Articles, explosive, n.o.s | 1.2C | UN0466 | II | 1.2C | | None | 62 | None | Forbidden | Forbidden | 07 | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G | Articles, explosive, n.o.s | 1.2D | UN0467 | II | 1.2D | | None | 62 | None | Forbidden | Forbidden | 07. | |
| G | Articles, explosive, n.o.s | 1.2E | UN0468 | II | 1.2E | | None | 62 | None | Forbidden | Forbidden | 07 | |
| G | Articles, explosive, n.o.s | 1.2F | UN0469 | II | 1.2F | | None | 62 | None | Forbidden | Forbidden | 08 | |
| G | Articles, explosive, n.o.s | 1.3C | UN0470 | II | 1.3C | | None | 62 | None | Forbidden | Forbidden | 07 | |
| G | Articles, explosive, n.o.s | 1.4E | UN0471 | II | 1.4E | | None | 62 | None | Forbidden | 75 kg | 06 | |
| G | Articles, explosive, n.o.s | 1.4F | UN0472 | II | 1.4F | | None | 62 | None | Forbidden | Forbidden | 08 | |
| | Articles, pressurized pneumatic *or* hydraulic *containing non-flammable gas* | 2.2 | UN3164 | | 2.2 | | 306 | 302, 304 | None | No limit | No limit | A | |
| | Articles, pyrophoric | 1.2L | UN0380 | II | 1.2L | | None | 62 | None | Forbidden | Forbidden | 08 | 8E, 14E, 15E, 17E |
| | Articles, pyrotechnic *for technical purposes* | 1.1G | UN0428 | II | 1.1G | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Articles, pyrotechnic *for technical purposes* | 1.2G | UN0429 | II | 1.2G | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Articles, pyrotechnic *for technical purposes* | 1.3G | UN0430 | II | 1.3G | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Articles, pyrotechnic *for technical purposes* | 1.4G | UN0431 | II | 1.4G | | None | 62 | None | Forbidden | 75 kg | 06 | |
| | Articles, pyrotechnic *for technical purposes* | 1.4S | UN0432 | II | 1.4S | | None | 62 | None | 25 kg | 100 kg | 05 | |
| D | Asbestos | 9 | NA2212 | III | 9 | 156, IB8, IP2, IP4 | 155 | 216 | 240 | 200 kg | 200 kg | A | 34, 40 |
| | *Ascaridole (organic peroxide)* | Forbidden | | | | | | | | | | | |
| D | Asphalt, *at or above its flash point* | 3 | NA1999 | III | 3 | IB3, T1, TP3 | 150 | 203 | 247 | Forbidden | Forbidden | D | |
| D | Asphalt, cut back, *see* Tars, liquid, *etc* | | | | | | | | | | | | |
| | *Automobile, motorcycle, tractor, other self-propelled vehicle, engine, or other mechanical apparatus, see* Vehicles *or* Battery *etc* | | | | | | | | | | | | |
| A G | Aviation regulated liquid, n.o.s. | 9 | UN3334 | | 9 | A35 | 155 | 204 | | No limit | No limit | A | |
| A G | Aviation regulated solid, n.o.s. | 9 | UN3335 | | 9 | A35 | 155 | 204 | | No limit | No limit | A | |
| | *Azaurolic acid (salt of) (dry)* | Forbidden | | | | | | | | | | | |
| | *Azido guanidine picrate (dry)* | Forbidden | | | | | | | | | | | |
| | *5-Azido-1-hydroxy tetrazole* | Forbidden | | | | | | | | | | | |
| | *Azido hydroxy tetrazole (mercury and silver salts)* | Forbidden | | | | | | | | | | | |
| | *3-Azido-1,2-Propylene glycol dinitrate* | Forbidden | | | | | | | | | | | |
| | *Azidodithiocarbonic acid* | Forbidden | | | | | | | | | | | |
| | *Azidoethyl nitrate* | Forbidden | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *1-Aziridinylphosphine oxide-(tris), see* Tris-(1-aziridinyl) phosphine oxide, solution | | | | | | | | | | | | |
| | Azodicarbonamide | 4.1 | UN3242 | II | 4.1 | 38, IB8, T3, TP33 | 151 | 212 | 240 | Forbidden | Forbidden | D | 12, 52, 53, 74 |
| | *Azotetrazole (dry)* | Forbidden | | | | | | | | | | | |
| | Barium | 4.3 | UN1400 | II | 4.3 | A19, IB7, IP2, T3, TP33 | 151 | 212 | 241 | 15 kg | 50 kg | E | 52 |
| | Barium alloys, pyrophoric | 4.2 | UN1854 | I | 4.2 | T21, TP7, TP33 | None | 181 | None | Forbidden | Forbidden | D | |
| | Barium azide, *dry or wetted with less than 50 percent water, by mass* | 1.1A | UN0224 | II | 1.1A, 6.1 | 111, 117 | None | 62 | None | Forbidden | Forbidden | 12 | |
| | Barium azide, wetted *with not less than 50 percent water, by mass* | 4.1 | UN1571 | I | 4.1, 6.1 | 162, A2 | None | 182 | None | Forbidden | 0.5 kg | D | 28 |
| | Barium bromate | 5.1 | UN2719 | II | 5.1, 6.1 | IB8, IP2, IP4, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 56, 58 |
| | Barium chlorate, solid | 5.1 | UN1445 | II | 5.1, 6.1 | A9, IB6, IP2, N34, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 56, 58 |
| | Barium chlorate, solution | 5.1 | UN3405 | II | 5.1, 6.1 | A9, IB2, N34, T4, TP1 | 152 | 202 | 243 | 1 L | 5 L | A | 56, 58, 133 |
| | | | | III | 5.1, 6.1 | A9, IB2, N34, T4, TP1 | 152 | 203 | 242 | 2.5 L | 30 L | A | 56, 58, 133 |
| | Barium compounds, n.o.s. | 6.1 | UN1564 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Barium cyanide | 6.1 | UN1565 | I | 6.1 | IB7, IP1, N74, N75, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | 40, 52 |
| | Barium hypochlorite *with more than 22 percent available chlorine* | 5.1 | UN2741 | II | 5.1, 6.1 | A7, A9, IB8, IP2, IP4, N34, T3, TP33 | 152 | 212 | None | 5 kg | 25 kg | B | 4, 52, 56, 58, 106 |
| | Barium nitrate | 5.1 | UN1446 | II | 5.1, 6.1 | IB8, IP2, IP4, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | |
| | Barium oxide | 6.1 | UN1884 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Barium perchlorate, solid | 5.1 | UN1447 | II | 5.1, 6.1 | IB6, IP2, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 56, 58 |
| | Barium perchlorate, solution | 5.1 | UN3406 | II | 5.1, 6.1 | IB2, T4, TP1 | 152 | 202 | 243 | 1 L | 5 L | A | 56, 58, 133 |
| | | | | III | 5.1, 6.1 | IB2, T4, TP1 | 152 | 203 | 242 | 2.5 L | 30 L | A | 56, 58, 133 |
| | Barium permanganate | 5.1 | UN1448 | II | 5.1, 6.1 | IB6, IP2, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | D | 56, 58, 138 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Barium peroxide | 5.1 | UN1449 | II | 5.1, 6.1 | A9, IB6, IP2, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 13, 52, 56, 75 |
| | *Barium selenate, see* Selenates *or* Selenites | | | | | | | | | | | | |
| | *Barium selenite, see* Selenates *or* Selenites | | | | | | | | | | | | |
| | Batteries, containing sodium | 4.3 | UN3292 | II | 4.3 | | 189 | 189 | 189 | Forbidden | No limit | A | |
| | Batteries, dry, containing potassium hydroxide solid, *electric, storage* | 8 | UN3028 | III | 8 | | None | 213 | None | 25 kg gross | 230 kg gross | A | 52. |
| | Batteries, wet, filled with acid, *electric storage* | 8 | UN2794 | III | 8 | | 159 | 159 | 159 | 30 kg gross | No limit | A | |
| | Batteries, wet, filled with alkali, *electric storage* | 8 | UN2795 | III | 8 | | 159 | 159 | 159 | 30 kg gross | No limit | A | 52. |
| | Batteries, wet, non-spillable, *electric storage* | 8 | UN2800 | III | 8 | | 159 | 159 | 159 | No Limit | No Limit | A | |
| | Batteries, dry, *not subject to the requirements of this subchapter* | | | | | 130 | | | | | | | |
| | Battery fluid, acid | 8 | UN2796 | II | 8 | A3, A7, B2, B15, IB2, N6, N34, T8, TP2, TP12 | 154 | 202 | 242 | 1 L | 30 L | B | |
| | Battery fluid, alkali | 8 | UN2797 | II | 8 | B2, IB2, N6, T7, TP2, TP28 | 154 | 202 | 242 | 1 L | 30 L | A | 29 |
| | *Battery lithium type, see* Lithium batteries *etc* | | | | | | | | | | | | |
| | Battery-powered vehicle *or* Battery-powered equipment | 9 | UN3171 | | 9 | 134 | 220 | 220 | None | No limit | No limit | | |
| | *Battery, wet, filled with acid or alkali with vehicle or mechanical equipment containing an internal combustion engine, see* Vehicle, etc. or Engines, internal combustion, *etc* | | | | | | | | | | | | |
| + | Benzaldehyde | 9 | UN1990 | III | 9 | IB3, T2, TP1 | 155 | 203 | 241 | 100 L | 220 L | A | |
| | Benzene | 3 | UN1114 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | 40 |
| | *Benzene diazonium chloride (dry)* | Forbidden | | | | | | | | | | | |
| | *Benzene diazonium nitrate (dry)* | Forbidden | | | | | | | | | | | |
| | *Benzene phosphorus dichloride, see* Phenyl phosphorus dichloride | | | | | | | | | | | | |
| | *Benzene phosphorus thiodichloride, see* Phenyl phosphorus thiodichloride | | | | | | | | | | | | |
| | Benzene sulfonyl chloride | 8 | UN2225 | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | 40 |
| | *Benzene triozonide* | Forbidden | | | | | | | | | | | |
| | *Benzenethiol, see* Phenyl mercaptan | | | | | | | | | | | | |
| | Benzidine | 6.1 | UN1885 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | *Benzol,* see Benzene | | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Benzonitrile | 6.1 | UN2224 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | 40, 52 |
| | Benzoquinone | 6.1 | UN2587 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Benzotrichloride | 8 | UN2226 | II | 8 | B2, IB2, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | A | 40 |
| | Benzotrifluoride | 3 | UN2338 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | 40 |
| | *Benzoxidiazoles (dry)* | Forbidden | | | | | | | | | | | |
| | *Benzoyl azide* | Forbidden | | | | | | | | | | | |
| | Benzoyl chloride | 8 | UN1736 | II | 8 | B2, IB2, T8, TP2, TP12, TP13 | 154 | 202 | 242 | 1 L | 30 L | C | 40 |
| | Benzyl bromide | 6.1 | UN1737 | II | 6.1, 8 | A3, A7, IB2, N33, N34, T8, TP2, TP12, TP13 | None | 202 | 243 | 1 L | 30 L | D | 13, 40. |
| | Benzyl chloride | 6.1 | UN1738 | II | 6.1, 8 | A3, A7, B70, IB2, N33, N42, T8, TP2, TP12, TP13 | None | 202 | 243 | 1 L | 30 L | D | 13, 40. |
| | Benzyl chloride *unstabilized* | 6.1 | UN1738 | II | 6.1, 8 | A3, A7, B8, B11, IB2, N33, N34, N43, T8, TP2, TP12, TP13 | 153 | 202 | 243 | 1 L | 30 L | D | 13, 40 |
| | Benzyl chloroformate | 8 | UN1739 | I | 8 | A3, A6, B4, N41, T10, TP2, TP12, TP13 | None | 201 | 243 | Forbidden | 2.5 L | D | 40 |
| | Benzyl iodide | 6.1 | UN2653 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | B | 12, 40 |
| | Benzyldimethylamine | 8 | UN2619 | II | 8, 3 | B2, IB2, T7, TP2 | 154 | 202 | 243 | 1 L | 30 L | A | 40, 48 |
| | Benzylidene chloride | 6.1 | UN1886 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | D | 40 |
| | Beryllium compounds, n.o.s. | 6.1 | UN1566 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Beryllium nitrate | 5.1 | UN2464 | II | 5.1, 6.1 | IB8, IP2, IP4, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | |
| | Beryllium, powder | 6.1 | UN1567 | II | 6.1, 4.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 15 kg | 50 kg | A | |
| | Bicyclo [2,2,1] hepta-2,5-diene, stabilized *or* 2,5-Norbornadiene, stabilized | 3 | UN2251 | II | 3 | IB2, T7, TP2 | 150 | 202 | 242 | 5 L | 60 L | D | |
| | Biological substance, Category B | 6.2 | UN3373 | | | A82 | 134 | 199 | None | 4 L or 4 kg | 4 L or 4 kg | A | 40 |
| | *Biphenyl triozonide* | Forbidden | | | | | | | | | | | |
| | Bipyridilium pesticides, liquid, flammable, toxic, *flash point less than 23 degrees C* | 3 | UN2782 | I | 3, 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | Forbidden | 30 L | E | |
| | | | | II | 3, 6.1 | IB2, T11, TP2, TP13, | 150 | 202 | 243 | 1 L | 60 L | B | 40 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | TP27 | | | | | | | |
| | Bipyridilium pesticides, liquid, toxic | 6.1 | UN3016 | I | 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1 | IB3, T7, TP2, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | 40 |
| | Bipyridilium pesticides, liquid, toxic, flammable, *flash point not less than 23 degrees C* | 6.1 | UN3015 | I | 6.1, 3 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 21, 40 |
| | | | | II | 6.1, 3 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 21, 40 |
| | | | | III | 6.1, 3 | B1, IB3, T7, TP2, TP28 | 153 | 203 | 242 | 60 L | 220 L | A | 21, 40 |
| | Bipyridilium pesticides, solid, toxic | 6.1 | UN2781 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | 40 |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 40 |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 40 |
| | *Bis (Aminopropyl) piperazine, see* Corrosive liquid, n.o.s. | | | | | | | | | | | | |
| | Bisulfate, aqueous solution | 8 | UN2837 | II | 8 | A7, B2, IB2, N34, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | A | |
| | | | | III | 8 | A7, IB3, N34, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | |
| | Bisulfites, aqueous solutions, n.o.s. | 8 | UN2693 | III | 8 | IB3, T7, TP1, TP28 | 154 | 203 | 241 | 5 L | 60 L | A | 40, 52 |
| | Black powder, compressed *or* Gunpowder, compressed *or* Black powder, in pellets *or* Gunpowder, in pellets | 1.1D | UN0028 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Black powder *or* Gunpowder, *granular or as a meal* | 1.1D | UN0027 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| D | Black powder for small arms | 4.1 | NA0027 | I | 4.1 | 70 | None | 170 | None | Forbidden | Forbidden | E | |
| | *Blasting agent, n.o.s., see* Explosives, blasting *etc* | | | | | | | | | | | | |
| | *Blasting cap assemblies, see* Detonator assemblies, non-electric, *for blasting* | | | | | | | | | | | | |
| | *Blasting caps, electric, see* Detonators, electric *for blasting* | | | | | | | | | | | | |
| | *Blasting caps, non-electric, see* Detonators, non-electric, *for blasting* | | | | | | | | | | | | |
| | *Bleaching powder, see* Calcium hypochlorite mixtures, *etc* | | | | | | | | | | | | |
| I | Blue asbestos *(Crocidolite) or* Brown asbestos *(amosite, mysorite)* | 9 | UN2212 | II | 9 | 156, IB8, IP2, IP4, T3, TP33 | 155 | 216 | 240 | Forbidden | Forbidden | A | 34, 40 |
| | Bombs, photo-flash | 1.1F | UN0037 | II | 1.1F | | | 62 | None | Forbidden | Forbidden | 08 | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Bombs, photo-flash | 1.1D | UN0038 | II | 1.1D | | | 62 | None | Forbidden | Forbidden | 03 | |
| | Bombs, photo-flash | 1.2G | UN0039 | II | 1.2G | | | 62 | None | Forbidden | Forbidden | 03 | |
| | Bombs, photo-flash | 1.3G | UN0299 | II | 1.3G | | | 62 | None | Forbidden | Forbidden | 03 | |
| | Bombs, smoke, non-explosive, *with corrosive liquid, without initiating device* | 8 | UN2028 | II | 8 | | None | 160 | None | Forbidden | 50 kg | E | 40 |
| | Bombs, *with bursting charge* | 1.1F | UN0033 | II | 1.1F | | | 62 | None | Forbidden | Forbidden | 08 | |
| | Bombs, *with bursting charge* | 1.1D | UN0034 | II | 1.1D | | | 62 | None | Forbidden | Forbidden | 03 | |
| | Bombs, *with bursting charge* | 1.2D | UN0035 | II | 1.2D | | | 62 | None | Forbidden | Forbidden | 03 | |
| | Bombs, *with bursting charge* | 1.2F | UN0291 | II | 1.2F | | | 62 | None | Forbidden | Forbidden | 08 | |
| | Bombs with flammable liquid, *with bursting charge* | 1.1J | UN0399 | II | 1.1J | | | 62 | None | Forbidden | Forbidden | 04 | 23E |
| | Bombs with flammable liquid, *with bursting charge* | 1.2J | UN0400 | II | 1.2J | | | 62 | None | Forbidden | Forbidden | 04 | 23E |
| | Boosters with detonator | 1.1B | UN0225 | II | 1.1B | | None | 62 | None | Forbidden | Forbidden | 11 | |
| | Boosters with detonator | 1.2B | UN0268 | II | 1.2B | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Boosters, *without detonator* | 1.1D | UN0042 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Boosters, *without detonator* | 1.2D | UN0283 | II | 1.2D | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | *Borate and chlorate mixtures, see* Chlorate and borate mixtures | | | | | | | | | | | | |
| | Borneol | 4.1 | UN1312 | III | 4.1 | A1, IB8, IP3, T1, TP33 | None | 213 | 240 | 25 kg | 100 kg | A | |
| + | Boron tribromide | 8 | UN2692 | I | 8, 6.1 | 2, B9, B14, B32, B74, N34, T20, TP2, TP12, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | C | 12 |
| | Boron trichloride | 2.3 | UN1741 | | 2.3, 8 | 3, B9, B14 | None | 304 | 314 | Forbidden | Forbidden | D | 25, 40 |
| | Boron trifluoride | 2.3 | UN1008 | | 2.3 | 2, B9, B14 | None | 302 | 314, 315 | Forbidden | Forbidden | D | 40 |
| | Boron trifluoride acetic acid complex, liquid | 8 | UN1742 | II | 8 | B2, B6, IB2, T8, TP2, TP12 | 154 | 202 | 242 | 1 L | 30 L | A | |
| | Boron trifluoride acetic acid complex, solid | 8 | UN3419 | II | 8 | B2, B6, IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | |
| | Boron trifluoride diethyl etherate | 8 | UN2604 | I | 8, 3 | A3, A19, T10, TP2 | None | 201 | 243 | 0.5 L | 2.5 L | D | 40 |
| | Boron trifluoride dihydrate | 8 | UN2851 | II | 8 | IB2, T7, TP2 | 154 | 212 | 240 | 15 kg | 50 kg | B | 12, 40, |
| | Boron trifluoride dimethyl etherate | 4.3 | UN2965 | I | 4.3, 8, 3 | A19, T10, TP2, TP7 | None | 201 | 243 | Forbidden | 1 L | D | 21, 28, 40, 49, 100 |
| | Boron trifluoride propionic acid complex, liquid | 8 | UN1743 | II | 8 | B2, IB2, T8, TP2, | 154 | 202 | 242 | 1 L | 30 L | A | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | TP12 | | | | | | | |
| | Boron trifluoride propionic acid complex, solid | 8 | UN3420 | II | 8 | B2, IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | |
| | *Box toe gum, see* Nitrocellulose *etc* | | | | | | | | | | | | |
| | Bromates, inorganic, aqueous solution, n.o.s. | 5.1 | UN3213 | II | 5.1 | IB2, T4, TP1 | 152 | 202 | 242 | 1 L | 5 L | B | 56, 58, 133 |
| | | | | III | 5.1 | IB2, T4, TP1 | 152 | 203 | 241 | 2.5 L | 30 L | B | 56, 58, 133 |
| | Bromates, inorganic, n.o.s. | 5.1 | UN1450 | II | 5.1 | IB8, IP2, IP4, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 56, 58 |
| + | Bromine | 8 | UN1744 | I | 8, 6.1 | 1, B9, B64, B85, N34, N43, T22, TP2, TP10, TP12, TP13 | None | 226 | 249 | Forbidden | Forbidden | D | 12, 40, 66, 74, 89, 90 |
| | *Bromine azide* | Forbidden | | | | | | | | | | | |
| | Bromine chloride | 2.3 | UN2901 | | 2.3, 8, 5.1 | 2, B9, B14, N86 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40, 89, 90 |
| + | Bromine pentafluoride | 5.1 | UN1745 | I | 5.1, 6.1, 8 | 1, B9, B14, B30, B72, T22, TP2, TP12, TP13, TP38, TP44 | None | 228 | 244 | Forbidden | Forbidden | D | 25, 40, 66, 90 |
| + | Bromine solutions | 8 | UN1744 | I | 8, 6.1 | 1, B9, B64, B85, N34, N43, T22, TP2, TP10, TP12, TP13 | None | 226 | 249 | Forbidden | Forbidden | D | 12, 40, 66, 74, 89, 90 |
| + | Bromine solutions | 8 | UN1744 | I | 8, 6.1 | 2, B9, B64, B85, N34, N43, T22, TP2, TP10, TP12, TP13 | None | 227 | 249 | Forbidden | Forbidden | D | 12, 40, 66, 74, 89, 90 |
| + | Bromine trifluoride | 5.1 | UN1746 | I | 5.1, 6.1, 8 | 2, B9, B14, B32, B74, T22, TP2, TP12, TP13, TP38, TP45 | None | 228 | 244 | Forbidden | Forbidden | D | 25, 40, 66, 90 |
| | *4-Bromo-1,2-dinitrobenzene* | Forbidden | | | | | | | | | | | |
| | *4-Bromo-1,2-dinitrobenzene (unstable at 59 degrees C)* | Forbidden | | | | | | | | | | | |
| | 1-Bromo-3-chloropropane | 6.1 | UN2688 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | 1-Bromo-3-methylbutane | 3 | UN2341 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *1-Bromo-3-nitrobenzene (unstable at 56 degrees C* ) | Forbidden | | | | | | | | | | | |
| | 2-Bromo-2-nitropropane-1,3-diol | 4.1 | UN3241 | III | 4.1 | 46, IB8, IP3 | 151 | 213 | None | 25 kg | 50 kg | C | 12, 25, 40 |
| | Bromoacetic acid, solid | 8 | UN3425 | II | 8 | A7, IB8, IP2, IP4, N34, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Bromoacetic acid solution | 8 | UN1938 | II | 8 | A7, B2, IB2, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | A | 40 |
| | | | | III | 8 | B2, IB3, T7, TP2 | 154 | 203 | 241 | 5 L | 60 L | A | 40 |
| + | Bromoacetone | 6.1 | UN1569 | II | 6.1, 3 | 2, T20, TP2, TP13 | None | 193 | 245 | Forbidden | Forbidden | D | 40 |
| | Bromoacetyl bromide | 8 | UN2513 | II | 8 | B2, IB2, T8, TP2, TP12 | 154 | 202 | 242 | 1 L | 30 L | C | 40, 53 |
| | Bromobenzene | 3 | UN2514 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Bromobenzyl cyanides, liquid | 6.1 | UN1694 | I | 6.1 | T14, TP2, TP13 | None | 201 | 243 | Forbidden | 30 L | D | 12, 40, 52 |
| | Bromobenzyl cyanides, solid | 6.1 | UN3449 | I | 6.1 | T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | D | 12, 40, 52 |
| | 1-Bromobutane | 3 | UN1126 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | 40 |
| | 2-Bromobutane | 3 | UN2339 | II | 3 | B1, IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | 40 |
| | Bromochloromethane | 6.1 | UN1887 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | 2-Bromoethyl ethyl ether | 3 | UN2340 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | 40 |
| | Bromoform | 6.1 | UN2515 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | 12, 40 |
| | Bromomethylpropanes | 3 | UN2342 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | 2-Bromopentane | 3 | UN2343 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Bromopropanes | 3 | UN2344 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | 40 |
| | | | | III | 3 | IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | 3-Bromopropyne | 3 | UN2345 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | D | 40 |
| | *Bromosilane* | Forbidden | | | | | | | | | | | |
| | *Bromotoluene-alpha, see* Benzyl bromide | | | | | | | | | | | | |
| | Bromotrifluoroethylene | 2.1 | UN2419 | | 2.1 | | None | 304 | 314, 315 | Forbidden | 150 kg | B | 40 |
| | Bromotrifluoromethane *or* Refrigerant gas, R 13B1. | 2.2 | UN1009 | | 2.2 | T50 | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | Brucine | 6.1 | UN1570 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | |
| | Bursters, *explosive* | 1.1D | UN0043 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Butadienes, stabilized *or* Butadienes and Hydrocarbon mixture, stabilized *containing more than 40% butadienes* | 2.1 | UN1010 | | 2.1 | T50 | 306 | 304 | 314, 315 | Forbidden | 150 kg | B | 40 |
| | Butane *see also* Petroleum gases, liquefied | 2.1 | UN1011 | | 2.1 | 19, T50 | 306 | 304 | 314, 315 | Forbidden | 150 kg | E | 40 |
| | *Butane, butane mixtures and mixtures having similar properties in* | | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *cartridges each not exceeding 500 grams, see* Receptacles, *etc* | | | | | | | | | | | | |
| | Butanedione | 3 | UN2346 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | *1,2,4-Butanetriol trinitrate* | Forbidden | | | | | | | | | | | |
| | Butanols | 3 | UN1120 | II | 3 | IB2, T4, TP1, TP29 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *tert-Butoxycarbonyl azide* | Forbidden | | | | | | | | | | | |
| | Butyl acetates | 3 | UN1123 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Butyl acid phosphate | 8 | UN1718 | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | |
| | Butyl acrylates, stabilized | 3 | UN2348 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *Butyl alcohols, see* Butanols | | | | | | | | | | | | |
| | Butyl benzenes | 3 | UN2709 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *n-Butyl bromide, see* 1-Bromobutane | | | | | | | | | | | | |
| | *n-Butyl chloride, see* Chlorobutanes | | | | | | | | | | | | |
| D | sec-Butyl chloroformate | 6.1 | NA2742 | I | 6.1, 3, 8 | 2, B9, B14, B32, B74, T20, TP4, TP12, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | A | 12, 13, 22, 25, 40, 48, 100 |
| | n-Butyl chloroformate | 6.1 | UN2743 | I | 6.1, 8, 3 | 2, B9, B14, B32, B74, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | A | 12, 13, 21, 25, 40, 100 |
| | *Butyl ethers, see* Dibutyl ethers | | | | | | | | | | | | |
| | *Butyl ethyl ether, see* Ethyl butyl ether | | | | | | | | | | | | |
| | n-Butyl formate | 3 | UN1128 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | *tert-Butyl hydroperoxide, with more than 90 percent with water* | Forbidden | | | | | | | | | | | |
| | tert-Butyl hypochlorite | 4.2 | UN3255 | I | 4.2, 8 | | None | 211 | 243 | Forbidden | Forbidden | D | |
| | N-n-Butyl imidazole | 6.1 | UN2690 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | |
| | tert-Butyl isocyanate | 6.1 | UN2484 | I | 6.1, 3 | 1, B9, B14, B30, B72, T22, TP2, TP13, TP38, TP44 | None | 226 | 244 | Forbidden | Forbidden | D | 40 |
| | n-Butyl isocyanate | 6.1 | UN2485 | I | 6.1, 3 | 2, B9, B14, B32, B74, B77, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 40 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Butyl mercaptans | 3 | UN2347 | II | 3 | A3, A6, IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | D | 52, 95 |
| | n-Butyl methacrylate, stabilized | 3 | UN2227 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Butyl methyl ether | 3 | UN2350 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Butyl nitrites | 3 | UN2351 | I | 3 | T11, TP1, TP8, TP27 | 150 | 201 | 243 | 1 L | 30 L | E | 40 |
| | | | | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | 40 |
| | | | | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | 40 |
| | *tert-Butyl peroxyacetate, with more than 76 percent in solution* | Forbidden | | | | | | | | | | | |
| | *n-Butyl peroxydicarbonate, with more than 52 percent in solution* | Forbidden | | | | | | | | | | | |
| | *tert-Butyl peroxyisobutyrate, with more than 77 percent in solution* | Forbidden | | | | | | | | | | | |
| | *Butyl phosphoric acid, see* Butyl acid phosphate | | | | | | | | | | | | |
| | Butyl propionates | 3 | UN1914 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | 5-tert-Butyl-2,4,6-trinitro-m-xylene *or* Musk xylene | 4.1 | UN2956 | III | 4.1 | 159 | None | 223 | None | Forbidden | Forbidden | D | 12, 25, 48, 127 |
| | Butyl vinyl ether, stabilized | 3 | UN2352 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | 40 |
| | n-Butylamine | 3 | UN1125 | II | 3, 8 | IB2, T7, TP1 | 150 | 202 | 242 | 1 L | 5 L | B | 40 |
| | N-Butylaniline | 6.1 | UN2738 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | 74 |
| | tert-Butylcyclohexylchloroformate | 6.1 | UN2747 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | 12, 13, 25 |
| | Butylene *see also* Petroleum gases, liquefied | 2.1 | UN1012 | | 2.1 | 19, T50 | 306 | 304 | 314, 315 | Forbidden | 150 kg | E | 40 |
| | 1,2-Butylene oxide, stabilized | 3 | UN3022 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | 27, 49 |
| | Butyltoluenes | 6.1 | UN2667 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | Butyltrichlorosilane | 8 | UN1747 | II | 8, 3 | A7, B2, B6, IB2, N34, T7, TP2, TP13 | None | 202 | 243 | Forbidden | 30 L | C | 40 |
| | 1,4-Butynediol | 6.1 | UN2716 | III | 6.1 | A1, IB8, IP3, T1, TP33 | None | 213 | 240 | 100 kg | 200 kg | A | 52, 53, 70, 139, 140 |
| | Butyraldehyde | 3 | UN1129 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Butyraldoxime | 3 | UN2840 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Butyric acid | 8 | UN2820 | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | 12 |
| | Butyric anhydride | 8 | UN2739 | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | |
| | Butyronitrile | 3 | UN2411 | II | 3, 6.1 | IB2, T7, TP1, TP13 | 150 | 202 | 243 | 1 L | 60 L | E | 40 |
| | Butyryl chloride | 3 | UN2353 | II | 3, 8 | IB2, T8, TP2, TP12, | 150 | 202 | 243 | 1 L | 5 L | C | 40 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | TP13 | | | | | | | |
| | Cacodylic acid | 6.1 | UN1572 | II | 6.1 | IB8, IP2, IP4,T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | E | 52 |
| | Cadmium compounds | 6.1 | UN2570 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Caesium hydroxide | 8 | UN2682 | II | 8 | IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | 29, 52. |
| | Caesium hydroxide solution | 8 | UN2681 | II | 8 | B2, IB2, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | A | 29, 52 |
| | | | | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | 29, 52 |
| | Calcium arsenate | 6.1 | UN1573 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Calcium arsenate and calcium arsenite, mixtures, solid | 6.1 | UN1574 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | *Calcium bisulfite solution, see* Bisulfites, aqueous solutions, n.o.s. | | | | | | | | | | | | |
| | Calcium carbide | 4.3 | UN1402 | I | 4.3 | A1, A8, B55, B59, IB4, IP1, N34, T9, TP7, TP33 | None | 211 | 242 | Forbidden | 15 kg | B | 52 |
| | | | | II | 4.3 | A1, A8, B55, B59, IB7, IP2, N34, T3, TP33 | 151 | 212 | 241 | 15 kg | 50 kg | B | 52 |
| | Calcium chlorate | 5.1 | UN1452 | II | 5.1 | A9, IB8, IP2, IP4, N34, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 56, 58 |
| | Calcium chlorate aqueous solution | 5.1 | UN2429 | II | 5.1 | A2, IB2, N41, T4, TP1 | 152 | 202 | 242 | 1 L | 5 L | B | 56, 58, 133 |
| | | | | III | 5.1 | A2, IB2, N41, T4, TP1 | 152 | 203 | 241 | 2.5 L | 30 L | B | 56, 68, 133 |
| | Calcium chlorite | 5.1 | UN1453 | II | 5.1 | A9, IB8, IP2, IP4, N34, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 56, 58 |
| | Calcium cyanamide *with more than 0.1 percent of calcium carbide* | 4.3 | UN1403 | III | 4.3 | A1, A19, IB8, IP4, T1, TP33 | 151 | 213 | 241 | 25 kg | 100 kg | A | 52 |
| | Calcium cyanide | 6.1 | UN1575 | I | 6.1 | IB7, IP1, N79, N80, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | 40, 52 |
| | Calcium dithionite *or* Calcium hydrosulfite | 4.2 | UN1923 | II | 4.2 | A19, A20, IB6, IP2, T3, TP33 | None | 212 | 241 | 15 kg | 50 kg | E | 13 |
| | Calcium hydride | 4.3 | UN1404 | I | 4.3 | A19, N40 | None | 211 | 242 | Forbidden | 15 kg | E | 52 |
| | Calcium hydrosulfite, *see* Calcium dithionite | | | | | | | | | | | | |
| | Calcium hypochlorite, dry *or* Calcium hypochlorite mixtures dry *with* | 5.1 | UN1748 | II | 5.1 | 165, 166, A7, A9, IB8, | 152 | 212 | None | 5 kg | 25 kg | D | 4, 25, 48, |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *more than 39 percent available chlorine (8.8 percent available oxygen)* | | | | | IP2, IP4, IP13, N34, W9 | | | | | | | 52, 56, 58, 69, 142 |
| | | | | III | 5.1 | 165, 171, A7, A9, IB8, IP4, IP13, N34, W9 | 152 | 213 | 240 | 25 kg | 100 kg | D | 4, 25, 48, 52, 56, 58, 69, 142 |
| | Calcium hypochlorite, hydrated *or* Calcium hypochlorite, hydrated mixtures, *with not less than 5.5 percent but not more than 16 percent water* | 5.1 | UN2880 | II | 5.1 | 165, IB8, IP2, IP4, IP13, W9 | 152 | 212 | 240 | 5 kg | 25 kg | D | 4, 25, 48, 52, 56, 58, 69, 142. |
| | Calcium hypochlorite mixtures, dry, *with more than 10 percent but not more than 39 percent available chlorine* | 5.1 | UN2208 | III | 5.1 | 165, A1, A29, IB8, IP3, IP13, N34, W9 | 152 | 213 | 240 | 25 kg | 100 kg | D | 4, 25, 48, 52, 56, 58, 69, 142 |
| | Calcium manganese silicon | 4.3 | UN2844 | III | 4.3 | A1, A19, IB8, IP2, IP4, T1, TP33 | 151 | 213 | 241 | 25 kg | 100 kg | A | 52, 85, 103 |
| | Calcium nitrate | 5.1 | UN1454 | III | 5.1 | 34, IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | |
| A | Calcium oxide | 8 | UN1910 | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | |
| | Calcium perchlorate | 5.1 | UN1455 | II | 5.1 | IB6, IP2, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 56, 58 |
| | Calcium permanganate | 5.1 | UN1456 | II | 5.1 | IB6, IP2, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | D | 56, 58, 138 |
| | Calcium peroxide | 5.1 | UN1457 | II | 5.1 | IB6, IP2, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 13, 52, 56, 75 |
| | Calcium phosphide | 4.3 | UN1360 | I | 4.3, 6.1 | A8, A19, N40 | None | 211 | 242 | Forbidden | 15 kg | E | 40, 52, 85 |
| | Calcium, pyrophoric *or* Calcium alloys, pyrophoric | 4.2 | UN1855 | I | 4.2 | | None | 187 | None | Forbidden | Forbidden | D | |
| | Calcium resinate | 4.1 | UN1313 | III | 4.1 | A1, A19, IB6, T1, TP33 | None | 213 | 240 | 25 kg | 100 kg | A | |
| | Calcium resinate, fused | 4.1 | UN1314 | III | 4.1 | A1, A19, IB4, T1, TP33 | None | 213 | 240 | 25 kg | 100 kg | A | |
| | *Calcium selenate, see* Selenates *or* Selenites | | | | | | | | | | | | |
| | Calcium silicide | 4.3 | UN1405 | II | 4.3 | A19, IB7, IP2, T3, TP33 | 151 | 212 | 241 | 15 kg | 50 kg | B | 52, 85, 103 |
| | | | | III | 4.3 | A1, A19, IB8, IP4, T1, TP33 | 151 | 213 | 241 | 25 kg | 100 kg | B | 52, 85, 103 |
| | Camphor oil | 3 | UN1130 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Camphor, *synthetic* | 4.1 | UN2717 | III | 4.1 | A1, IB8, IP3, T1, TP33 | None | 213 | 240 | 25 kg | 100 kg | A | |
| | *Cannon primers, see* Primers, tubular | | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Caproic acid | 8 | UN2829 | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | |
| | *Caps, blasting, see* Detonators, *etc* | | | | | | | | | | | | |
| | Carbamate pesticides, liquid, flammable, toxic, *flash point less than 23 degrees C* | 3 | UN2758 | I | 3, 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | Forbidden | 30 L | B | 40 |
| | | | | II | 3, 6.1 | IB2, T11, TP2, TP13, TP27 | 150 | 202 | 243 | 1 L | 60 L | B | 40 |
| | Carbamate pesticides, liquid, toxic | 6.1 | UN2992 | I | 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1 | IB3, T7, TP2, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | 40 |
| | Carbamate pesticides, liquid, toxic, flammable, *flash point not less than 23 degrees C* | 6.1 | UN2991 | I | 6.1, 3 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1, 3 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1, 3 | B1, IB3, T7, TP2, TP28 | 153 | 203 | 242 | 60 L | 220 L | A | 40 |
| | Carbamate pesticides, solid, toxic | 6.1 | UN2757 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | 40 |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 40 |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 40 |
| | *Carbolic acid, see* Phenol, solid *or* Phenol, molten | | | | | | | | | | | | |
| | *Carbolic acid solutions, see* Phenol solutions | | | | | | | | | | | | |
| I | Carbon, activated | 4.2 | UN1362 | III | 4.2 | IB8, IP3, T1, TP33 | None | 213 | 241 | 0.5 kg | 0.5 kg | A | 12 |
| I | Carbon, *animal or vegetable origin* | 4.2 | UN1361 | II | 4.2 | IB6, T3, TP33 | None | 212 | 242 | Forbidden | Forbidden | A | 12 |
| | | | | III | 4.2 | IB8, IP3, T1, TP33 | None | 213 | 241 | Forbidden | Forbidden | A | 12 |
| | *Carbon bisulfide, see* Carbon disulfide | | | | | | | | | | | | |
| | Carbon dioxide | 2.2 | UN1013 | | 2.2 | | 306 | 302, 304 | 302, 314, 315 | 75 kg | 150 kg | A | |
| | Carbon dioxide, refrigerated liquid | 2.2 | UN2187 | | 2.2 | T75, TP5 | 306 | 304 | 314, 315 | 50 kg | 500 kg | B | |
| A W | Carbon dioxide, solid *or* Dry ice | 9 | UN1845 | III | None | | 217 | 217 | 240 | 200 kg | 200 kg | C | 40 |
| | Carbon disulfide | 3 | UN1131 | I | 3, 6.1 | B16, T14, TP2, TP7, TP13 | None | 201 | 243 | Forbidden | Forbidden | D | 18, 40, 115 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Carbon monoxide, compressed | 2.3 | UN1016 | | 2.3, 2.1 | 4 | None | 302 | 314, 315 | Forbidden | 25 kg | D | 40 |
| D | Carbon monoxide, refrigerated liquid *(cryogenic liquid)* | 2.3 | NA9202 | | 2.3, 2.1 | 4, T75, TP5 | None | 316 | 318 | Forbidden | Forbidden | D | |
| | Carbon tetrabromide | 6.1 | UN2516 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 25 |
| | Carbon tetrachloride | 6.1 | UN1846 | II | 6.1 | IB2, N36, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | 40 |
| | *Carbonyl chloride, see* Phosgene | | | | | | | | | | | | |
| | Carbonyl fluoride | 2.3 | UN2417 | | 2.3, 8 | 2 | None | 302 | None | Forbidden | Forbidden | D | 40 |
| | Carbonyl sulfide | 2.3 | UN2204 | | 2.3, 2.1 | 3, B14 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40 |
| | *Cartridge cases, empty primed, see* Cases, cartridge, empty, with primer | | | | | | | | | | | | |
| | *Cartridges, actuating, for aircraft ejector seat catapult, fire extinguisher, canopy removal or apparatus, see* Cartridges, power device | | | | | | | | | | | | |
| | *Cartridges, explosive, see* Charges, demolition | | | | | | | | | | | | |
| | Cartridges, flash | 1.1G | UN0049 | II | 1.1G | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Cartridges, flash | 1.3G | UN0050 | II | 1.3G | | None | 62 | None | Forbidden | 75 kg | 07 | |
| | Cartridges for weapons, blank | 1.1C | UN0326 | II | 1.1C | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Cartridges for weapons, blank | 1.2C | UN0413 | II | 1.2C | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Cartridges for weapons, blank *or* Cartridges, small arms, blank | 1.4S | UN0014 | II | None | | 63 | 62 | None | 25 kg | 100 kg | 05 | |
| | Cartridges for weapons, blank *or* Cartridges, small arms, blank | 1.3C | UN0327 | II | 1.3C | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Cartridges for weapons, blank *or* Cartridges, small arms, blank | 1.4C | UN0338 | II | 1.4C | | None | 62 | None | Forbidden | 75 kg | 06 | |
| | Cartridges for weapons, inert projectile | 1.2C | UN0328 | II | 1.2C | | None | 62 | None | Forbidden | Forbidden | 03 | |
| | Cartridges for weapons, inert projectile *or* Cartridges, small arms | 1.4S | UN0012 | II | None | | 63 | 62 | None | 25 kg | 100 kg | 05 | |
| | Cartridges for weapons, inert projectile *or* Cartridges, small arms | 1.4C | UN0339 | II | 1.4C | | None | 62 | None | Forbidden | 75 kg | 06 | |
| | Cartridges for weapons, inert projectile *or* Cartridges, small arms | 1.3C | UN0417 | II | 1.3C | | None | 62 | None | Forbidden | Forbidden | 06 | |
| | Cartridges for weapons, *with bursting charge* | 1.1F | UN0005 | II | 1.1F | | None | 62 | None | Forbidden | Forbidden | 08 | |
| | Cartridges for weapons, *with bursting charge* | 1.1E | UN0006 | II | 1.1E | | None | 62 | None | Forbidden | Forbidden | 03 | |
| | Cartridges for weapons, *with bursting charge* | 1.2F | UN0007 | II | 1.2F | | None | 62 | None | Forbidden | Forbidden | 08 | |
| | Cartridges for weapons, *with bursting charge* | 1.2E | UN0321 | II | 1.2E | | None | 62 | None | Forbidden | Forbidden | 03 | |
| | Cartridges for weapons, *with bursting charge* | 1.4F | UN0348 | II | 1.4F | | None | 62 | None | Forbidden | Forbidden | 08 | |
| | Cartridges for weapons, *with bursting charge* | 1.4E | UN0412 | II | 1.4E | | None | 62 | None | Forbidden | 75 kg | 02 | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cartridges, oil well | 1.3C | UN0277 | II | 1.3C | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Cartridges, oil well | 1.4C | UN0278 | II | 1.4C | | None | 62 | None | Forbidden | 75 kg | 06 | |
| | Cartridges, power device | 1.3C | UN0275 | II | 1.3C | | None | 62 | None | Forbidden | 75 kg | 07 | |
| | Cartridges, power device | 1.4C | UN0276 | II | 1.4C | 110 | None | 62 | None | Forbidden | 75 kg | 06 | |
| | Cartridges, power device | 1.4S | UN0323 | II | 1.4S | 110 | 63 | 62 | None | 25 kg | 100 kg | 05 | |
| | Cartridges, power device | 1.2C | UN0381 | II | 1.2C | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | *Cartridges, safety, blank, see* Cartridges for weapons, blank *(UN 0014)* | | | | | | | | | | | | |
| | *Cartridges, safety, see* Cartriges for weapons, inert projectile, *or* Cartridges, small arms *or* Cartridges, power device ( *UN 0323* ) | | | | | | | | | | | | |
| | Cartridges, signal | 1.3G | UN0054 | II | 1.3G | | None | 62 | None | Forbidden | 75 kg | 07 | |
| | Cartridges, signal | 1.4G | UN0312 | II | 1.4G | | None | 62 | None | Forbidden | 75 kg | 06 | |
| | Cartridges, signal | 1.4S | UN0405 | II | 1.4S | | None | 62 | None | 25 kg | 100 kg | 05 | |
| D | Cartridges, small arms | ORM-D | | | None | | 63 | None | None | 30 kg gross | 30 kg gross | A | |
| D | Cartridges power device *(used to project fastening devices)* | ORM–D | | | None | | 63 | None | None | 30 kg gross | 30 kg gross | A | |
| | *Cartridges, sporting, see* Cartridges for weapons, inert porjectile, *or* Cartridges, small arms | | | | | | | | | | | | |
| | *Cartridges, starter, jet engine, see* Cartridges, power device | | | | | | | | | | | | |
| | Cases, cartridge, empty with primer | 1.4S | UN0055 | II | 1.4S | 50 | None | 62 | None | 25 kg | 100 kg | 05 | |
| | Cases, cartridges, empty with primer | 1.4C | UN0379 | II | 1.4C | 50 | None | 62 | None | Forbidden | 75 kg | 06 | |
| | Cases, combustible, empty, without primer | 1.4C | UN0446 | II | 1.4C | | None | 62 | None | Forbidden | 75 kg | 06 | |
| | Cases, combustible, empty, without primer | 1.3C | UN0447 | II | 1.3C | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | *Casinghead gasoline see* Gasoline | | | | | | | | | | | | |
| A W | Castor beans *or* Castor meal *or* Castor pomace *or* Castor flake | 9 | UN2969 | II | None | IB8, IP2, IP4, T3, TP33 | 155 | 204 | 240 | No limit | No limit | E | 34, 40 |
| G | Caustic alkali liquids, n.o.s. | 8 | UN1719 | II | 8 | B2, IB2, T11, TP2, TP27 | 154 | 202 | 242 | 1 L | 30 L | A | 29 |
| | | | | III | 8 | IB3, T7, TP1, TP28 | 154 | 203 | 241 | 5 L | 60 L | A | 29 |
| | *Caustic potash, see* Potassium hydroxide *etc* | | | | | | | | | | | | |
| | *Caustic soda, (etc.) see* Sodium hydroxide *etc* | | | | | | | | | | | | |
| | Cells, containing sodium | 4.3 | UN3292 | II | 4.3 | | 189 | 189 | 189 | 25 kg gross | No limit | A | |
| | Celluloid, *in block, rods, rolls, sheets, tubes, etc., except scrap* | 4.1 | UN2000 | III | 4.1 | | None | 213 | 240 | 25 kg | 100 kg | A | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Celluloid, scrap | 4.2 | UN2002 | III | 4.2 | IB8, IP3 | None | 213 | 241 | Forbidden | Forbidden | D | |
| | *Cement, see* Adhesives *containing flammable liquid* | | | | | | | | | | | | |
| | Cerium, *slabs, ingots, or rods* | 4.1 | UN1333 | II | 4.1 | IB8, IP2, IP4, N34 | None | 212 | 240 | 15 kg | 50 kg | A | 74, 91 |
| | Cerium, *turnings or gritty powder* | 4.3 | UN3078 | II | 4.3 | A1, IB7, IP2, T3, TP33 | 151 | 212 | 242 | 15 kg | 50 kg | E | 52 |
| | Cesium *or* Caesium | 4.3 | UN1407 | I | 4.3 | A7, A19, IB4, IP1, N34, N40 | None | 211 | 242 | Forbidden | 15 kg | D | 52 |
| | Cesium nitrate *or* Caesium nitrate | 5.1 | UN1451 | III | 5.1 | A1, A29, IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | |
| D | Charcoal *briquettes, shell, screenings, wood, etc.* | 4.2 | NA1361 | III | 4.2 | IB8, T1, TP33 | 151 | 213 | 240 | 25 kg | 100 kg | A | 12 |
| | Charges, bursting, plastics bonded | 1.1D | UN0457 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Charges, bursting, plastics bonded | 1.2D | UN0458 | II | 1.2D | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Charges, bursting, plastics bonded | 1.4D | UN0459 | II | 1.4D | | None | 62 | None | Forbidden | 75 kg | 06 | |
| | Charges, bursting, plastics bonded | 1.4S | UN0460 | II | 1.4S | | None | 62 | None | 25 kg | 100 kg | 05 | |
| | Charges, demolition | 1.1D | UN0048 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 03 | |
| | Charges, depth | 1.1D | UN0056 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 03 | |
| | *Charges, expelling, explosive, for fire extinguishers, see* Cartridges, power device | | | | | | | | | | | | |
| | Charges, explosive, commercial *without detonator* | 1.1D | UN0442 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Charges, explosive, commercial *without detonator* | 1.2D | UN0443 | II | 1.2D | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Charges, explosive, commercial *without detonator* | 1.4D | UN0444 | II | 1.4D | | None | 62 | None | Forbidden | 75 kg | 06 | |
| | Charges, explosive, commercial *without detonator* | 1.4S | UN0445 | II | 1.4S | | None | 62 | None | 25 kg | 100 kg | 05 | |
| | Charges, propelling | 1.1C | UN0271 | II | 1.1C | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Charges, propelling | 1.3C | UN0272 | II | 1.3C | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Charges, propelling | 1.2C | UN0415 | II | 1.2C | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Charges, propelling | 1.4C | UN0491 | II | 1.4C | | None | 62 | None | Forbidden | 75 kg | 06 | |
| | Charges, propelling, for cannon | 1.3C | UN0242 | II | 1.3C | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Charges, propelling, for cannon | 1.1C | UN0279 | II | 1.1C | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Charges, propelling, for cannon | 1.2C | UN0414 | II | 1.2C | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Charges, shaped, flexible, linear | 1.4D | UN0237 | II | 1.4D | | None | 62 | None | Forbidden | 75 kg | 06 | |
| | Charges, shaped, flexible, linear | 1.1D | UN0288 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 07 | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Charges, shaped, *without detonator* | 1.1D | UN0059 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Charges, shaped, *without detonator* | 1.2D | UN0439 | II | 1.2D | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Charges, shaped, *without detonator* | 1.4D | UN0440 | II | 1.4D | | None | 62 | None | Forbidden | 75 kg | 06 | |
| | Charges, shaped, *without detonator* | 1.4S | UN0441 | II | 1.4S | | None | 62 | None | 25 kg | 100 kg | 05 | |
| | Charges, supplementary explosive | 1.1D | UN0060 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| D | Chemical kit | 8 | NA1760 | II | 8 | | 154 | 161 | None | 1 L | 30 L | B | 40 |
| | Chemical kits | 9 | UN3316 | | 9 | 15 | 161 | 161 | None | 10 kg | 10 kg | A | |
| | Chloral, anhydrous, stabilized | 6.1 | UN2075 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | D | 40 |
| | Chlorate and borate mixtures | 5.1 | UN1458 | II | 5.1 | A9, IB8, IP2, IP4, N34, T3, TP33 | 152 | 212 | 240 | 5 kg | 25 kg | A | 56, 58 |
| | | | | III | 5.1 | A9, IB8, IP3, N34, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | 56, 58 |
| | Chlorate and magnesium chloride mixture solid | 5.1 | UN1459 | II | 5.1 | A9, IB8, IP2, IP4, N34, T3, TP33 | 152 | 212 | 240 | 5 kg | 25 kg | A | 56, 58 |
| | | | | III | 5.1 | A9, IB8, IP3, N34, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | 56, 58 |
| | Chlorate and magnesium chloride mixture solution | 5.1 | UN3407 | II | 5.1 | A9, IB2, N34, T4, TP1 | 152 | 202 | 242 | 1 L | 5 L | A | 56, 58, 133 |
| | | | | III | 5.1 | A9, IB2, N34, T4, TP1 | 152 | 203 | 241 | 2.5 L | 30 L | A | 56, 58, 133 |
| | *Chlorate of potash, see* Potassium chlorate | | | | | | | | | | | | |
| | *Chlorate of soda, see* Sodium chlorate | | | | | | | | | | | | |
| | Chlorates, inorganic, aqueous solution, n.o.s. | 5.1 | UN3210 | II | 5.1 | IB2, T4, TP1 | 152 | 202 | 242 | 1 L | 5 L | B | 56, 58, 133 |
| | | | | III | 5.1 | IB2, T4, TP1 | 152 | 203 | 241 | 2.5 L | 30 L | B | 56, 58, 133 |
| | Chlorates, inorganic, n.o.s. | 5.1 | UN1461 | II | 5.1 | A9, IB6, IP2, N34, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 56, 58 |
| | Chloric acid aqueous solution, *with not more than 10 percent chloric acid* | 5.1 | UN2626 | II | 5.1 | IB2, T4, TP1 | None | 229 | None | Forbidden | Forbidden | D | 56, 58 |
| | *Chloride of phosphorus, see* Phosphorus trichloride | | | | | | | | | | | | |
| | *Chloride of sulfur, see* Sulfur chloride | | | | | | | | | | | | |
| | *Chlorinated lime, see* Calcium hypochlorite mixtures, *etc* | | | | | | | | | | | | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Chlorine | 2.3 | UN1017 | | 2.3, 8 | 2, B9, B14, N86, T50, TP19 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40, 51, 55, 62, 68, 89, 90 |
| | *Chlorine azide* | Forbidden | | | | | | | | | | | |
| D | Chlorine dioxide, hydrate, frozen | 5.1 | NA9191 | II | 5.1, 6.1 | | None | 229 | None | Forbidden | Forbidden | E | |
| | *Chlorine dioxide (not hydrate)* | Forbidden | | | | | | | | | | | |
| | Chlorine pentafluoride | 2.3 | UN2548 | | 2.3, 5.1, 8 | 1, B7, B9, B14, N86 | None | 304 | 314 | Forbidden | Forbidden | D | 40, 89, 90 |
| | Chlorine trifluoride | 2.3 | UN1749 | | 2.3, 5.1, 8 | 2, B7, B9, B14, N86 | None | 304 | 314 | Forbidden | Forbidden | D | 40, 89, 90 |
| | Chlorite solution | 8 | UN1908 | II | 8 | A3, A6, A7, B2, IB2, N34, T7, TP2, TP24 | 154 | 202 | 242 | 1 L | 30 L | B | 26, 44, 89, 100, 141 |
| | | | | III | 8 | A3, A6, A7, B2, IB3, N34, T4, TP2, TP24 | 154 | 203 | 241 | 5 L | 60 L | B | 26, 44, 89, 100, 141 |
| | Chlorites, inorganic, n.o.s. | 5.1 | UN1462 | II | 5.1 | A7, IB6, IP2, N34, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 56, 58 |
| | 1-Chloro-1,1-difluoroethane *or* Refrigerant gas R 142b | 2.1 | UN2517 | | 2.1 | T50 | 306 | 304 | 314, 315 | Forbidden | 150 kg | B | 40 |
| | 3-Chloro-4-methylphenyl isocyanate, liquid | 6.1 | UN2236 | II | 6.1 | IB2 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | 3-Chloro-4-methylphenyl isocyanate, solid | 6.1 | UN3428 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | B | 40 |
| | 1-Chloro-1,2,2,2-tetrafluoroethane *or* Refrigerant gas R 124 | 2.2 | UN1021 | | 2.2 | T50 | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | 4-Chloro-o-toluidine hydrochloride, solid | 6.1 | UN1579 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | 4-Chloro-o-toluidine hydrochloride, solution | 6.1 | UN3410 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | 1-Chloro-2,2,2-trifluoroethane *or* Refrigerant gas R 133a | 2.2 | UN1983 | | 2.2 | T50 | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | Chloroacetic acid, molten | 6.1 | UN3250 | II | 6.1, 8 | IB1, T7, TP3, TP28 | None | 202 | 243 | Forbidden | Forbidden | C | 40 |
| | Chloroacetic acid, solid | 6.1 | UN1751 | II | 6.1, 8 | A3, A7, IB8, IP4, N34, T3, TP33 | 153 | 212 | 242 | 15 kg | 50 kg | A | 40 |
| | Chloroacetic acid, solution | 6.1 | UN1750 | II | 6.1, 8 | A7, IB2, N34, T7, TP2 | 153 | 202 | 243 | 1 L | 30 L | C | 40 |
| | Chloroacetone, stabilized | 6.1 | UN1695 | I | 6.1, 3, 8 | 2, B9, B14, B32, B74, N12, N32, N34, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 21, 40, 100 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Chloroacetone (unstabilized)* | Forbidden | | | | | | | | | | | |
| + | Chloroacetonitrile | 6.1 | UN2668 | II | 6.1, 3 | 2, B9, B14, B32, B74, IB9, T20, TP2, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | A | 12, 40, 52 |
| | Chloroacetophenone, liquid, ( *CN* ) | 6.1 | UN3416 | II | 6.1 | A3, IB2, N12, N32, N33, T7, TP2, TP13 | None | 202 | 243 | Forbidden | 60 L | D | 12, 40 |
| | Chloroacetophenone, solid, ( *CN* ) | 6.1 | UN1697 | II | 6.1 | A3, IB8, IP2, IP4, N12, N32, N33, N34, T3, TP2, TP13, TP33 | None | 212 | None | Forbidden | 100 kg | D | 12, 40 |
| | Chloroacetyl chloride | 6.1 | UN1752 | I | 6.1, 8 | 2, B3, B8, B9, B14, B32, B74, B77, N34, N43, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 40 |
| | Chloroanilines, liquid | 6.1 | UN2019 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | 52 |
| | Chloroanilines, solid | 6.1 | UN2018 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Chloroanisidines | 6.1 | UN2233 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Chlorobenzene | 3 | UN1134 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *Chlorobenzol, see* Chlorobenzene | | | | | | | | | | | | |
| | Chlorobenzotrifluorides | 3 | UN2234 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | 40 |
| | Chlorobenzyl chlorides, liquid | 6.1 | UN2235 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | Chlorobenzyl chlorides, solid | 6.1 | UN3427 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Chlorobutanes | 3 | UN1127 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Chlorocresols solution | 6.1 | UN2669 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | 12 |
| | | | | III | 6.1 | IB3, T7, TP2 | 153 | 203 | 241 | 60 L | 220 L | A | 12 |
| | Chlorocresols, solid | 6.1 | UN3437 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 12 |
| | Chlorodifluorobromomethane *or* Refrigerant gas R 12B1 | 2.2 | UN1974 | | 2.2 | T50 | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | Chlorodifluoromethane and chloropentafluoroethane mixture *or* Refrigerant gas R 502 *with fixed boiling point, with approximately 49 percent chlorodifluoromethane* | 2.2 | UN1973 | | 2.2 | T50 | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | Chlorodifluoromethane *or* Refrigerant gas R 22 | 2.2 | UN1018 | | 2.2 | T50 | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| + | Chlorodinitrobenzenes, liquid. | 6.1 | UN1577 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | B | 91 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | Chlorodinitrobenzenes, solid | 6.1 | UN3441 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 91 |
| | 2-Chloroethanal | 6.1 | UN2232 | I | 6.1 | 2, B9, B14, B32, B74, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 40 |
| | Chloroform | 6.1 | UN1888 | III | 6.1 | IB3, N36, T7, TP2 | 153 | 203 | 241 | 60 L | 220 L | A | 40 |
| G | Chloroformates, toxic, corrosive, flammable, n.o.s. | 6.1 | UN2742 | II | 6.1, 8, 3 | 5, IB1, T7, TP2 | 153 | 202 | 243 | 1 L | 30 L | A | 12, 13, 21, 25, 40, 100 |
| G | Chloroformates, toxic, corrosive, n.o.s. | 6.1 | UN3277 | II | 6.1, 8 | IB2, T8, TP2, TP13, TP28 | 153 | 202 | 243 | 1 L | 30 L | A | 12, 13, 25, 40 |
| | Chloromethyl chloroformate | 6.1 | UN2745 | II | 6.1, 8 | IB2, T7, TP2, TP13 | 153 | 202 | 243 | 1 L | 30 L | A | 12, 13, 21, 25, 40, 100 |
| | Chloromethyl ethyl ether | 3 | UN2354 | II | 3, 6.1 | IB2, T7, TP1, TP13 | 150 | 202 | 243 | 1 L | 60 L | E | 40 |
| | Chloronitroanilines | 6.1 | UN2237 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| + | Chloronitrobenzene, liquid *ortho* | 6.1 | UN3409 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | |
| + | Chloronitrobenzenes, solid *meta or para* | 6.1 | UN1578 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Chloronitrotoluenes, liquid | 6.1 | UN2433 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | 44, 89, 100, 141 |
| | Chloronitrotoluenes, solid | 6.1 | UN3457 | III | 6.1 | IB8, IP3,T1, TP33 | 153 | 213 | 240 | 25 kg | 200 kg | A | |
| | Chloropentafluoroethane *or* Refrigerant gas R 115 | 2.2 | UN1020 | | 2.2 | T50 | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | Chlorophenolates, liquid *or* Phenolates, liquid | 8 | UN2904 | III | 8 | IB3 | 154 | 203 | 241 | 5 L | 60 L | A | |
| | Chlorophenolates, solid *or* Phenolates, solid | 8 | UN2905 | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | |
| | Chlorophenols, liquid | 6.1 | UN2021 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | Chlorophenols, solid | 6.1 | UN2020 | III | 6.1 | IB8, IP3, T1, TP1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Chlorophenyltrichlorosilane | 8 | UN1753 | II | 8 | A7, B2, B6, IB2, N34, T7, TP2 | None | 202 | 242 | Forbidden | 30 L | C | 40 |
| + | Chloropicrin | 6.1 | UN1580 | I | 6.1 | 2, B7, B9, B14, B32, B46, B74, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 40 |
| | Chloropicrin and methyl bromide mixtures | 2.3 | UN1581 | | 2.3 | 2, B9, B14, N86, T50 | None | 193 | 314, 315 | Forbidden | Forbidden | D | 25, 40 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Chloropicrin and methyl chloride mixtures | 2.3 | UN1582 | | 2.3 | 2, N86, T50 | None | 193 | 245 | Forbidden | Forbidden | D | 25, 40 |
| | *Chloropicrin mixture, flammable (pressure not exceeding 14.7 psia at 115 degrees F flash point below 100 degrees F) see* Toxic liquids, flammable, *etc* | | | | | | | | | | | | |
| | Chloropicrin mixtures, n.o.s. | 6.1 | UN1583 | I | 6.1 | 5 | None | 201 | 243 | Forbidden | Forbidden | C | 40 |
| | | | | II | 6.1 | IB2 | 153 | 202 | 243 | Forbidden | Forbidden | C | 40 |
| | | | | III | 6.1 | IB3 | 153 | 203 | 241 | Forbidden | Forbidden | C | 40 |
| D | Chloropivaloyl chloride | 6.1 | NA9263 | I | 6.1, 8 | 2, B9, B14, B32, B74, T20, TP4, TP12, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | B | 40 |
| | Chloroplatinic acid, solid | 8 | UN2507 | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | |
| | Chloroprene, stabilized | 3 | UN1991 | I | 3, 6.1 | B57, T14, TP2, TP13 | None | 201 | 243 | Forbidden | 30 L | D | 40 |
| | *Chloroprene, uninhibited* | Forbidden | | | | | | | | | | | |
| | 1-Chloropropane | 3 | UN1278 | II | 3 | IB2, IP8, N34, T7, TP2 | None | 202 | 242 | Forbidden | 60 L | E | |
| | 2-Chloropropane | 3 | UN2356 | I | 3 | N36, T11, TP2, TP13 | 150 | 201 | 243 | 1 L | 30 L | E | |
| | 3-Chloropropanol-1 | 6.1 | UN2849 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | 2-Chloropropene | 3 | UN2456 | I | 3 | A3, N36, T11, TP2 | 150 | 201 | 243 | 1 L | 30 L | E | |
| | 2-Chloropropionic acid | 8 | UN2511 | III | 8 | IB3, T4, TP2 | 154 | 203 | 241 | 5 L | 60 L | A | 8 |
| | 2-Chloropyridine | 6.1 | UN2822 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | 40 |
| | Chlorosilanes, corrosive, n.o.s | 8 | UN2987 | II | 8 | B2, IB2, T14, TP2, TP27 | None | 202 | 242 | 1 L | 30 L | C | 40. |
| | Chlorosilanes, flammable, corrosive, n.o.s | 3 | UN2985 | II | 3, 8 | IB1, T11, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 5 L | B | 40. |
| | Chlorosilanes, toxic, corrosive, n.o.s | 6.1 | UN3361 | II | 6.1, 8 | IB1, T11, TP2, TP13 | None | 202 | 243 | 1 L | 30 L | C | 40. |
| | Chlorosilanes, toxic, corrosive, flammable, n.o.s | 6.1 | UN3362 | II | 6.1, 3, 8 | IB1, T11, TP2, TP13 | None | 202 | 243 | 1 L | 30 L | C | 40, 125. |
| | Chlorosilanes, water-reactive, flammable, corrosive, n.o.s. | 4.3 | UN2988 | I | 4.3, 3, 8 | A2, T10, TP2, TP7, TP13 | None | 201 | 244 | Forbidden | 1 L | D | 21, 28, 40, 49, 100 |
| + | Chlorosulfonic acid *(with or without sulfur trioxide)* | 8 | UN1754 | I | 8, 6.1 | 2, B9, B10, B14, B32, B74, T20, TP2, TP12, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | C | 40 |
| | Chlorotoluenes | 3 | UN2238 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Chlorotoluidines, liquid | 6.1 | UN3429 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Chlorotoluidines, solid | 6.1 | UN2239 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Chlorotrifluoromethane and trifluoromethane azeotropic mixture *or* Refrigerant gas R 503 *with approximately 60 percent chlorotrifluoromethane* | 2.2 | UN2599 | | 2.2 | | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | Chlorotrifluoromethane *or* Refrigerant gas R 13 | 2.2 | UN1022 | | 2.2 | | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | Chromic acid solution | 8 | UN1755 | II | 8 | B2, IB2, T8, TP2, TP12 | 154 | 202 | 242 | 1 L | 30 L | C | 40, 44, 89, 100, 141 |
| | | | | III | 8 | IB3, T4, TP1, TP12 | 154 | 203 | 241 | 5 L | 60 L | C | 40, 44, 89, 100, 141 |
| | *Chromic anhydride, see* Chromium trioxide, anhydrous | | | | | | | | | | | | |
| | Chromic fluoride, solid | 8 | UN1756 | II | 8 | IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | 52 |
| | Chromic fluoride, solution | 8 | UN1757 | II | 8 | B2, IB2, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | A | |
| | | | | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | |
| | Chromium nitrate | 5.1 | UN2720 | III | 5.1 | A1, A29, IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | |
| | Chromium oxychloride | 8 | UN1758 | I | 8 | A3, A6, A7, B10, N34, T10, TP2, TP12 | None | 201 | 243 | 0.5 L | 2.5 L | C | 40, 66, 74, 89, 90 |
| | Chromium trioxide, anhydrous | 5.1 | UN1463 | II | 5.1, 6.1, 8 | IB8, IP4, T3, TP33 | None | 212 | 242 | 5 kg | 25 kg | A | |
| | *Chromyl chloride, see* Chromium oxychloride | | | | | | | | | | | | |
| | *Cigar and cigarette lighters, charged with fuel, see* Lighters *or* Lighter refills *containing flammable gas* . | | | | | | | | | | | | |
| | *Coal briquettes, hot* | Forbidden | | | | | | | | | | | |
| | Coal gas, compressed | 2.3 | UN1023 | | 2.3, 2.1 | 3 | None | 302 | 314, 315 | Forbidden | Forbidden | D | 40 |
| | Coal tar distillates, flammable | 3 | UN1136 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, IB3, T4, TP1, TP29 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *Coal tar dye, corrosive, liquid, n.o.s, see* Dyes, liquid *or* solid, n.o.s. *or* Dye intermediates, liquid *or* solid, corrosive, n.o.s. | | | | | | | | | | | | |
| | Coating solution ( *includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining* ) | 3 | UN1139 | I | 3 | T11, TP1, TP8, TP27 | 150 | 201 | 243 | 1 L | 30 L | E | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | II | 3 | 149, IB2, T4, TP1, TP8 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Cobalt naphthenates, powder | 4.1 | UN2001 | III | 4.1 | A19, IB8, IP3, T1, TP33 | 151 | 213 | 240 | 25 kg | 100 kg | A | |
| | Cobalt resinate, precipitated | 4.1 | UN1318 | III | 4.1 | A1, A19, IB6, T1, TP33 | 151 | 213 | 240 | 25 kg | 100 kg | A | |
| | *Coke, hot* | Forbidden | | | | | | | | | | | |
| | *Collodion, see* Nitrocellulose *etc* | | | | | | | | | | | | |
| D G | Combustible liquid, n.o.s. | Comb liq | NA1993 | III | None | IB3, T1, T4, TP1 | 150 | 203 | 241 | 60 L | 220 L | A | |
| G | Components, explosive train, n.o.s | 1.2B | UN0382 | II | 1.2B | | None | 62 | None | Forbidden | Forbidden | 11 | |
| G | Components, explosive train, n.o.s | 1.4B | UN0383 | II | 1.4B | | None | 62 | None | Forbidden | 75 kg | 06 | |
| G | Components, explosive train, n.o.s | 1.4S | UN0384 | II | 1.4S | | None | 62 | None | 25 kg | 100 kg | 05 | |
| G | Components, explosive train, n.o.s | 1.1B | UN0461 | II | 1.1B | | None | 62 | None | Forbidden | Forbidden | 11 | |
| | *Composition B, see* Hexolite, *etc* | | | | | | | | | | | | |
| D G | Compounds, cleaning liquid | 8 | NA1760 | I | 8 | A7, B10, T14, TP2, TP27 | None | 201 | 243 | 0.5 L | 2.5 L | B | 40 |
| | | | | II | 8 | B2, IB2, N37, T11, TP2, TP27 | 154 | 202 | 242 | 1 L | 30 L | B | 40 |
| | | | | III | 8 | IB3, N37, T7, TP1, TP28 | 154 | 203 | 241 | 5 L | 60 L | A | 40 |
| D G | Compounds, cleaning liquid | 3 | NA1993 | I | 3 | T11, TP1 | 150 | 201 | 243 | 1 L | 30 L | E | |
| | | | | II | 3 | IB2, T7, TP1, TP8, TP28 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, B52, IB3, T4, TP1, TP29 | 150 | 203 | 242 | 60 L | 220 L | A | |
| D G | Compounds, tree killing, liquid *or* Compounds, weed killing, liquid | 8 | NA1760 | I | 8 | A7, B10, T14, TP2, TP27 | None | 201 | 243 | 0.5 L | 2.5 L | B | 40 |
| | | | | II | 8 | B2, IB2, N37, T11, TP2, TP27 | 154 | 202 | 242 | 1 L | 30 L | B | 40 |
| | | | | III | 8 | IB3, N37, T7, TP1, TP28 | 154 | 203 | 241 | 5 L | 60 L | A | 40 |
| D G | Compounds, tree killing, liquid *or* Compounds, weed killing, liquid | 3 | NA1993 | I | 3 | T11, TP1 | 150 | 201 | 243 | 1 L | 30 L | E | |
| | | | | II | 3 | IB2, T7, TP1, TP8, | 150 | 202 | 242 | 5 L | 60 L | B | |

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| | | | | | | TP28 | | | | | | | |
| | | | | III | 3 | B1, B52, IB3, T4, TP1, TP29 | 150 | 203 | 242 | 60 L | 220 L | A | |
| D G | Compounds, tree killing, liquid *or* Compounds, weed killing, liquid | 6.1 | NA2810 | I | 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1 | IB2, T11, TP2, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1 | IB3, T7, TP1, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | 40 |
| G | Compressed gas, flammable, n.o.s. | 2.1 | UN1954 | | 2.1 | | 306 | 302, 305 | 314, 315 | Forbidden | 150 kg | D | 40 |
| G | Compressed gas, n.o.s | 2.2 | UN1956 | | 2.2 | 77 | 306, 307 | 302, 305 | 314, 315 | 75 kg | 150 kg | A. | |
| G | Compressed gas, oxidizing, n.o.s. | 2.2 | UN3156 | | 2.2, 5.1 | A14 | 306 | 302 | 314, 315 | 75 kg | 150 kg | D | |
| G I | Compressed gas, toxic, corrosive, n.o.s. *Inhalation Hazard Zone A* | 2.3 | UN3304 | | 2.3, 8 | 1 | None | 192 | 245 | Forbidden | Forbidden | D | 40 |
| G I | Compressed gas, toxic, corrosive, n.o.s. *Inhalation Hazard Zone B* | 2.3 | UN3304 | | 2.3, 8 | 2, B9, B14 | None | 302, 305 | 314, 315 | Forbidden | Forbidden | D | 40 |
| G I | Compressed gas, toxic, corrosive, n.o.s. *Inhalation Hazard Zone C* | 2.3 | UN3304 | | 2.3, 8 | 3, B14 | None | 302, 305 | 314, 315 | Forbidden | Forbidden | D | 40 |
| G I | Compressed gas, toxic, corrosive, n.o.s. *Inhalation Hazard Zone D* | 2.3 | UN3304 | | 2.3, 8 | 4 | None | 302, 305 | 314, 315 | Forbidden | Forbidden | D | 40 |
| G I | Compressed gas, toxic, flammable, corrosive, n.o.s. *Inhalation Hazard Zone A* | 2.3 | UN3305 | | 2.3, 2.1, 8 | 1 | None | 192 | 245 | Forbidden | Forbidden | D | 17, 40 |
| G I | Compressed gas, toxic, flammable, corrosive, n.o.s. *Inhalation Hazard Zone B* | 2.3 | UN3305 | | 2.3, 2.1, 8 | 2, B9, B14 | None | 302, 305 | 314, 315 | Forbidden | Forbidden | D | 17, 40 |
| G I | Compressed gas, toxic, flammable, corrosive, n.o.s. *Inhalation Hazard Zone C* | 2.3 | UN3305 | | 2.3, 2.1, 8 | 3, B14 | None | 302, 305 | 314, 315 | Forbidden | Forbidden | D | 17, 40 |
| G I | Compressed gas, toxic, flammable, corrosive, n.o.s. *Inhalation Hazard Zone D* | 2.3 | UN3305 | | 2.3, 2.1, 8 | 4 | None | 302, 305 | 314, 315 | Forbidden | Forbidden | D | 17, 40 |
| G | Compressed gas, toxic, flammable, n.o.s. *Inhalation hazard Zone A* | 2.3 | UN1953 | | 2.3, 2.1 | 1 | None | 192 | 245 | Forbidden | Forbidden | D | 40 |
| G | Compressed gas, toxic, flammable, n.o.s. *Inhalation hazard Zone B* | 2.3 | UN1953 | | 2.3, 2.1 | 2, B9, B14 | None | 302, 305 | 314, 315 | Forbidden | Forbidden | D | 40 |
| G | Compressed gas, toxic, flammable, n.o.s. *Inhalation Hazard Zone C* | 2.3 | UN1953 | | 2.3, 2.1 | 3, B14 | None | 302, 305 | 314, 315 | Forbidden | Forbidden | D | 40 |
| G | Compressed gas, toxic, flammable, n.o.s. *Inhalation Hazard Zone D* | 2.3 | UN1953 | | 2.3, 2.1 | 4 | None | 302, 305 | 314, 315 | Forbidden | Forbidden | D | 40 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G | Compressed gas, toxic, n.o.s. *Inhalation Hazard Zone A* | 2.3 | UN1955 | | 2.3 | 1 | None | 192 | 245 | Forbidden | Forbidden | D | 40 |
| G | Compressed gas, toxic, n.o.s. *Inhalation Hazard Zone B* | 2.3 | UN1955 | | 2.3 | 2, B9, B14 | None | 302, 305 | 314, 315 | Forbidden | Forbidden | D | 40 |
| G | Compressed gas, toxic, n.o.s. *Inhalation Hazard Zone C* | 2.3 | UN1955 | | 2.3 | 3, B14 | None | 302, 305 | 314, 315 | Forbidden | Forbidden | D | 40 |
| G | Compressed gas, toxic, n.o.s. *Inhalation Hazard Zone D* | 2.3 | UN1955 | | 2.3 | 4 | None | 302, 305 | 314, 315 | Forbidden | Forbidden | D | 40 |
| G I | Compressed gas, toxic, oxdizing, corrosive, n.o.s. *Inhalation Hazard Zone A* | 2.3 | UN3306 | | 2.3, 5.1, 8 | 1 | None | 192 | 244 | Forbidden | Forbidden | D | 40, 89, 90 |
| G I | Compressed gas, toxic, oxidizing, corrosive, n.o.s. *Inhalation Hazard Zone B* | 2.3 | UN3306 | | 2.3, 5.1, 8 | 2, B9, B14 | None | 302, 305 | 314, 315 | Forbidden | Forbidden | D | 40, 89, 90 |
| G I | Compressed gas, toxic, oxidizing, corrosive, n.o.s. *Inhalation Hazard Zone C* | 2.3 | UN3306 | | 2.3, 5.1, 8 | 3, B14 | None | 302, 305 | 314, 315 | Forbidden | Forbidden | D | 40, 89, 90 |
| G I | Compressed gas, toxic, oxidizing, corrosive, n.o.s. *Inhalation Hazard Zone D* | 2.3 | UN3306 | | 2.3, 5.1, 8 | 4 | None | 302, 305 | 314, 315 | Forbidden | Forbidden | D | 40, 89, 90 |
| G | Compressed gas, toxic, oxidizing, n.o.s. *Inhalation Hazard Zone A* | 2.3 | UN3303 | | 2.3, 5.1 | 1 | None | 192 | 245 | Forbidden | Forbidden | D | 40 |
| G | Compressed gas, toxic, oxidizing, n.o.s. *Inhalation Hazard Zone B* | 2.3 | UN3303 | | 2.3, 5.1 | 2, B9, B14 | None | 302, 305 | 314, 315 | Forbidden | Forbidden | D | 40 |
| G | Compressed gas, toxic, oxidizing, n.o.s. *Inhalation Hazard Zone C* | 2.3 | UN3303 | | 2.3, 5.1 | 3, B14 | None | 302, 305 | 314, 315 | Forbidden | Forbidden | D | 40 |
| G | Compressed gas, toxic, oxidizing, n.o.s. *Inhalation Hazard Zone D* | 2.3 | UN3303 | | 2.3, 5.1 | 4 | None | 302, 305 | 314, 315 | Forbidden | Forbidden | D | 40 |
| D | Consumer commodity | ORM-D | | | None | | 156, 306 | 156, 306 | None | 30 kg gross | 30 kg gross | A | |
| G | Contrivances, water-activated, *with burster, expelling charge or propelling charge* | 1.2L | UN0248 | II | 1.2L | | None | 62 | None | Forbidden | Forbidden | 08 | 8E, 14E, 15E, 17E |
| G | Contrivances, water-activated, *with burster, expelling charge or propelling charge* | 1.3L | UN0249 | II | 1.3L | | None | 62 | None | Forbidden | Forbidden | 08 | 8E, 14E, 15E, 17E |
| | Copper acetoarsenite | 6.1 | UN1585 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | *Copper acetylide* | Forbidden | | | | | | | | | | | |
| | *Copper amine azide* | Forbidden | | | | | | | | | | | |
| | Copper arsenite | 6.1 | UN1586 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Copper based pesticides, liquid, flammable, toxic, *flash point less than 23 degrees C* | 3 | UN2776 | I | 3, 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | Forbidden | 30 L | B | 40 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | II | 3, 6.1 | IB2, T11, TP2, TP13, TP27 | 150 | 202 | 243 | 1 L | 60 L | B | 40 |
| | Copper based pesticides, liquid, toxic | 6.1 | UN3010 | I | 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1 | IB3, T7, TP2, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | 40 |
| | Copper based pesticides, liquid, toxic, flammable, *flash point not less than 23 degrees C* | 6.1 | UN3009 | I | 6.1, 3 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1, 3 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1, 3 | B1, IB3, T7, TP2, TP28 | 153 | 203 | 242 | 60 L | 220 L | A | 40 |
| | Copper based pesticides, solid, toxic | 6.1 | UN2775 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | 40 |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 40 |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 40 |
| | Copper chlorate | 5.1 | UN2721 | II | 5.1 | A1, IB8, IP2, IP4, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 56, 58 |
| | Copper chloride | 8 | UN2802 | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | |
| | Copper cyanide | 6.1 | UN1587 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 204 | 242 | 25 kg | 100 kg | A | 52 |
| | *Copper selenate, see* Selenates *or* Selenites | | | | | | | | | | | | |
| | *Copper selenite, see* Selenates *or* Selenites | | | | | | | | | | | | |
| | *Copper tetramine nitrate* | Forbidden | | | | | | | | | | | |
| A W | Copra | 4.2 | UN1363 | III | 4.2 | IB8, IP3, IP7 | None | 213 | 241 | Forbidden | Forbidden | A | 13, 19, 48, 119 |
| | Cord, detonating, *flexible* | 1.1D | UN0065 | II | 1.1D | 102 | 63(a) | 62 | None | Forbidden | Forbidden | 07 | |
| | Cord, detonating, *flexible* | 1.4D | UN0289 | II | 1.4D | | None | 62 | None | Forbidden | 75 kg | 06 | |
| | Cord detonating *or* Fuse detonating *metal clad* | 1.2D | UN0102 | II | 1.2D | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Cord, detonating *or* Fuse, detonating *metal clad* | 1.1D | UN0290 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Cord, detonating, mild effect *or* Fuse, detonating, mild effect *metal clad* | 1.4D | UN0104 | II | 1.4D | | None | 62 | None | Forbidden | 75 kg | 06 | |
| | Cord, igniter | 1.4G | UN0066 | II | 1.4G | | None | 62 | None | Forbidden | 75 kg | 06 | |
| | *Cordeau detonant fuse, see* Cord, detonating, *etc;* Cord, detonating, *flexible* | | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Cordite, see* Powder, smokeless | | | | | | | | | | | | |
| G | Corrosive, liquid, acidic, inorganic, n.o.s | 8 | UN3264 | I | 8 | A6, B10, T14, TP2, TP27 | None | 201 | 243 | 0.5 L | 2.5 L | B | 40. |
| | | | | II | 8 | B2, IB2, T11, TP2, TP27 | 154 | 202 | 242 | 1 L | 30 L | B | 40. |
| | | | | III | 8 | IB3, T7, TP1, TP28 | 154 | 203 | 241 | 5 L | 60 L | A | 40. |
| G | Corrosive liquid, acidic, organic, n.o.s. | 8 | UN3265 | I | 8 | A6, B10, T14, TP2, TP27 | None | 201 | 243 | 0.5 L | 2.5 L | B | 40 |
| | | | | II | 8 | B2, IB2, T11, TP2, TP27 | 154 | 202 | 242 | 1 L | 30 L | B | 40 |
| | | | | III | 8 | IB3, T7, TP1, TP28 | 154 | 203 | 241 | 5 L | 60 L | A | 40 |
| G | Corrosive liquid, basic, inorganic, n.o.s. | 8 | UN3266 | I | 8 | A6, T14, TP2, TP27 | None | 201 | 243 | 0.5 L | 2.5 L | B | 40, 52 |
| | | | | II | 8 | B2, IB2, T11, TP2, TP27 | 154 | 202 | 242 | 1 L | 30 L | B | 40, 52 |
| | | | | III | 8 | IB3, T7, TP1, TP28 | 154 | 203 | 241 | 5 L | 60 L | A | 40, 52 |
| G | Corrosive liquid, basic, organic, n.o.s. | 8 | UN3267 | I | 8 | A6, B10, T14, TP2, TP27 | None | 201 | 243 | 0.5 L | 2.5 L | B | 40, 52 |
| | | | | II | 8 | B2, IB2, T11, TP2, TP27 | 154 | 202 | 242 | 1 L | 30 L | B | 40, 52 |
| | | | | III | 8 | IB3, T7, TP1, TP28 | 154 | 203 | 241 | 5 L | 60 L | A | 40, 52 |
| G | Corrosive liquid, self-heating, n.o.s. | 8 | UN3301 | I | 8, 4.2 | A6, B10 | None | 201 | 243 | 0.5 L | 2.5 L | D | |
| | | | | II | 8, 4.2 | B2, IB1 | 154 | 202 | 242 | 1 L | 30 L | D | |
| G | Corrosive liquids, flammable, n.o.s. | 8 | UN2920 | I | 8, 3 | A6, B10, T14, TP2, TP27 | None | 201 | 243 | 0.5 L | 2.5 L | C | 25, 40 |
| | | | | II | 8, 3 | B2, IB2, T11, TP2, TP27 | None | 202 | 243 | 1 L | 30 L | C | 25, 40 |
| G | Corrosive liquids, n.o.s. | 8 | UN1760 | I | 8 | A6, A7, B10, T14, TP2, TP27 | None | 201 | 243 | 0.5 L | 2.5 L | B | 40 |
| | | | | II | 8 | B2, IB2, T11, TP2, TP27 | 154 | 202 | 242 | 1 L | 30 L | B | 40 |
| | | | | III | 8 | IB3, T7, TP1, TP28 | 154 | 203 | 241 | 5 L | 60 L | A | 40 |
| G | Corrosive liquids, oxidizing, n.o.s. | 8 | UN3093 | I | 8, 5.1 | A6, A7 | None | 201 | 243 | Forbidden | 2.5 L | C | 89 |
| | | | | II | 8, 5.1 | A6, A7, IB2 | None | 202 | 243 | 1 L | 30 L | C | 89 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G | Corrosive liquids, toxic, n.o.s. | 8 | UN2922 | I | 8, 6.1 | A6, A7, B10, T14, TP2, TP13, TP27 | None | 201 | 243 | 0.5 L | 2.5 L | B | 40 |
| | | | | II | 8, 6.1 | B3, IB2, T7, TP2 | 154 | 202 | 243 | 1 L | 30 L | B | 40 |
| | | | | III | 8, 6.1 | IB3, T7, TP1, TP28 | 154 | 203 | 241 | 5 L | 60 L | B | 40 |
| G | Corrosive liquids, water-reactive, n.o.s. | 8 | UN3094 | I | 8, 4.3 | A6, A7 | None | 201 | 243 | Forbidden | 1 L | E | |
| | | | | II | 8, 4.3 | A6, A7 | None | 202 | 243 | 1 L | 5 L | E | |
| G | Corrosive solid, acidic, inorganic, n.o.s. | 8 | UN3260 | I | 8 | IB7, IP1, T6, TP33 | None | 211 | 242 | 1 kg | 25 kg | B | |
| | | | | II | 8 | IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | B | |
| | | | | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | |
| G | Corrosive solid, acidic, organic, n.o.s. | 8 | UN3261 | I | 8 | IB7, IP1, T6, TP33 | None | 211 | 242 | 1 kg | 25 kg | B | |
| | | | | II | 8 | IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | B | |
| | | | | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | |
| G | Corrosive solid, basic, inorganic, n.o.s. | 8 | UN3262 | I | 8 | IB7, IP1, T6, TP33 | None | 211 | 242 | 1 kg | 25 kg | B | 52 |
| | | | | II | 8 | IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | B | 52 |
| | | | | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | 52 |
| G | Corrosive solid, basic, organic, n.o.s. | 8 | UN3263 | I | 8 | IB7, IP1, T6, TP33 | None | 211 | 242 | 1 kg | 25 kg | B | 52 |
| | | | | II | 8 | IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | B | 52 |
| | | | | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | 52 |
| G | Corrosive solids, flammable, n.o.s. | 8 | UN2921 | I | 8, 4.1 | IB6, T6, TP33 | None | 211 | 242 | 1 kg | 25 kg | B | 12, 25 |
| | | | | II | 8, 4.1 | IB8, IP2, IP4, T3, TP33 | None | 212 | 242 | 15 kg | 50 kg | B | 12, 25 |
| G | Corrosive solids, n.o.s. | 8 | UN1759 | I | 8 | IB7, IP1, T6, TP33 | None | 211 | 242 | 1 kg | 25 kg | B | |
| | | | | II | 8 | 128, IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | |
| | | | | III | 8 | 128, IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | |
| G | Corrosive solids, oxidizing, n.o.s. | 8 | UN3084 | I | 8, 5.1 | T6, TP33 | None | 211 | 242 | 1 kg | 25 kg | C | |
| | | | | II | 8, 5.1 | IB6, IP2, T3, TP33 | None | 212 | 242 | 15 kg | 50 kg | C | |
| G | Corrosive solids, self-heating, n.o.s. | 8 | UN3095 | I | 8, 4.2 | T6, TP33 | None | 211 | 243 | 1 kg | 25 kg | C | |
| | | | | II | 8, 4.2 | IB6, IP2, T3, TP33 | None | 212 | 242 | 15 kg | 50 kg | C | |
| G | Corrosive solids, toxic, n.o.s. | 8 | UN2923 | I | 8, 6.1 | IB7, T6, TP33 | None | 211 | 242 | 1 kg | 25 kg | B | 40 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | II | 8, 6.1 | IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | B | 40 |
| | | | | III | 8, 6.1 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | B | 40, 95 |
| G | Corrosive solids, water-reactive, n.o.s. | 8 | UN3096 | I | 8, 4.3 | IB4, IP1, T6, TP33 | None | 211 | 243 | 1 kg | 25 kg | D | |
| | | | | II | 8, 4.3 | IB6, IP2, T3, TP33 | None | 212 | 242 | 15 kg | 50 kg | D | |
| D W | Cotton | 9 | NA1365 | | 9 | 137, IB8, IP2, IP4, W41 | None | None | None | No limit | No limit | A | |
| A W | Cotton waste, oily | 4.2 | UN1364 | III | 4.2 | IB8, IP3, IP7 | None | 213 | None | Forbidden | Forbidden | A | 54 |
| A I W | Cotton, wet | 4.2 | UN1365 | III | 4.2 | IB8, IP3, IP7 | None | 204 | 241 | Forbidden | Forbidden | A | |
| | Coumarin derivative pesticides, liquid, flammable, toxic, *flash point less than 23 degrees C* | 3 | UN3024 | I | 3, 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | Forbidden | 30 L | B | 40 |
| | | | | II | 3, 6.1 | IB2, T11, TP2, TP13, TP27 | 150 | 202 | 243 | 1 L | 60 L | B | 40 |
| | Coumarin derivative pesticides, liquid, toxic | 6.1 | UN3026 | I | 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1 | IB2, T11, TP2, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1 | IB3, T7, TP1, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | 40 |
| | Coumarin derivative pesticides, liquid, toxic, flammable, *flash point not less than 23 degrees C* | 6.1 | UN3025 | I | 6.1, 3 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1, 3 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1, 3 | B1, IB3, T7, TP1, TP28 | 153 | 203 | 242 | 60 L | 220 L | A | 40 |
| | Coumarin derivative pesticides, solid, toxic | 6.1 | UN3027 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | 40 |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 40 |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 40 |
| | Cresols, liquid | 6.1 | UN2076 | II | 6.1, 8 | IB2, IP2, IP4, T7, TP2 | 153 | 202 | 243 | 1 L | 30 L | B | |
| | Cresols, solid | 6.1 | UN3455 | II | 6.1, 8 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 15 kg | 50 kg | B | |
| | Cresylic acid | 6.1 | UN2022 | II | 6.1, 8 | IB2, T7, TP2, TP13 | 153 | 202 | 243 | 1 L | 30 L | B | |
| | Crotonaldehyde *or* Crotonaldehyde, stabilized | 6.1 | UN1143 | I | 6.1, 3 | 2, 175, B9, B14, B32, B74, B77, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | B | 40 |
| | Crotonic acid, liquid | 8 | UN3472 | III | 8 | IB8, T1 | 154 | 203 | 241 | 5 L | 60 L | A | 12. |
| | Crotonic acid, solid | 8 | UN2823 | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | 12. |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Crotonylene | 3 | UN1144 | II | 3 | T11, TP2 | 150 | 201 | 243 | 1 L | 30 L | E | |
| | Cupriethylenediamine solution | 8 | UN1761 | II | 8, 6.1 | IB2, T7, TP2 | 154 | 202 | 243 | 1 L | 30 L | A | |
| | | | | III | 8, 6.1 | IB3, T7, TP1, TP28 | 154 | 203 | 242 | 5 L | 60 L | A | 95 |
| | Cutters, cable, explosive | 1.4S | UN0070 | II | 1.4S | | None | 62 | None | 25 kg | 100 kg | 05 | |
| | *Cyanide or cyanide mixtures, dry, see* Cyanides, inorganic, solid, n.o.s. | | | | | | | | | | | | |
| | Cyanide solutions, n.o.s. | 6.1 | UN1935 | I | 6.1 | B37, T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40, 52 |
| | | | | II | 6.1 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | A | 40, 52 |
| | | | | III | 6.1 | IB3, T7, TP2, TP13, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | 40, 52 |
| | Cyanides, inorganic, solid, n.o.s. | 6.1 | UN1588 | I | 6.1 | IB7, IP1, N74, N75, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | 52 |
| | | | | II | 6.1 | IB8, IP2, IP4, N74, N75, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 52 |
| | | | | III | 6.1 | IB8, IP3, N74, N75, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 52 |
| | Cyanogen | 2.3 | UN1026 | | 2.3, 2.1 | 2 | None | 304 | 245 | Forbidden | Forbidden | D | 40 |
| | Cyanogen bromide | 6.1 | UN1889 | I | 6.1, 8 | A6, A8, T6, TP33 | None | 211 | 242 | 1 kg | 15 kg | D | 40 |
| | Cyanogen chloride, stabilized | 2.3 | UN1589 | | 2.3, 8 | 1 | None | 192 | 245 | Forbidden | Forbidden | D | 40 |
| | Cyanuric chloride | 8 | UN2670 | II | 8 | IB8, IP2, IP4, T3, TP33 | None | 212 | 240 | 15 kg | 50 kg | A | 12, 40 |
| | *Cyanuric triazide* | Forbidden | | | | | | | | | | | |
| | Cyclobutane | 2.1 | UN2601 | | 2.1 | | 306 | 304 | 314, 315 | Forbidden | 150 kg | B | 40 |
| | Cyclobutyl chloroformate | 6.1 | UN2744 | II | 6.1, 8, 3 | IB1, T7, TP2, TP13 | 153 | 202 | 243 | 1 L | 30 L | A | 12, 13, 21, 25, 40, 100 |
| | 1,5,9-Cyclododecatriene | 6.1 | UN2518 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | 40 |
| | Cycloheptane | 3 | UN2241 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | 40 |
| | Cycloheptatriene | 3 | UN2603 | II | 3, 6.1 | IB2, T7, TP1, TP13 | 150 | 202 | 243 | 1 L | 60 L | E | 40 |
| | Cycloheptene | 3 | UN2242 | II | 3 | B1, IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Cyclohexane | 3 | UN1145 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | E | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cyclohexanone | 3 | UN1915 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Cyclohexene | 3 | UN2256 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | E | |
| | Cyclohexenyltrichlorosilane | 8 | UN1762 | II | 8 | A7, B2, IB2, N34, T7, TP2, TP13 | None | 202 | 242 | Forbidden | 30 L | C | 40 |
| | Cyclohexyl acetate | 3 | UN2243 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Cyclohexyl isocyanate | 6.1 | UN2488 | I | 6.1, 3 | 2, B9, B14, B32, B74, B77, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 40 |
| | Cyclohexyl mercaptan | 3 | UN3054 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | 40, 95 |
| | Cyclohexylamine | 8 | UN2357 | II | 8, 3 | IB2, T7, TP2 | None | 202 | 243 | 1 L | 30 L | A | 40 |
| | Cyclohexyltrichlorosilane | 8 | UN1763 | II | 8 | A7, B2, IB2, N34, T7, TP2, TP13 | None | 202 | 242 | Forbidden | 30 L | C | 40 |
| | Cyclonite and cyclotetramethylenetetranitramine mixtures, wetted *or* desensitized *see* RDX and HMX mixtures, wetted *or* desensitized *etc* | | | | | | | | | | | | |
| | Cyclonite and HMX mixtures, wetted *or* desensitized *see* RDX and HMX mixtures, wetted *or* desensitized *etc* | | | | | | | | | | | | |
| | Cyclonite and octogen mixtures, wetted *or* desensitized *see* RDX and HMX mixtures, wetted *or* desensitized *etc* | | | | | | | | | | | | |
| | Cyclonite, *see* Cyclotrimethylenetrinitramine, *etc* | | | | | | | | | | | | |
| | Cyclooctadiene phosphines, *see* 9-Phosphabicyclononanes | | | | | | | | | | | | |
| | Cyclooctadienes | 3 | UN2520 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Cyclooctatetraene | 3 | UN2358 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Cyclopentane | 3 | UN1146 | II | 3 | IB2, T7, TP1 | 150 | 202 | 242 | 5 L | 60 L | E | |
| | *Cyclopentane, methyl, see* Methylcyclopentane | | | | | | | | | | | | |
| | Cyclopentanol | 3 | UN2244 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Cyclopentanone | 3 | UN2245 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Cyclopentene | 3 | UN2246 | II | 3 | IB2, IP8, T7, TP2 | 150 | 202 | 242 | 5 L | 60 L | E | |
| | Cyclopropane | 2.1 | UN1027 | | 2.1 | T50 | 306 | 304 | 314, 315 | Forbidden | 150 kg | E | 40 |
| | *Cyclotetramethylene tetranitramine (dry or unphlegmatized) (HMX)* | Forbidden | | | | | | | | | | | |
| | Cyclotetramethylenetetranitramine, desensitized *or* Octogen, desensitized *or* HMX, desensitized | 1.1D | UN0484 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cyclotetramethylenetetranitramine, wetted *or* HMX, wetted *or* Octogen, wetted *with not less than 15 percent water, by mass* | 1.1D | UN0226 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Cyclotrimethylenenitramine and octogen, mixtures, wetted *or* desensitized *see* RDX and HMX mixtures, wetted *or* desensitized, etc | | | | | | | | | | | | |
| | Cyclotrimethylenetrinitramine and cyclotetramethylenetetranitramine mixtures, wetted *or* desensitized *see* RDX and HMX mixtures, wetted *or* desensitized *etc* | | | | | | | | | | | | |
| | Cyclotrimethylenetrinitramine and HMX mixtures, wetted *or* desensitized *see* RDX and HMX mixtures, wetted *or* desensitized *etc* | | | | | | | | | | | | |
| | Cyclotrimethylenetrinitramine, desensitized *or* Cyclonite, desensitized *or* Hexogen, desensitized *or* RDX, desensitized | 1.1D | UN0483 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Cyclotrimethylenetrinitramine, wetted *or* Cyclonite, wetted *or* Hexogen, wetted *or* RDX, wetted *with not less than 15 percent water by mass* | 1.1D | UN0072 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Cymenes | 3 | UN2046 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Dangerous Goods in Machinery *or* Dangerous Goods in Apparatus | 9 | UN3363 | | | 136, A105 | None | 222 | None | See A105 | See A105 | A. | |
| | Decaborane | 4.1 | UN1868 | II | 4.1, 6.1 | A19, A20, IB6, IP2, T3, TP33 | None | 212 | None | Forbidden | 50 kg | A | 74 |
| | Decahydronaphthalene | 3 | UN1147 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | n-Decane | 3 | UN2247 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Deflagrating metal salts of aromatic nitroderivatives, n.o.s. | 1.3C | UN0132 | II | 1.3C | | None | 62 | None | Forbidden | Forbidden | 10 | 5E |
| | *Delay electric igniter, see* Igniters | | | | | | | | | | | | |
| D | Denatured alcohol | 3 | NA1987 | II | 3 | 172, T8 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | 172, B1, T7 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *Depth charges, see* Charges, depth | | | | | | | | | | | | |
| G | Desensitized explosive, liquid, n.o.s. | 3 | UN3379 | I | 3 | 164 | None | 201 | None | Forbidden | Forbidden | D | 36 |
| G | Desensitized explosive, solid, n.o.s. | 4.1 | UN3380 | I | 4.1 | 164 | None | 211 | None | Forbidden | Forbidden | D | 28, 36 |
| | *Detonating relays, see* Detonators, *etc* | | | | | | | | | | | | |
| | Detonator assemblies, non-electric *for blasting* | 1.1B | UN0360 | II | 1.1B | | None | 62 | None | Forbidden | Forbidden | 11 | |
| | Detonator assemblies, non-electric, *for blasting* | 1.4B | UN0361 | II | 1.4B | 103 | 63(f), 63(g) | 62 | None | Forbidden | 75 kg | 06 | |
| | Detonator, assemblies, non-electric *for blasting* | 1.4S | UN0500 | II | 1.4S | | 63(f), 63(g) | 62 | None | 25 kg | 100 kg | 05 | |
| | Detonators, electric, *for blasting* | 1.1B | UN0030 | II | 1.1B | | 63(f), 63(g) | 62 | None | Forbidden | Forbidden | 11 | |
| | Detonators, electric, *for blasting* | 1.4B | UN0255 | II | 1.4B | 103 | 63(f), 63(g) | 62 | None | Forbidden | 75 kg | 06 | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Detonators, electric *for blasting* | 1.4S | UN0456 | II | 1.4S | | 63(f), 63(g) | 62 | None | 25 kg | 100 kg | 05 | |
| | Detonators for ammunition | 1.1B | UN0073 | II | 1.1B | | None | 62 | None | Forbidden | Forbidden | 11 | |
| | Detonators for ammunition | 1.2B | UN0364 | II | 1.2B | | None | 62 | None | Forbidden | Forbidden | 11 | |
| | Detonators for ammunition | 1.4B | UN0365 | II | 1.4B | 103 | None | 62 | None | Forbidden | 75 kg | 06 | |
| | Detonators for ammunition | 1.4S | UN0366 | II | 1.4S | | None | 62 | None | 25 kg | 100 kg | 05 | |
| | Detonators, non-electric, *for blasting* | 1.1B | UN0029 | II | 1.1B | | None | 62 | None | Forbidden | Forbidden | 11 | |
| | Detonators, non-electric, *for blasting* | 1.4B | UN0267 | II | 1.4B | 103 | 63(f), 63(g) | 62 | None | Forbidden | 75 kg | 06 | |
| | Detonators, non-electric, *for blasting* | 1.4S | UN0455 | II | 1.4S | | 63(f), 63(g), | 62 | None | 25 kg | 100 kg | 05 | |
| | Deuterium, compressed | 2.1 | UN1957 | | 2.1 | N89 | 306 | 302 | None | Forbidden | 150 kg | E | 40 |
| | Devices, small, hydrocarbon gas powered *or* Hydrocarbon gas refills for small devices *with release device* | 2.1 | UN3150 | | 2.1 | | 306 | 304 | None | 1 kg | 15 kg | B | 40 |
| | Di-n-amylamine | 3 | UN2841 | III | 3, 6.1 | B1, IB3, T4, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *Di-n-butyl peroxydicarbonate, with more than 52 percent in solution* | Forbidden | | | | | | | | | | | |
| | Di-n-butylamine | 8 | UN2248 | II | 8, 3 | IB2, T7, TP2 | None | 202 | 243 | 1 L | 30 L | A | |
| | *2,2-Di-(tert-butylperoxy) butane, with more than 55 percent in solution* | Forbidden | | | | | | | | | | | |
| | *Di-(tert-butylperoxy) phthalate, with more than 55 percent in solution* | Forbidden | | | | | | | | | | | |
| | *2,2-Di-(4,4-di-tert-butylperoxycyclohexyl) propane, with more than 42 percent with inert solid* | Forbidden | | | | | | | | | | | |
| | *Di-2,4-dichlorobenzoyl peroxide, with more than 75 percent with water* | Forbidden | | | | | | | | | | | |
| | 1,2-Di-(dimethylamino)ethane | 3 | UN2372 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | *Di-2-ethylhexyl phosphoric acid, see* Diisooctyl acid phosphate | | | | | | | | | | | | |
| | *Di-(1-hydroxytetrazole) (dry)* | Forbidden | | | | | | | | | | | |
| | *Di-(1-naphthoyl) peroxide* | Forbidden | | | | | | | | | | | |
| | *a,a'-Di-(nitroxy) methylether* | Forbidden | | | | | | | | | | | |
| | *Di-(beta-nitroxyethyl) ammonium nitrate* | Forbidden | | | | | | | | | | | |
| | Diacetone alcohol | 3 | UN1148 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *Diacetone alcohol peroxides, with more than 57 percent in solution with more than 9 percent hydrogen peroxide, less than 26 percent diacetone alcohol and less than 9 percent water; total active oxygen content more* | Forbidden | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *than 9 percent by mass* | | | | | | | | | | | | |
| | *Diacetyl, see* Butanedione | | | | | | | | | | | | |
| | *Diacetyl peroxide, solid, or with more than 25 percent in solution* | Forbidden | | | | | | | | | | | |
| | Diallylamine | 3 | UN2359 | II | 3, 6.1, 8 | IB2, T7, TP1 | 150 | 202 | 243 | 1 L | 5 L | B | 21, 40, 100 |
| | Diallylether | 3 | UN2360 | II | 3, 6.1 | IB2, N12, T7, TP1, TP13 | 150 | 202 | 243 | 1 L | 60 L | E | 40 |
| | 4,4′-Diaminodiphenyl methane | 6.1 | UN2651 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | *p-Diazidobenzene* | Forbidden | | | | | | | | | | | |
| | *1,2-Diazidoethane* | Forbidden | | | | | | | | | | | |
| | *1,1'-Diazoaminonaphthalene* | Forbidden | | | | | | | | | | | |
| | *Diazoaminotetrazole (dry)* | Forbidden | | | | | | | | | | | |
| | *Diazodinitrophenol (dry)* | Forbidden | | | | | | | | | | | |
| | Diazodinitrophenol, wetted *with not less than 40 percent water or mixture of alcohol and water, by mass* | 1.1A | UN0074 | II | 1.1A | 111, 117 | None | 62 | None | Forbidden | Forbidden | 12 | |
| | *Diazodiphenylmethane* | Forbidden | | | | | | | | | | | |
| | *Diazonium nitrates (dry)* | Forbidden | | | | | | | | | | | |
| | *Diazonium perchlorates (dry)* | Forbidden | | | | | | | | | | | |
| | *1,3-Diazopropane* | Forbidden | | | | | | | | | | | |
| | *Dibenzyl peroxydicarbonate, with more than 87 percent with water* | Forbidden | | | | | | | | | | | |
| | Dibenzyldichlorosilane | 8 | UN2434 | II | 8 | B2, IB2, T7, TP2, TP13 | 154 | 202 | 242 | 1 L | 30 L | C | 40 |
| | Diborane | 2.3 | UN1911 | | 2.3, 2.1 | 1, N89 | None | 302 | None | Forbidden | Forbidden | D | 40, 57 |
| D | Diborane mixtures | 2.1 | NA1911 | | 2.1 | 5 | None | 302 | 245 | Forbidden | Forbidden | D | 40, 57 |
| | *Dibromoacetylene* | Forbidden | | | | | | | | | | | |
| | 1,2-Dibromobutan-3-one | 6.1 | UN2648 | II | 6.1 | IB2 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | Dibromochloropropane | 6.1 | UN2872 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | |
| | | | | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| A | Dibromodifluoromethane , *R12B2* | 9 | UN1941 | III | None | T11, TP2 | 155 | 203 | 241 | 100 L | 220 L | A | 25 |
| | *1,2-Dibromoethane, see* Ethylene dibromide | | | | | | | | | | | | |
| | Dibromomethane | 6.1 | UN2664 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dibutyl ethers | 3 | UN1149 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Dibutylaminoethanol | 6.1 | UN2873 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | *N,N'-Dichlorazodicarbonamidine (salts of) (dry)* | Forbidden | | | | | | | | | | | |
| | 1,1-Dichloro-1-nitroethane | 6.1 | UN2650 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | 12, 40, 74 |
| D | 3,5-Dichloro-2,4,6-trifluoropyridine | 6.1 | NA9264 | I | 6.1 | 2, B9, B14, B32, B74, T20, TP4, TP12, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | A | 40 |
| | Dichloroacetic acid | 8 | UN1764 | II | 8 | A3, A6, A7, B2, IB2, N34, T8, TP2, TP12 | 154 | 202 | 242 | 1 L | 30 L | A | |
| | 1,3-Dichloroacetone | 6.1 | UN2649 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | B | 12, 40 |
| | Dichloroacetyl chloride | 8 | UN1765 | II | 8 | A3, A6, A7, B2, B6, IB2, N34, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | D | 40 |
| | *Dichloroacetylene* | Forbidden | | | | | | | | | | | |
| + | Dichloroanilines, liquid | 6.1 | UN1590 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | 40 |
| | Dichloroanilines, solid | 6.1 | UN3442 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 40 |
| + | o-Dichlorobenzene | 6.1 | UN1591 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | 2,2′-Dichlorodiethyl ether | 6.1 | UN1916 | II | 6.1, 3 | IB2, N33, N34, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | |
| | Dichlorodifluoromethane and difluoroethane azeotropic mixture *or* Refrigerant gas R 500 *with approximately 74 percent dichlorodifluoromethane* | 2.2 | UN2602 | | 2.2 | T50 | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | Dichlorodifluoromethane *or* Refrigerant gas R 12 | 2.2 | UN1028 | | 2.2 | T50 | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | Dichlorodimethyl ether, symmetrical | 6.1 | UN2249 | I | 6.1, 3 | | None | 201 | 243 | Forbidden | Forbidden | | 40 |
| | 1,1-Dichloroethane | 3 | UN2362 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | 40 |
| | *1,2-Dichloroethane, see* Ethylene dichloride | | | | | | | | | | | | |
| | *Dichloroethyl sulfide* | Forbidden | | | | | | | | | | | |
| | 1,2-Dichloroethylene | 3 | UN1150 | II | 3 | IB2, T7, TP2 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Dichlorofluoromethane *or* Refrigerant gas R21 | 2.2 | UN1029 | | 2.2 | T50 | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | Dichloroisocyanuric acid, dry *or* Dichloroisocyanuric acid salts | 5.1 | UN2465 | II | 5.1 | 28, IB8, IP4, T3, TP33 | 152 | 212 | 240 | 5 kg | 25 kg | A | 13 |
| | Dichloroisopropyl ether | 6.1 | UN2490 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | B | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dichloromethane | 6.1 | UN1593 | III | 6.1 | IB3, IP8, N36, T7, TP2 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | Dichloropentanes | 3 | UN1152 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Dichlorophenyl isocyanates | 6.1 | UN2250 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | B | 25, 40, 48 |
| | Dichlorophenyltrichlorosilane | 8 | UN1766 | II | 8 | A7, B2, B6, IB2, N34, T7, TP2, TP13 | None | 202 | 242 | Forbidden | 30 L | C | 40 |
| | 1,2-Dichloropropane | 3 | UN1279 | II | 3 | IB2, N36, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | 1,3-Dichloropropanol-2 | 6.1 | UN2750 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | 12, 40 |
| | *Dichloropropene and propylene dichloride mixture, see* 1,2-Dichloropropane | | | | | | | | | | | | |
| | Dichloropropenes | 3 | UN2047 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Dichlorosilane | 2.3 | UN2189 | | 2.3, 2.1, 8 | 2, B9, B14 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 17, 40 |
| | 1,2-Dichloro-1,1,2,2- tetrafluoroethane *or* Refrigerant gas R 114 | 2.2 | UN1958 | | 2.2 | T50 | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | *Dichlorovinylchloroarsine* | Forbidden | | | | | | | | | | | |
| | *Dicycloheptadiene, see* Bicyclo [2,2,1] hepta-2,5-diene, stabilized | | | | | | | | | | | | |
| | Dicyclohexylamine | 8 | UN2565 | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | |
| | Dicyclohexylammonium nitrite | 4.1 | UN2687 | III | 4.1 | IB8, IP3, T1, TP33 | 151 | 213 | 240 | 25 kg | 100 kg | A | 48 |
| | Dicyclopentadiene | 3 | UN2048 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Didymium nitrate | 5.1 | UN1465 | III | 5.1 | A1, IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | |
| D | Diesel fuel | 3 | NA1993 | III | None | 144, B1, IB3, T4, TP1, TP29 | 150 | 203 | 242 | 60 L | 220 L | A | |
| I | Diesel fuel | 3 | UN1202 | III | 3 | 144, B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *Diethanol nitrosamine dinitrate (dry)* | Forbidden | | | | | | | | | | | |
| | Diethoxymethane | 3 | UN2373 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | E | |
| | 3,3-Diethoxypropene | 3 | UN2374 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Diethyl carbonate | 3 | UN2366 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *Diethyl cellosolve, see* Ethylene glycol diethyl ether | | | | | | | | | | | | |
| | Diethyl ether *or* Ethyl ether | 3 | UN1155 | I | 3 | T11, TP2 | 150 | 201 | 243 | 1 L | 30 L | E | 40 |
| | Diethyl ketone | 3 | UN1156 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Diethyl peroxydicarbonate, with more than 27 percent in solution* | Forbidden | | | | | | | | | | | |
| | Diethyl sulfate | 6.1 | UN1594 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | C | |
| | Diethyl sulfide | 3 | UN2375 | II | 3 | IB2, T7, TP1, TP13 | None | 202 | 243 | 5 L | 60 L | E | |
| | Diethylamine | 3 | UN1154 | II | 3, 8 | A3, IB2, N34, T7, TP1 | 150 | 202 | 243 | 1 L | 5 L | E | 40 |
| | 2-Diethylaminoethanol | 8 | UN2686 | II | 8, 3 | B2, IB2, T7, TP2 | None | 202 | 243 | 1 L | 30 L | A | |
| | 3-Diethyamino-propylamine. | 3 | UN2684 | III | 3, 8 | B1, IB3, T4, TP1 | 150 | 203 | 242 | 5 L | 60 L | A | |
| + | N, N-Diethylaniline | 6.1 | UN2432 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | Diethylbenzene | 3 | UN2049 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Diethyldichlorosilane | 8 | UN1767 | II | 8, 3 | A7, B6, IB2, N34, T7, TP2, TP13 | None | 202 | 243 | Forbidden | 30 L | C | 40 |
| | *Diethylene glycol dinitrate* | Forbidden | | | | | | | | | | | |
| | Diethyleneglycol dinitrate, desensitized *with not less than 25 percent non-volatile water-insoluble phlegmatizer, by mass* | 1.1D | UN0075 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 13 | 21E |
| | Diethylenetriamine | 8 | UN2079 | II | 8 | B2, IB2, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | A | 40, 52 |
| | N,N-Diethylethylenediamine | 8 | UN2685 | II | 8, 3 | IB2, T7, TP2 | None | 202 | 243 | 1 L | 30 L | A | |
| | *Diethylgold bromide* | Forbidden | | | | | | | | | | | |
| | Diethylthiophosphoryl chloride | 8 | UN2751 | II | 8 | B2, IB2, T7, TP2 | None | 212 | 240 | 15 kg | 50 kg | D | 12, 40 |
| | Diethylzinc | 4.2 | UN1366 | I | 4.2, 4.3 | 173, B11, T21, TP2, TP7 | None | 181 | 244 | Forbidden | Forbidden | D | 18 |
| | *Difluorochloroethanes, see* 1-Chloro-1,1-difluoroethanes | | | | | | | | | | | | |
| | 1,1-Difluoroethane *or* Refrigerant gas R 152a | 2.1 | UN1030 | | 2.1 | T50 | 306 | 304 | 314, 315 | Forbidden | 150 kg | B | 40 |
| | 1,1-Difluoroethylene *or* Refrigerant gas R 1132a | 2.1 | UN1959 | | 2.1 | | 306 | 304 | None | Forbidden | 150 kg | E | 40 |
| | Difluoromethane *or* Refrigerant gas R 32 | 2.1 | UN3252 | | 2.1 | T50 | 306 | 302 | 314, 315 | Forbidden | 150 kg | D | 40 |
| | Difluorophosphoric acid, anhydrous | 8 | UN1768 | II | 8 | A6, A7, B2, IB2, N5, N34, T8, TP2, TP12 | None | 202 | 242 | 1 L | 30 L | A | 40 |
| | 2,3-Dihydropyran | 3 | UN2376 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | *1,8-Dihydroxy-2,4,5,7-tetranitroanthraquinone (chrysamminic acid)* | Forbidden | | | | | | | | | | | |
| | *Diiodoacetylene* | Forbidden | | | | | | | | | | | |
| | Diisobutyl ketone | 3 | UN1157 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Diisobutylamine | 3 | UN2361 | III | 3, 8 | B1, IB3, T4, TP1 | 150 | 203 | 242 | 5 L | 60 L | A | |
| | Diisobutylene, isomeric compounds | 3 | UN2050 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Diisooctyl acid phosphate | 8 | UN1902 | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | |
| | Diisopropyl ether | 3 | UN1159 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | E | 40 |
| | Diisopropylamine | 3 | UN1158 | II | 3, 8 | IB2, T7, TP1 | 150 | 202 | 243 | 1 L | 5 L | B | |
| | *Diisopropylbenzene hydroperoxide, with more than 72 percent in solution* | Forbidden | | | | | | | | | | | |
| | Diketene, stabilized | 6.1 | UN2521 | I | 6.1, 3 | 2, B9, B14, B32, B74, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 26, 27, 40 |
| | 1,2-Dimethoxyethane | 3 | UN2252 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | 1,1-Dimethoxyethane | 3 | UN2377 | II | 3 | IB2, T7, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Dimethyl carbonate | 3 | UN1161 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | *Dimethyl chlorothiophosphate, see* Dimethyl thiophosphoryl chloride | | | | | | | | | | | | |
| | *2,5-Dimethyl-2,5-dihydroperoxy hexane, with more than 82 percent with water* | Forbidden | | | | | | | | | | | |
| | Dimethyl disulfide | 3 | UN2381 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | 40 |
| | Dimethyl ether | 2.1 | UN1033 | | 2.1 | T50 | 306 | 304 | 314, 315 | Forbidden | 150 kg | B | 40 |
| | Dimethyl-N-propylamine | 3 | UN2266 | II | 3, 8 | IB2, T7, TP2, TP13 | 150 | 202 | 243 | 1 L | 5 L | B | 40 |
| | Dimethyl sulfate | 6.1 | UN1595 | I | 6.1, 8 | 2, B9, B14, B32, B74, B77, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 40 |
| | Dimethyl sulfide | 3 | UN1164 | II | 3 | IB2, IP8, T7, TP2 | 150 | 202 | 242 | 5 L | 60 L | E | 40 |
| | Dimethyl thiophosphoryl chloride | 6.1 | UN2267 | II | 6.1, 8 | IB2, T7, TP2 | 153 | 202 | 243 | 1 L | 30 L | B | 25 |
| | Dimethylamine, anhydrous | 2.1 | UN1032 | | 2.1 | N87, T50 | None | 304 | 314, 315 | Forbidden | 150 kg | D | 40 |
| | Dimethylamine solution | 3 | UN1160 | II | 3, 8 | IB2, T7, TP1 | 150 | 202 | 243 | 1 L | 5 L | B | 52. |
| | 2-Dimethylaminoacetonitrile | 3 | UN2378 | II | 3, 6.1 | IB2, T7, TP1 | 150 | 202 | 243 | 1 L | 60 L | A | 40, 52 |
| | 2-Dimethylaminoethanol | 8 | UN2051 | II | 8, 3 | B2, IB2, T7, TP2 | 154 | 202 | 243 | 1 L | 30 L | A | |
| | 2-Dimethylaminoethyl acrylate | 6.1 | UN3302 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | D | 25 |
| | 2-Dimethylaminoethyl methacrylate | 6.1 | UN2522 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | N,N-Dimethylaniline | 6.1 | UN2253 | II | 6.1 | IB1, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2,3-Dimethylbutane | 3 | UN2457 | II | 3 | IB2, T7, TP1 | 150 | 202 | 242 | 5 L | 60 L | E | |
| | 1, 3-Dimethylbutylamine | 3 | UN2379 | II | 3, 8 | IB2, T7, TP1 | 150 | 202 | 243 | 1 L | 5 L | B | 52. |
| | Dimethylcarbamoyl chloride | 8 | UN2262 | II | 8 | B2, IB2, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | A | 40 |
| | Dimethylcyclohexanes | 3 | UN2263 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | N,N-Dimethylcyclohexylamine | 8 | UN2264 | II | 8, 3 | B2, IB2, T7, TP2 | 154 | 202 | 243 | 1 L | 30 L | A | 40 |
| | Dimethyldichlorosilane | 3 | UN1162 | II | 3, 8 | B77, IB2, T7, TP2, TP13 | None | 202 | 243 | Forbidden | Forbidden | B | 40 |
| | Dimethyldiethoxysilane | 3 | UN2380 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Dimethyldioxanes | 3 | UN2707 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | N,N-Dimethylformamide | 3 | UN2265 | III | 3 | B1, IB3, T2, TP2 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *Dimethylhexane dihydroperoxide (dry)* | Forbidden | | | | | | | | | | | |
| | Dimethylhydrazine, symmetrical | 6.1 | UN2382 | I | 6.1, 3 | 2, B9, B14, B32, B74, B77, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 40, 52, 74. |
| | Dimethylhydrazine, unsymmetrical | 6.1 | UN1163 | I | 6.1, 3, 8 | 2, B7, B9, B14, B32, B74, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 21, 38, 40, 52, 100. |
| | 2,2-Dimethylpropane | 2.1 | UN2044 | | 2.1 | | 306 | 304 | 314, 315 | Forbidden | 150 kg | E | 40 |
| | Dimethylzinc | 4.2 | UN1370 | I | 4.2, 4.3 | 173, B11, B16, T21, TP2, TP7 | None | 181 | 244 | Forbidden | Forbidden | D | 18 |
| | Dinitro-o-cresol | 6.1 | UN1598 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | *1,3-Dinitro-5,5-dimethyl hydantoin* | Forbidden | | | | | | | | | | | |
| | *Dinitro-7,8-dimethylglycoluril (dry)* | Forbidden | | | | | | | | | | | |
| | *1,3-Dinitro-4,5-dinitrosobenzene* | Forbidden | | | | | | | | | | | |
| | *1,4-Dinitro-1,1,4,4-tetramethylolbutanetetranitrate (dry)* | Forbidden | | | | | | | | | | | |
| | *2,4-Dinitro-1,3,5-trimethylbenzene* | Forbidden | | | | | | | | | | | |
| | Dinitroanilines | 6.1 | UN1596 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 91 |
| | Dinitrobenzenes, liquid | 6.1 | UN1597 | II | 6.1 | 11, IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | 91 |
| | | | | III | 6.1 | 11, IB3, T7, TP2 | 153 | 203 | 241 | 60 L | 220 L | A | 91 |
| | Dinitrobenzenes, solid | 6.1 | UN3443 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 91 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Dinitrochlorobenzene, see* Chlorodinitrobenzene | | | | | | | | | | | | |
| | *1,2-Dinitroethane* | Forbidden | | | | | | | | | | | |
| | *1,1-Dinitroethane (dry)* | Forbidden | | | | | | | | | | | |
| | Dinitrogen tetroxide | 2.3 | UN1067 | | 2.3, 5.1, 8 | 1, B7, B14, B45, B46, B61, B66, B67, B77, T50, TP21 | None | 336 | 314 | Forbidden | Forbidden | D | 40, 89, 90 |
| | Dinitroglycoluril *or* Dingu | 1.1D | UN0489 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | *Dinitromethane* | Forbidden | | | | | | | | | | | |
| | Dinitrophenol, *dry or wetted with less than 15 percent water, by mass* | 1.1D | UN0076 | II | 1.1D, 6.1 | | None | 62 | None | Forbidden | Forbidden | 10 | 5E |
| | Dinitrophenol solutions | 6.1 | UN1599 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | 36 |
| | | | | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | 36 |
| | Dinitrophenol, wetted *with not less than 15 percent water, by mass* | 4.1 | UN1320 | I | 4.1, 6.1 | 23, A8, A19, A20, N41 | None | 211 | None | 1 kg | 15 kg | E | 28, 36 |
| | Dinitrophenolates *alkali metals, dry or wetted with less than 15 percent water, by mass* | 1.3C | UN0077 | II | 1.3C, 6.1 | | None | 62 | None | Forbidden | Forbidden | 10 | 5E |
| | Dinitrophenolates, wetted *with not less than 15 percent water, by mass* | 4.1 | UN1321 | I | 4.1, 6.1 | 23, A8, A19, A20, N41 | None | 211 | None | 1 kg | 15 kg | E | 28, 36 |
| | *Dinitropropylene glycol* | Forbidden | | | | | | | | | | | |
| | Dinitroresorcinol, *dry or wetted with less than 15 percent water, by mass* | 1.1D | UN0078 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | 5E |
| | *2,4-Dinitroresorcinol (heavy metal salts of) (dry)* | Forbidden | | | | | | | | | | | |
| | *4,6-Dinitroresorcinol (heavy metal salts of) (dry)* | Forbidden | | | | | | | | | | | |
| | Dinitroresorcinol, wetted *with not less than 15 percent water, by mass* | 4.1 | UN1322 | I | 4.1 | 23, A8, A19, A20, N41 | None | 211 | None | 1 kg | 15 kg | E | 28, 36 |
| | *3,5-Dinitrosalicylic acid (lead salt) (dry)* | Forbidden | | | | | | | | | | | |
| | Dinitrosobenzene | 1.3C | UN0406 | II | 1.3C | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | *Dinitrosobenzylamidine and salts of (dry)* | Forbidden | | | | | | | | | | | |
| | *2,2-Dinitrostilbene* | Forbidden | | | | | | | | | | | |
| | Dinitrotoluenes, *liquid* | 6.1 | UN2038 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | |
| | Dinitrotoluenes, molten | 6.1 | UN1600 | II | 6.1 | T7, TP3 | None | 202 | 243 | Forbidden | Forbidden | C | |
| | Dinitrotoluenes, solid | 6.1 | UN3454 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | *1,9-Dinitroxy pentamethylene-2,4, 6,8-tetramine (dry)* | Forbidden | | | | | | | | | | | |
| | Dioxane | 3 | UN1165 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Dioxolane | 3 | UN1166 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | 40 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dipentene | 3 | UN2052 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Diphenylamine chloroarsine | 6.1 | UN1698 | I | 6.1 | T6, TP33 | None | 201 | None | Forbidden | Forbidden | D | 40 |
| | Diphenylchloroarsine, liquid | 6.1 | UN1699 | I | 6.1 | A8, B14, B32, N33, N34, T14, TP2, TP13, TP27 | None | 201 | 243 | Forbidden | 30 L | D | 40 |
| | Diphenylchloroarsine, solid | 6.1 | UN3450 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | D | 40 |
| | Diphenyldichlorosilane | 8 | UN1769 | II | 8 | A7, B2, IB2, N34, T7, TP2, TP13 | None | 202 | 242 | Forbidden | 30 L | C | 40 |
| | Diphenylmethyl bromide | 8 | UN1770 | II | 8 | IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | D | 40 |
| | Dipicryl sulfide, *dry or wetted with less than 10 percent water, by mass* | 1.1D | UN0401 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Dipicryl sulfide, wetted *with not less than 10 percent water, by mass* | 4.1 | UN2852 | I | 4.1 | 162, A2, N41, N84 | None | 211 | None | Forbidden | 0.5 kg | D | 28 |
| | Dipicrylamine, *see* Hexanitrodiphenylamine | | | | | | | | | | | | |
| | *Dipropionyl peroxide, with more than 28 percent in solution* | Forbidden | | | | | | | | | | | |
| | Di-n-propyl ether | 3 | UN2384 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Dipropyl ketone | 3 | UN2710 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Dipropylamine | 3 | UN2383 | II | 3, 8 | IB2, T7, TP1 | 150 | 202 | 243 | 1 L | 5 L | B | |
| G | Disinfectant, liquid, corrosive, n.o.s. | 8 | UN1903 | I | 8 | A6, A7, B10, T14, TP2, TP27 | None | 201 | 243 | 0.5 L | 2.5 L | B | |
| G | Disinfectants, liquid, corrosive n.o.s. | 8 | UN1903 | II | 8 | B2, IB2, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | B | |
| | | | | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | |
| G | Disinfectants, liquid, toxic, n.o.s. | 6.1 | UN3142 | I | 6.1 | A4, T14, TP2, TP27 | None | 201 | 243 | 1 L | 30 L | A | 40 |
| | | | | II | 6.1 | IB2, T11, TP2, TP27 | 153 | 202 | 243 | 5 L | 60 L | A | 40 |
| | | | | III | 6.1 | IB3, T7, TP1, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | 40 |
| G | Disinfectants, solid, toxic, n.o.s. | 6.1 | UN1601 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | 40 |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 40 |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 40 |
| | Disodium trioxosilicate | 8 | UN3253 | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | 52. |
| G | Dispersant gases, n.o.s. *see* Refrigerant gases, n.o.s. | | | | | | | | | | | | |
| | Divinyl ether, stabilized | 3 | UN1167 | I | 3 | A7, T11, TP2 | None | 201 | 243 | 1 L | 30 L | E | 40 |
| | Dodecyltrichlorosilane | 8 | UN1771 | II | 8 | A7, B2, B6, IB2, N34, T7, TP2, TP13 | None | 202 | 242 | Forbidden | 30 L | C | 40 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dry ice, *see* Carbon dioxide, solid | | | | | | | | | | | | |
| G | Dyes, liquid, corrosive, n.o.s. or Dye intermediates, liquid, corrosive, n.o.s. | 8 | UN2801 | I | 8 | 11, A6, B10, T14, TP2, TP27 | None | 201 | 243 | 0.5 L | 2.5 L | A | |
| | | | | II | 8 | 11, B2, IB2, T11, TP2, TP27 | 154 | 202 | 242 | 1 L | 30 L | A | |
| | | | | III | 8 | 11, IB3, T7, TP1, TP28 | 154 | 203 | 241 | 5 L | 60 L | A | |
| G | Dyes, liquid, toxic, n.o.s. *or* Dye intermediates, liquid, toxic, n.o.s. | 6.1 | UN1602 | I | 6.1 | | None | 201 | 243 | 1 L | 30 L | A | |
| | | | | II | 6.1 | IB2 | 153 | 202 | 243 | 5 L | 60 L | A | |
| | | | | III | 6.1 | IB3 | 153 | 203 | 241 | 60 L | 220 L | A | |
| G | Dyes, solid, corrosive, n.o.s. *or* Dye intermediates, solid, corrosive, n.o.s. | 8 | UN3147 | I | 8 | IB7, IP1, T6, TP33 | None | 211 | 242 | 1 kg | 25 kg | A | |
| | | | | II | 8 | IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | |
| | | | | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | |
| G | Dyes, solid, toxic, n.o.s. *or* Dye intermediates, solid, toxic, n.o.s. | 6.1 | UN3143 | I | 6.1 | A5, IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | *Dynamite, see* Explosive, blasting, type A | | | | | | | | | | | | |
| | *Electrolyte (acid or alkali) for batteries, see* Battery fluid, acid *or* Battery fluid, alkali | | | | | | | | | | | | |
| | Elevated temperature liquid, flammable, n.o.s., *with flash point above 37.8 C, at or above its flash point* | 3 | UN3256 | III | 3 | IB1, T3, TP3, TP29 | None | None | 247 | Forbidden | Forbidden | A | |
| | Elevated temperature liquid, n.o.s., *at or above 100 C and below its flash point (including molten metals, molten salts, etc.)* | 9 | UN3257 | III | 9 | IB1, T3, TP3, TP29 | None | None | 247 | Forbidden | Forbidden | A | 85 |
| | Elevated temperature solid, n.o.s., *at or above 240 C, see §173.247(h)(4)* | 9 | UN3258 | III | 9 | | 247(h) (4) | None | 247 | Forbidden | Forbidden | A | 85 |
| | Engines, internal combustion, *flammable gas powered* | 9 | UN3166 | | 9 | 135 | 220 | 220 | 220 | Forbidden | No limit | A | |
| | Engines, internal combustion, *flammable liquid powered* | 9 | UN3166 | | 9 | 135 | 220 | 220 | 220 | No limit | No limit | A | |
| G | Environmentally hazardous substances, liquid, n.o.s. | 9 | UN3082 | III | 9 | 8, 146, IB3, T4, TP1, TP29 | 155 | 203 | 241 | No limit | No limit | A | |
| G | Environmentally hazardous substances, solid, n.o.s. | 9 | UN3077 | III | 9 | 8, 146, B54, IB8, IP3, N20, T1, TP33 | 155 | 213 | 240 | No limit | No limit | A | |
| | Epibromohydrin | 6.1 | UN2558 | I | 6.1, 3 | T14, TP2, TP13 | None | 201 | 243 | Forbidden | Forbidden | D | 40 |
| + | Epichlorohydrin | 6.1 | UN2023 | II | 6.1, 3 | IB2, T7, TP2, TP13 | 153 | 202 | 243 | 5 L | 60 L | A | 40 |
| | 1,2-Epoxy-3-ethoxypropane | 3 | UN2752 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Esters, n.o.s. | 3 | UN3272 | II | 3 | IB2, T7, TP1, TP8, TP28 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, IB3, T4, TP1, TP29 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *Etching acid, liquid, n.o.s., see* Hydrofluoric acid, etc | | | | | | | | | | | | |
| | Ethane | 2.1 | UN1035 | | 2.1 | | 306 | 304 | 302 | Forbidden | 150 kg | E | 40 |
| D | Ethane-Propane mixture, refrigerated liquid | 2.1 | NA1961 | | 2.1 | T75, TP5 | None | 316 | 314, 315 | Forbidden | Forbidden | D | 40 |
| | Ethane, refrigerated liquid | 2.1 | UN1961 | | 2.1 | T75, TP5 | None | None | 315 | Forbidden | Forbidden | D | 40 |
| | *Ethanol amine dinitrate* | Forbidden | | | | | | | | | | | |
| | Ethanol *or* Ethyl alcohol *or* Ethanol solutions *or* Ethyl alcohol solutions | 3 | UN1170 | II | 3 | 24, IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | A | |
| | | | | III | 3 | 24, B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Ethanolamine *or* Ethanolamine solutions | 8 | UN2491 | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | 52. |
| | *Ether, see* Diethyl ether | | | | | | | | | | | | |
| | Ethers, n.o.s. | 3 | UN3271 | II | 3 | IB2, T7, TP1, TP8, TP28 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, IB3, T4, TP1, TP29 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Ethyl acetate | 3 | UN1173 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Ethyl acrylate, stabilized | 3 | UN1917 | II | 3 | IB2, T4, TP1, TP13 | 150 | 202 | 242 | 5 L | 60 L | B | 40 |
| | Ethyl alcohol, *see* Ethanol | | | | | | | | | | | | |
| | *Ethyl aldehyde, see* Acetaldehyde | | | | | | | | | | | | |
| | Ethyl amyl ketone | 3 | UN2271 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | N-Ethylbenzyltoluidines, solid | 6.1 | UN3460 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | N-Ethyl-N-benzylaniline | 6.1 | UN2274 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | Ethyl borate | 3 | UN1176 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Ethyl bromide | 6.1 | UN1891 | II | 6.1 | IB2, IP8, T7, TP2, TP13 | 153 | 202 | 243 | 5 L | 60 L | B | 40, 85 |
| | Ethyl bromoacetate | 6.1 | UN1603 | II | 6.1, 3 | IB2, T7, TP2 | None | 202 | 243 | Forbidden | Forbidden | D | 40 |
| | Ethyl butyl ether | 3 | UN1179 | II | 3 | B1, IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Ethyl butyrate | 3 | UN1180 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethyl chloride | 2.1 | UN1037 | | 2.1 | B77, N86, T50 | None | 322 | 314, 315 | Forbidden | 150 kg | B | 40 |
| | Ethyl chloroacetate | 6.1 | UN1181 | II | 6.1, 3 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | |
| | Ethyl chloroformate | 6.1 | UN1182 | I | 6.1, 3, 8 | 2, B9, B14, B32, B74, N34, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 21, 40, 100 |
| | Ethyl 2-chloropropionate | 3 | UN2935 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| + | Ethyl chlorothioformate | 8 | UN2826 | II | 8, 6.1, 3 | 2, B9, B14, B32, B74, T20, TP2, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | A | 40 |
| | Ethyl crotonate | 3 | UN1862 | II | 3 | IB2, T4, TP2 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Ethyl ether, *see* Diethyl ether | | | | | | | | | | | | |
| | Ethyl fluoride *or* Refrigerant gas R161 | 2.1 | UN2453 | | 2.1 | | 306 | 304 | 314, 315 | Forbidden | 150 kg | E | 40 |
| | Ethyl formate | 3 | UN1190 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | E | |
| | *Ethyl hydroperoxide* | Forbidden | | | | | | | | | | | |
| | Ethyl isobutyrate | 3 | UN2385 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| + | Ethyl isocyanate | 3 | UN2481 | I | 3, 6.1 | 1, B9, B14, B30, B72, T22, TP2, TP13, TP38, TP44 | None | 226 | 244 | Forbidden | Forbidden | D | 40, 52 |
| | Ethyl lactate | 3 | UN1192 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Ethyl mercaptan | 3 | UN2363 | I | 3 | A6, T11, TP2, TP13 | None | 201 | 243 | Forbidden | 30 L | E | 95, 102 |
| | Ethyl methacrylate, stabilized | 3 | UN2277 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Ethyl methyl ether | 2.1 | UN1039 | | 2.1 | | None | 201 | 314, 315 | Forbidden | 150 kg | B | 40 |
| | Ethyl methyl ketone *or* Methyl ethyl ketone | 3 | UN1193 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Ethyl nitrite solutions | 3 | UN1194 | I | 3, 6.1 | | None | 201 | None | Forbidden | Forbidden | E | 40, 105 |
| | Ethyl orthoformate | 3 | UN2524 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Ethyl oxalate | 6.1 | UN2525 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | *Ethyl perchlorate* | Forbidden | | | | | | | | | | | |
| D | Ethyl phosphonothioic dichloride, anhydrous | 6.1 | NA2927 | I | 6.1, 8 | 2, B9, B14, B32, B74, T20, TP4, TP12, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 40 |
| D | Ethyl phosphonous dichloride, anhydrous *pyrophoric liquid* | 6.1 | NA2845 | I | 6.1, 4.2 | 2, B9, B14, B32, B74, | None | 227 | 244 | Forbidden | Forbidden | D | 18 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | T20, TP4, TP12, TP13, TP38, TP45 | | | | | | | |
| D | Ethyl phosphorodichloridate | 6.1 | NA2927 | I | 6.1, 8 | 2, B9, B14, B32, B74, T20, TP4, TP12, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 40 |
| | Ethyl propionate | 3 | UN1195 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Ethyl propyl ether | 3 | UN2615 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | E | |
| | *Ethyl silicate, see* Tetraethyl silicate | | | | | | | | | | | | |
| | Ethylacetylene, stabilized | 2.1 | UN2452 | | 2.1 | N88 | None | 304 | 314, 315 | Forbidden | 150 kg | B | 40 |
| | Ethylamine | 2.1 | UN1036 | | 2.1 | B77, N87, T50 | None | 321 | 314, 315 | Forbidden | 150 kg | D | 40 |
| | Ethylamine, aqueous solution *with not less than 50 percent but not more than 70 percent ethylamine* | 3 | UN2270 | II | 3, 8 | IB2, T7, TP1 | 150 | 202 | 243 | 1 L | 5 L | B | 40, 52. |
| | N-Ethylaniline | 6.1 | UN2272 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | 52, 74 |
| | 2-Ethylaniline | 6.1 | UN2273 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | 52, 74 |
| | Ethylbenzene | 3 | UN1175 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | N-Ethylbenzyltoluidines liquid | 6.1 | UN2753 | III | 6.1 | IB3, T7, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | 2-Ethylbutanol | 3 | UN2275 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | 2-Ethylbutyl acetate | 3 | UN1177 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | 2-Ethylbutyraldehyde | 3 | UN1178 | II | 3 | B1, IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Ethyldichloroarsine | 6.1 | UN1892 | I | 6.1 | 2, B9, B14, B32, B74, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 40 |
| | Ethyldichlorosilane | 4.3 | UN1183 | I | 4.3, 8, 3 | A2, A3, A7, N34, T10, TP2, TP7, TP13 | None | 201 | 244 | Forbidden | 1 L | D | 21, 28, 40, 49, 100 |
| | Ethylene, acetylene and propylene in mixture, refrigerated liquid *with at least 71.5 percent ethylene with not more than 22.5 percent acetylene and not more than 6 percent propylene* | 2.1 | UN3138 | | 2.1 | T75, TP5 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40, 57 |
| | Ethylene chlorohydrin | 6.1 | UN1135 | I | 6.1, 3 | 2, B9, B14, B32, B74, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 40 |
| | Ethylene | 2.1 | UN1962 | | 2.1 | | 306 | 304 | 302 | Forbidden | 150 kg | E | 40 |
| | *Ethylene diamine diperchlorate* | Forbidden | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethylene dibromide | 6.1 | UN1605 | I | 6.1 | 2, B9, B14, B32, B74, B77, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 40 |
| | *Ethylene dibromide and methyl bromide liquid mixtures, see* Methyl bromide and ethylene dibromide, liquid mixtures | | | | | | | | | | | | |
| | Ethylene dichloride | 3 | UN1184 | II | 3, 6.1 | IB2, N36, T7, TP1 | 150 | 202 | 243 | 1 L | 60 L | B | 40 |
| | Ethylene glycol diethyl ether | 3 | UN1153 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | A | |
| | | | | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *Ethylene glycol dinitrate* | Forbidden | | | | | | | | | | | |
| | Ethylene glycol monoethyl ether | 3 | UN1171 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Ethylene glycol monoethyl ether acetate | 3 | UN1172 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Ethylene glycol monomethyl ether | 3 | UN1188 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Ethylene glycol monomethyl ether acetate | 3 | UN1189 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Ethylene oxide and carbon dioxide mixture *with more than 87 percent ethylene oxide* | 2.3 | UN3300 | | 2.3, 2.1 | 4 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40 |
| | Ethylene oxide and carbon dioxide mixtures *with more than 9 percent but not more than 87 percent ethylene oxide* | 2.1 | UN1041 | | 2.1 | T50 | 306 | 304 | 314, 315 | Forbidden | 25 kg | B | 40 |
| | Ethylene oxide and carbon dioxide mixtures *with not more than 9 percent ethylene oxide* | 2.2 | UN1952 | | 2.2 | | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | Ethylene oxide and chlorotetrafluoroethane mixture *with not more than 8.8 percent ethylene oxide* | 2.2 | UN3297 | | 2.2 | T50 | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | Ethylene oxide and dichlorodifluoromethane mixture, *with not more than 12.5 percent ethylene oxide* | 2.2 | UN3070 | | 2.2 | T50 | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | Ethylene oxide and pentafluoroethane mixture *with not more than 7.9 percent ethylene oxide* | 2.2 | UN3298 | | 2.2 | T50 | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | Ethylene oxide and propylene oxide mixtures *, with not more than 30 percent ethylene oxide* | 3 | UN2983 | I | 3, 6.1 | 5, A11, N4, N34, T14, TP2, TP7, TP13 | None | 201 | 243 | Forbidden | 30 L | E | 40 |
| | Ethylene oxide and tetrafluoroethane mixture *with not more than 5.6 percent ethylene oxide* | 2.2 | UN3299 | | 2.2 | T50 | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | Ethylene oxide *or* Ethylene oxide with nitrogen *up to a total pressure of 1MPa (10 bar) at 50 degrees C* | 2.3 | UN1040 | | 2.3, 2.1 | 4, A59, T50, TP20 | None | 323 | 323 | Forbidden | Forbidden | D | 40 |
| | Ethylene, refrigerated liquid *(cryogenic liquid)* | 2.1 | UN1038 | | 2.1 | T75, TP5 | None | 316 | 318, 319 | Forbidden | Forbidden | D | 40 |
| | Ethylenediamine | 8 | UN1604 | II | 8, 3 | IB2, T7, TP2 | 154 | 202 | 243 | 1 L | 30 L | A | 40, 52. |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethyleneimine, stabilized | 6.1 | UN1185 | I | 6.1, 3 | 1, B9, B14, B30, B72, B77, N25, N32, T22, TP2, TP13, TP38, TP44 | None | 226 | 244 | Forbidden | Forbidden | D | 40 |
| | *Ethylhexaldehyde, see* Octyl aldehydes *etc* | | | | | | | | | | | | |
| | 2-Ethylhexyl chloroformate | 6.1 | UN2748 | II | 6.1, 8 | IB2, T7, TP2, TP13 | 153 | 202 | 243 | 1 L | 30 L | A | 12, 13, 21, 25, 40, 100 |
| | 2-Ethylhexylamine | 3 | UN2276 | III | 3, 8 | B1, IB3, T4, TP1 | 150 | 203 | 242 | 5 L | 60 L | A | 40 |
| | Ethylphenyldichlorosilane | 8 | UN2435 | II | 8 | A7, B2, IB2, N34, T7, TP2, TP13 | None | 202 | 242 | Forbidden | 30 L | C | |
| | 1-Ethylpiperidine | 3 | UN2386 | II | 3, 8 | IB2, T7, TP1 | 150 | 202 | 243 | 1 L | 5 L | B | 52. |
| | N-Ethyltoluidines | 6.1 | UN2754 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | |
| | Ethyltrichlorosilane | 3 | UN1196 | II | 3, 8 | A7, IB1, N34, T7, TP2, TP13 | None | 202 | 243 | 1 L | 5 L | B | 40. |
| | *Etiologic agent, see* Infectious substances, *etc* | | | | | | | | | | | | |
| | *Explosive articles, see* Articles, explosive , n.o.s. *etc* | | | | | | | | | | | | |
| | Explosive, blasting, type A | 1.1D | UN0081 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | 19E, 21E |
| | Explosive, blasting, type B | 1.1D | UN0082 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | 19E |
| | Explosive, blasting, type B *or* Agent blasting, Type B | 1.5D | UN0331 | II | 1.5D | 105,106 | None | 62 | None | Forbidden | Forbidden | 10 | 19E |
| | Explosive, blasting, type C | 1.1D | UN0083 | II | 1.1D | 123 | None | 62 | None | Forbidden | Forbidden | 10 | 22E |
| | Explosive, blasting, type D | 1.1D | UN0084 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Explosive, blasting, type E | 1.1D | UN0241 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | 19E |
| | Explosive, blasting, type E *or* Agent blasting, Type E | 1.5D | UN0332 | II | 1.5D | 105, 106 | None | 62 | None | Forbidden | Forbidden | 10 | 19E |
| | *Explosive, forbidden. See §173.54* | Forbidden | | | | | | | | | | | |
| | *Explosive substances, see* Substances, explosive, n.o.s. *etc* | | | | | | | | | | | | |
| | *Explosives, slurry, see* Explosive, blasting, type E | | | | | | | | | | | | |
| | *Explosives, water gels, see* Explosive, blasting, type E | | | | | | | | | | | | |
| | Extracts, aromatic, liquid | 3 | UN1169 | II | 3 | 149, IB2, T4, TP1, TP8 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Extracts, flavoring, liquid | 3 | UN1197 | II | 3 | 149, IB2, T4, TP1, TP8 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Fabric with animal or vegetable oil, see* Fibers *or* fabrics, *etc* | | | | | | | | | | | | |
| | Ferric arsenate | 6.1 | UN1606 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Ferric arsenite | 6.1 | UN1607 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Ferric chloride, anhydrous | 8 | UN1773 | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | |
| | Ferric chloride, solution | 8 | UN2582 | III | 8 | B15, IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | |
| | Ferric nitrate | 5.1 | UN1466 | III | 5.1 | A1, A29, IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | |
| | Ferrocerium | 4.1 | UN1323 | II | 4.1 | 59, A19, IB8, IP2, IP4, T3, TP33 | 151 | 212 | 240 | 15 kg | 50 kg | A | |
| | Ferrosilicon *with 30 percent or more but less than 90 percent silicon* | 4.3 | UN1408 | III | 4.3, 6.1 | A1, A19, B6, IB8, IP4, IP7, T1, TP33 | 151 | 213 | 240 | 25 kg | 100 kg | A | 13, 40, 52, 53, 85, 103 |
| | Ferrous arsenate | 6.1 | UN1608 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| D | Ferrous chloride, solid | 8 | NA1759 | II | 8 | IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | |
| D | Ferrous chloride, solution | 8 | NA1760 | II | 8 | B3, IB2, T11, TP2, TP27 | 154 | 202 | 242 | 1 L | 30 L | B | 40 |
| | Ferrous metal borings *or* Ferrous metal shavings *or* Ferrous metal turnings *or* Ferrous metal cuttings *in a form liable to self-heating* | 4.2 | UN2793 | III | 4.2 | A1, A19, IB8, IP3, IP7 | None | 213 | 241 | 25 kg | 100 kg | A | |
| | Fertilizer ammoniating solution *with free ammonia* | 2.2 | UN1043 | | 2.2 | N87 | 306 | 304 | 314, 315 | Forbidden | 150 kg | E | 40 |
| A I W | Fibers, animal *or* Fibers, vegetable *burnt, wet or damp* | 4.2 | UN1372 | III | 4.2 | | 151 | 213 | 240 | Forbidden | Forbidden | A | |
| IW | Fibers, vegetable, dry | 4.1 | UN3360 | III | 4.1 | 137 | 151 | 213 | 240 | No Limit | No Limit | A | |
| A W | Fibers *or* Fabrics, animal *or* vegetable *or* Synthetic, n.o.s. *with animal or vegetable oil* | 4.2 | UN1373 | III | 4.2 | 137, IB8, IP3, T1, TP33 | None | 213 | 241 | Forbidden | Forbidden | A | |
| | Fibers *or* Fabrics impregnated with weakly nitrated nitrocellulose, n.o.s. | 4.1 | UN1353 | III | 4.1 | A1, IB8, IP3 | None | 213 | 240 | 25 kg | 100 kg | D | |
| | *Films, nitrocellulose base, from which gelatine has been removed; film scrap, see* Celluloid scrap | | | | | | | | | | | | |
| | Films, nitrocellulose base, *gelatine coated (except scrap)* | 4.1 | UN1324 | III | 4.1 | | None | 183 | None | 25 kg | 100 kg | D | 28 |
| | Fire extinguisher charges, *corrosive liquid* | 8 | UN1774 | II | 8 | N41 | 154 | 202 | None | 1 L | 30 L | A | |
| | *Fire extinguisher charges, expelling, explosive, see* Cartridges, power device | | | | | | | | | | | | |
| | Fire extinguishers *containing compressed or liquefied gas* | 2.2 | UN1044 | | 2.2 | 18, 110 | 309 | 309 | None | 75 kg | 150 kg | A | |
| | Firelighters, solid *with flammable liquid* | 4.1 | UN2623 | III | 4.1 | A1, A19 | None | 213 | None | 25 kg | 100 kg | A | 52 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Fireworks | 1.1G | UN0333 | II | 1.1G | 108 | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Fireworks | 1.2G | UN0334 | II | 1.2G | 108 | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Fireworks | 1.3G | UN0335 | II | 1.3G | 108 | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Fireworks | 1.4G | UN0336 | II | 1.4G | 108 | None | 62 | None | Forbidden | 75 kg | 06 | |
| | Fireworks | 1.4S | UN0337 | II | 1.4S | 108 | None | 62 | None | 25 kg | 100 kg | 05 | |
| | First aid kits | 9 | UN3316 | | 9 | 15 | 161 | 161 | None | 10 kg | 10 kg | A | |
| W | Fish meal, stabilized *or* Fish scrap, stabilized | 9 | UN2216 | III | None | 155, IB8, IP3, T1, TP33 | 155 | 218 | 218 | No limit | No limit | B | 88, 122, 128 |
| | Fish meal, unstablized *or* Fish scrap, unstabilized | 4.2 | UN1374 | II | 4.2 | 155, A1, A19, IB8, IP2, IP4, T3, TP33 | None | 212 | 241 | 15 kg | 50 kg | B | 18, 128 |
| | *Flammable compressed gas, see* Compressed *or* Liquefied gas, flammable, *etc* | | | | | | | | | | | | |
| | *Flammable compressed gas (small receptacles not fitted with a dispersion device, not refillable), see* Receptacles, *etc* | | | | | | | | | | | | |
| | *Flammable gas in lighters, see* Lighters *or* lighter refills, *cigarettes, containing flammable gas* | | | | | | | | | | | | |
| G | Flammable liquid, toxic, corrosive, n.o.s. | 3 | UN3286 | I | 3, 6.1, 8 | T14, TP2, TP13, TP27 | None | 201 | 243 | Forbidden | 2.5 L | E | 21, 40, 100 |
| | | | | II | 3, 6.1, 8 | IB2, T11, TP2, TP13, TP27 | 150 | 202 | 243 | 1 L | 5 L | B | 21, 40, 100 |
| G | Flammable liquids, corrosive, n.o.s. | 3 | UN2924 | I | 3, 8 | T14, TP2 | None | 201 | 243 | 0.5 L | 2.5 L | E | 40 |
| | | | | II | 3, 8 | IB2, T11, TP2, TP27 | 150 | 202 | 243 | 1 L | 5 L | B | 40 |
| | | | | III | 3, 8 | B1, IB3, T7, TP1, TP28 | 150 | 203 | 242 | 5 L | 60 L | A | 40 |
| G | Flammable liquids, n.o.s. | 3 | UN1993 | I | 3 | T11, TP1, TP27 | 150 | 201 | 243 | 1 L | 30 L | E | |
| | | | | II | 3 | IB2, T7, TP1, TP8, TP28 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, B52, IB3, T4, TP1, TP29 | 150 | 203 | 242 | 60 L | 220 L | A | |
| G | Flammable liquids, toxic, n.o.s. | 3 | UN1992 | I | 3, 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | Forbidden | 30 L | E | 40 |
| | | | | II | 3, 6.1 | IB2, T7, TP2, TP13 | 150 | 202 | 243 | 1 L | 60 L | B | 40 |
| | | | | III | 3, 6.1 | B1, IB3, T7, TP1, TP28 | 150 | 203 | 242 | 60 L | 220 L | A | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G | Flammable solid, corrosive, inorganic, n.o.s. | 4.1 | UN3180 | II | 4.1, 8 | A1, IB6, IP2, T3, TP33 | 151 | 212 | 242 | 15 kg | 50 kg | D | 40 |
| | | | | III | 4.1, 8 | A1, IB6, T1, TP33 | 151 | 213 | 242 | 25 kg | 100 kg | D | 40 |
| G | Flammable solid, inorganic, n.o.s. | 4.1 | UN3178 | II | 4.1 | A1, IB8, IP2, IP4, T3, TP33 | 151 | 212 | 240 | 15 kg | 50 kg | B | |
| | | | | III | 4.1 | A1, IB8, IP3, T1, TP33 | 151 | 213 | 240 | 25 kg | 100 kg | B | |
| G | Flammable solid, organic, molten, n.o.s. | 4.1 | UN3176 | II | 4.1 | IB1, T3, TP3, TP26 | 151 | 212 | 240 | Forbidden | Forbidden | C | |
| | | | | III | 4.1 | IB1, T1, TP3, TP26 | 151 | 213 | 240 | Forbidden | Forbidden | C | |
| G | Flammable solid, oxidizing, n.o.s. | 4.1 | UN3097 | II | 4.1, 5.1 | 131 | None | 214 | 214 | Forbidden | Forbidden | E | 40 |
| | | | | III | 4.1, 5.1 | 131, T1, TP33 | None | 214 | 214 | Forbidden | Forbidden | D | 40 |
| G | Flammable solid, toxic, inorganic, n.o.s. | 4.1 | UN3179 | II | 4.1, 6.1 | A1, IB6, IP2, T3, TP33 | 151 | 212 | 242 | 15 kg | 50 kg | B | 40 |
| | | | | III | 4.1, 6.1 | A1, IB6, T1, TP33 | 151 | 213 | 242 | 25 kg | 100 kg | B | 40 |
| G | Flammable solids, corrosive, organic, n.o.s. | 4.1 | UN2925 | II | 4.1, 8 | A1, IB6, IP2, T3, TP33 | None | 212 | 242 | 15 kg | 50 kg | D | 40 |
| | | | | III | 4.1, 8 | A1, IB6, T1, TP33 | 151 | 213 | 242 | 25 kg | 100 kg | D | 40 |
| G | Flammable solids, organic, n.o.s. | 4.1 | UN1325 | II | 4.1 | A1, IB8, IP2, IP4, T3, TP33 | 151 | 212 | 240 | 15 kg | 50 kg | B | |
| | | | | III | 4.1 | A1, IB8, IP3, T1, TP33 | 151 | 213 | 240 | 25 kg | 100 kg | B | |
| G | Flammable solids, toxic, organic, n.o.s. | 4.1 | UN2926 | II | 4.1, 6.1 | A1, IB6, IP2, T3, TP33 | 151 | 212 | 242 | 15 kg | 50 kg | B | 40 |
| | | | | III | 4.1, 6.1 | A1, IB6, T1, TP33 | 151 | 213 | 242 | 25 kg | 100 kg | B | 40 |
| | Flares, aerial | 1.3G | UN0093 | II | 1.3G | | None | 62 | None | Forbidden | 75 kg | 07 | |
| | Flares, aerial | 1.4G | UN0403 | II | 1.4G | | None | 62 | None | Forbidden | 75 kg | 06 | |
| | Flares, aerial | 1.4S | UN0404 | II | 1.4S | | None | 62 | None | 25 kg | 100 kg | 05 | |
| | Flares, aerial | 1.1G | UN0420 | II | 1.1G | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Flares, aerial | 1.2G | UN0421 | II | 1.2G | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | *Flares, airplane, see* Flares, aerial | | | | | | | | | | | | |
| | *Flares, signal, see* Cartridges, signal | | | | | | | | | | | | |
| | Flares, surface | 1.3G | UN0092 | II | 1.3G | | None | 62 | None | Forbidden | 75 kg | 07 | |
| | Flares, surface | 1.1G | UN0418 | II | 1.1G | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Flares, surface | 1.2G | UN0419 | II | 1.2G | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | *Flares, water-activated, see* Contrivances, water-activated, *etc* | | | | | | | | | | | | |
| | Flash powder | 1.1G | UN0094 | II | 1.1G | | None | 62 | None | Forbidden | Forbidden | 15 | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Flash powder | 1.3G | UN0305 | II | 1.3G | | None | 62 | None | Forbidden | Forbidden | 15 | |
| | *Flue dusts, poisonous, see* Arsenical dust | | | | | | | | | | | | |
| | *Fluoric acid, see* Hydrofluoric acid, *etc* | | | | | | | | | | | | |
| | Fluorine, compressed | 2.3 | UN1045 | | 2.3, 5.1, 8 | 1, N86 | None | 302 | None | Forbidden | Forbidden | D | 40, 89, 90 |
| | Fluoroacetic acid | 6.1 | UN2642 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 1 kg | 15 kg | E | |
| | Fluoroanilines | 6.1 | UN2941 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | Fluorobenzene | 3 | UN2387 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Fluoroboric acid | 8 | UN1775 | II | 8 | A6, A7, B2, B15, IB2, N3, N34, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | A | |
| | Fluorophosphoric acid anhydrous | 8 | UN1776 | II | 8 | A6, A7, B2, IB2, N3, N34, T8, TP2, TP12 | None | 202 | 242 | 1 L | 30 L | A | |
| | Fluorosilicates, n.o.s. | 6.1 | UN2856 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 52 |
| | Fluorosilicic acid | 8 | UN1778 | II | 8 | A6, A7, B2, B15, IB2, N3, N34, T8, TP2, TP12 | None | 202 | 242 | 1 L | 30 L | A | |
| | Fluorosulfonic acid | 8 | UN1777 | I | 8 | A3, A6, A7, A10, B6, B10, N3, N36, T10, TP2, TP12 | None | 201 | 243 | 0.5 L | 2.5 L | D | 40 |
| | Fluorotoluenes | 3 | UN2388 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | 40 |
| | *Forbidden materials. See §173.21* | Forbidden | | | | | | | | | | | |
| | Formaldehyde, solutions, flammable | 3 | UN1198 | III | 3, 8 | B1, IB3, T4, TP1 | 150 | 203 | 242 | 5 L | 60 L | A | 40 |
| | Formaldehyde, solutions, *with not less than 25 percent formaldehyde* | 8 | UN2209 | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | |
| | *Formalin, see* Formaldehyde, solutions | | | | | | | | | | | | |
| | Formic acid *with not less than 10% but not more than 85% acid by mass* | 8 | UN3412 | II | 8 | IB2, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | A | 40. |
| | Formic acid *with not less than 5% but less than 10% acid by mass* | 8 | UN3412 | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | 40 |
| | Formic acid *with more than 85% acid by mass* | 8 | UN1779 | II | 8, 3 | B2, B28, IB2, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | A | 40. |
| | Fracturing devices, explosive, *without detonators for oil wells* | 1.1D | UN0099 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Fuel, aviation, turbine engine | 3 | UN1863 | I | 3 | 144, T11, TP1, TP8, TP28 | 150 | 201 | 243 | 1 L | 30 L | E | |
| | | | | II | 3 | 144, IB2, T4, TP1, TP8 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | 144, B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Fuel cell cartridges. *containing flammable liquids* | 3 | UN3473 | II | 3 | | 150 | 230 | None | 5 L | 60 L | A | |
| D | Fuel oil *(No. 1, 2, 4, 5, or 6)* | 3 | NA1993 | III | 3 | 144, B1, IB3, T4, TP1, TP29 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *Fuel system components (including fuel control units (FCU), carburetors, fuel lines, fuel pumps) see* Dangerous Goods in Apparatus *or* Dangerous Goods in Machinery | | | | | | | | | | | | |
| | *Fulminate of mercury (dry)* | Forbidden | | | | | | | | | | | |
| | *Fulminate of mercury, wet, see* Mercury fulminate, *etc* | | | | | | | | | | | | |
| | *Fulminating gold* | Forbidden | | | | | | | | | | | |
| | *Fulminating mercury* | Forbidden | | | | | | | | | | | |
| | *Fulminating platinum* | Forbidden | | | | | | | | | | | |
| | *Fulminating silver* | Forbidden | | | | | | | | | | | |
| | *Fulminic acid* | Forbidden | | | | | | | | | | | |
| | Fumaryl chloride | 8 | UN1780 | II | 8 | B2, IB2, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | C | 8, 40 |
| | *Fumigated lading, see* §§172.302(g), 173.9 and 176.76(h) | | | | | | | | | | | | |
| | Fumigated transport vehicle *or* freight container *see* §173.9 | | | | | | | | | | | | |
| | Furaldehydes | 6.1 | UN1199 | II | 6.1, 3 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | |
| | Furan | 3 | UN2389 | I | 3 | T12, TP2, TP13 | None | 201 | 243 | 1 L | 30 L | E | 40 |
| | Furfuryl alcohol | 6.1 | UN2874 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | 52, 74 |
| | Furfurylamine | 3 | UN2526 | III | 3, 8 | B1, IB3, T4, TP1 | 150 | 203 | 242 | 5 L | 60 L | A | 40 |
| | Fuse, detonating, *metal clad, see* Cord, detonating, *metal clad* | | | | | | | | | | | | |
| | Fuse, detonating, mild effect, *metal clad, see* Cord, detonating, mild effect, *metal clad* | | | | | | | | | | | | |
| | Fuse, igniter *tubular metal clad* | 1.4G | UN0103 | II | 1.4G | | None | 62 | None | Forbidden | 75 kg | 06 | |
| | Fuse, non-detonating *instantaneous or quickmatch* | 1.3G | UN0101 | II | 1.3G | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Fuse, safety | 1.4S | UN0105 | II | 1.4S | | None | 62 | None | 25 kg | 100 kg | 05 | |
| D | Fusee ( *railway or highway* ) | 4.1 | NA1325 | II | 4.1 | | None | 184 | None | 15 kg | 50 kg | B | |
| | Fusel oil | 3 | UN1201 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *Fuses, tracer, see* Tracers for ammunition | | | | | | | | | | | | |
| | *Fuzes, combination, percussion and time, see* Fuzes, detonating *(UN0257,* | | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *UN0367);* Fuzes, igniting *(UN0317, UN0368)* | | | | | | | | | | | | |
| | Fuzes, detonating | 1.1B | UN0106 | II | 1.1B | | None | 62 | None | Forbidden | Forbidden | 11 | |
| | Fuzes, detonating | 1.2B | UN0107 | II | 1.2B | | None | 62 | None | Forbidden | Forbidden | 11 | |
| | Fuzes, detonating | 1.4B | UN0257 | II | 1.4B | 116 | None | 62 | None | Forbidden | 75 kg | 06 | |
| | Fuzes, detonating | 1.4S | UN0367 | II | 1.4S | 116 | None | 62 | None | 25 kg | 100 kg | 05 | |
| | Fuzes, detonating, *with protective features* | 1.1D | UN0408 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Fuzes, detonating, *with protective features* | 1.2D | UN0409 | II | 1.2D | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Fuzes, detonating, *with protective features* | 1.4D | UN0410 | II | 1.4D | 116 | None | 62 | None | Forbidden | 75 kg | 06 | |
| | Fuzes, igniting | 1.3G | UN0316 | II | 1.3G | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Fuzes, igniting | 1.4G | UN0317 | II | 1.4G | | None | 62 | None | Forbidden | 75 kg | 06 | |
| | Fuzes, igniting | 1.4S | UN0368 | II | 1.4S | | None | 62 | None | 25 kg | 100 kg | 05 | |
| | *Galactsan trinitrate* | Forbidden | | | | | | | | | | | |
| | Gallium | 8 | UN2803 | III | 8 | T1, TP33 | None | 162 | 240 | 20 kg | 20 kg | B | 48 |
| | Gas cartridges, *(flammable) without a release device, non-refillable* | 2.1 | UN2037 | | 2.1 | | 306 | 304 | None | 1 kg | 15 kg | B | 40 |
| | Gas generator assemblies (aircraft), *containing a non-flammable non-toxic gas and a propellant cartridge* | 2.2 | | | 2.2 | | None | 335 | None | 75 kg | 150 kg | A | |
| D | Gas identification set | 2.3 | NA9035 | | 2.3 | 6 | None | 194 | None | Forbidden | Forbidden | D | |
| | Gas oil | 3 | UN1202 | III | 3 | 144, B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| G | Gas, refrigerated liquid, flammable, n.o.s. *(cryogenic liquid)* | 2.1 | UN3312 | | 2.1 | T75, TP5 | None | 316 | 318 | Forbidden | Forbidden | D | 40 |
| G | Gas, refrigerated liquid, n.o.s. *(cryogenic liquid)* | 2.2 | UN3158 | | 2.2 | T75, TP5 | 320 | 316 | 318 | 50 kg | 500 kg | D | |
| G | Gas, refrigerated liquid, oxidizing, n.o.s. *(cryogenic liquid)* | 2.2 | UN3311 | | 2.2, 5.1 | T75, TP5, TP22 | 320 | 316 | 318 | Forbidden | Forbidden | D | |
| | Gas sample, non-pressurized, flammable, n.o.s., *not refrigerated liquid* | 2.1 | UN3167 | | 2.1 | | 306 | 302, 304 | None | 1 L | 5 L | D | |
| | Gas sample, non-pressurized, toxic, flammable, n.o.s., *not refrigerated liquid* | 2.3 | UN3168 | | 2.3, 2.1 | 6 | 306 | 302 | None | Forbidden | 1 L | D | |
| | Gas sample, non-pressurized, toxic, n.o.s., *not refrigerated liquid* | 2.3 | UN3169 | | 2.3 | 6 | 306 | 302, 304 | None | Forbidden | 1 L | D | |
| D | Gasohol *gasoline mixed with ethyl alcohol, with not more than 20 percent alcohol* | 3 | NA1203 | II | 3 | 144 | 150 | 202 | 242 | 5 L | 60 L | E | |
| | Gasoline | 3 | UN1203 | II | 3 | 144, B1, B33, T8 | 150 | 202 | 242 | 5 L | 60 L | E | |
| | *Gasoline, casinghead, see* Gasoline | | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Gelatine, blasting, see* Explosive, blasting, type A | | | | | | | | | | | | |
| | *Gelatine dynamites, see* Explosive, blasting, type A | | | | | | | | | | | | |
| | Germane | 2.3 | UN2192 | | 2.3, 2.1 | 2 | None | 302 | 245 | Forbidden | Forbidden | D | 40 |
| | *Glycerol-1,3-dinitrate* | Forbidden | | | | | | | | | | | |
| | *Glycerol gluconate trinitrate* | Forbidden | | | | | | | | | | | |
| | *Glycerol lactate trinitrate* | Forbidden | | | | | | | | | | | |
| | Glycerol alpha-monochlorohydrin | 6.1 | UN2689 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | *Glyceryl trinitrate, see* Nitroglycerin, *etc* | | | | | | | | | | | | |
| | Glycidaldehyde | 3 | UN2622 | II | 3, 6.1 | IB2, IP8, T7, TP1 | 150 | 202 | 243 | 1 L | 60 L | A | 40 |
| | Grenades, *hand or rifle, with bursting charge* | 1.1D | UN0284 | II | 1.1D | | | 62 | None | Forbidden | Forbidden | 07 | |
| | Grenades, *hand or rifle, with bursting charge* | 1.2D | UN0285 | II | 1.2D | | | 62 | None | Forbidden | Forbidden | 07 | |
| | Grenades, *hand or rifle, with bursting charge* | 1.1F | UN0292 | II | 1.1F | | | 62 | None | Forbidden | Forbidden | 08 | |
| | Grenades, *hand or rifle, with bursting charge* | 1.2F | UN0293 | II | 1.2F | | | 62 | None | Forbidden | Forbidden | 08 | |
| | *Grenades, illuminating, see* Ammunition, illuminating, *etc* | | | | | | | | | | | | |
| | Grenades, practice, *hand or rifle* | 1.4S | UN0110 | II | 1.4S | | | 62 | None | 25 kg | 100 kg | 05 | |
| | Grenades, practice, *hand or rifle* | 1.3G | UN0318 | II | 1.3G | | | 62 | None | Forbidden | Forbidden | 07 | |
| | Grenades, practice, *hand or rifle* | 1.2G | UN0372 | II | 1.2G | | | 62 | None | Forbidden | Forbidden | 07 | |
| | Grenades practice *Hand or rifle* | 1.4G | UN0452 | II | 1.4G | | | 62 | None | Forbidden | 75 kg | 06 | |
| | *Grenades, smoke, see* Ammunition, smoke, *etc* | | | | | | | | | | | | |
| | Guanidine nitrate | 5.1 | UN1467 | III | 5.1 | A1, IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | 73 |
| | *Guanyl nitrosaminoguanylidene hydrazine (dry)* | Forbidden | | | | | | | | | | | |
| | Guanyl nitrosaminoguanylidene hydrazine, wetted *with not less than 30 percent water, by mass* | 1.1A | UN0113 | II | 1.1A | 111, 117 | None | 62 | None | Forbidden | Forbidden | 12 | |
| | *Guanyl nitrosaminoguanyltetrazene (dry)* | Forbidden | | | | | | | | | | | |
| | Guanyl nitrosaminoguanyltetrazene, wetted *or* Tetrazene, wetted *with not less than 30 percent water or mixture of alcohol and water, by mass* | 1.1A | UN0114 | II | 1.1A | 111, 117 | None | 62 | None | Forbidden | Forbidden | 12 | |
| | Gunpowder, compressed *or* Gunpowder in pellets, *see* Black powder *(UN 0028)* | | | | | | | | | | | | |
| | Gunpowder, *granular or as a meal, see* Black powder *(UN 0027)* | | | | | | | | | | | | |
| | Hafnium powder, dry | 4.2 | UN2545 | I | 4.2 | | None | 211 | 242 | Forbidden | Forbidden | D | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | II | 4.2 | A19, A20, IB6, IP2, N34, T3, TP33 | None | 212 | 241 | 15 kg | 50 kg | D | |
| | | | | III | 4.2 | IB8, IP3, T1, TP33 | None | 213 | 241 | 25 kg | 100 kg | D | |
| | Hafnium powder, wetted *with not less than 25 percent water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns* | 4.1 | UN1326 | II | 4.1 | A6, A19, A20, IB6, IP2, N34, T3, TP33 | None | 212 | 241 | 15 kg | 50 kg | E | 74 |
| | *Hand signal device, see* Signal devices, hand | | | | | | | | | | | | |
| | *Hazardous substances, liquid or solid, n.o.s., see* Environmentally hazardous substances, *etc* | | | | | | | | | | | | |
| D G | Hazardous waste, liquid, n.o.s. | 9 | NA3082 | III | 9 | IB3, T2, TP1 | 155 | 203 | 241 | No limit | No limit | A | |
| D G | Hazardous waste, solid, n.o.s. | 9 | NA3077 | III | 9 | B54, IB8, IP2, T1, TP33 | 155 | 213 | 240 | No limit | No limit | A | |
| | Heating oil, light | 3 | UN1202 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Helium, compressed | 2.2 | UN1046 | | 2.2 | | 306 | 302 | 302, 314 | 75 kg | 150 kg | A | 85 |
| | Helium, refrigerated liquid *(cryogenic liquid)* | 2.2 | UN1963 | | 2.2 | T75, TP5 | 320 | 316 | 318 | 50 kg | 500 kg | B | |
| | Heptafluoropropane *or* Refrigerant gas R 227 | 2.2 | UN3296 | | 2.2 | T50 | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | n-Heptaldehyde | 3 | UN3056 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Heptanes | 3 | UN1206 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | n-Heptene | 3 | UN2278 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Hexachloroacetone | 6.1 | UN2661 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | B | 12, 40 |
| | Hexachlorobenzene | 6.1 | UN2729 | III | 6.1 | B3, IB8, IP3, T1, TP33 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | Hexachlorobutadiene | 6.1 | UN2279 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | Hexachlorocyclopentadiene | 6.1 | UN2646 | I | 6.1 | 2, B9, B14, B32, B74, B77, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 40 |
| | Hexachlorophene | 6.1 | UN2875 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Hexadecyltrichlorosilane | 8 | UN1781 | II | 8 | A7, B2, B6, IB2, N34, T7, TP2 | None | 202 | 242 | Forbidden | 30 L | C | 40 |
| | Hexadienes | 3 | UN2458 | II | 3 | IB2, T4, TP1 | None | 202 | 242 | 5 L | 60 L | B | |
| | Hexaethyl tetraphosphate and compressed gas mixtures | 2.3 | UN1612 | | 2.3 | 3 | None | 334 | None | Forbidden | Forbidden | D | 40 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Hexaethyl tetraphosphate, *liquid* | 6.1 | UN1611 | II | 6.1 | IB2, N76, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | E | 40 |
| | Hexaethyl tetraphosphate, *solid* | 6.1 | UN1611 | II | 6.1 | IB8, IP2, IP4, N76 | 153 | 212 | 242 | 25 kg | 100 kg | E | 40 |
| | Hexafluoroacetone | 2.3 | UN2420 | | 2.3, 8 | 2, B9, B14 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40 |
| | Hexafluoroacetone hydrate, liquid | 6.1 | UN2552 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | Hexafluoroacetone hydrate, solid | 6.1 | UN3436 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | B | 40 |
| | Hexafluoroethane, *or* Refrigerant gas R 116 | 2.2 | UN2193 | | 2.2 | | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | Hexafluorophosphoric acid | 8 | UN1782 | II | 8 | A6, A7, B2, IB2, N3, N34, T8, TP2, TP12 | None | 202 | 242 | 1 L | 30 L | A | |
| | Hexafluoropropylene compressed *or* Refrigerant gas R 1216 | 2.2 | UN1858 | | 2.2 | T50 | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | Hexaldehyde | 3 | UN1207 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Hexamethylene diisocyanate | 6.1 | UN2281 | II | 6.1 | IB2, T7, TP2, TP13 | 153 | 202 | 243 | 5 L | 60 L | C | 13, 40 |
| | *Hexamethylene triperoxide diamine (dry)* | Forbidden | | | | | | | | | | | |
| | Hexamethylenediamine, solid | 8 | UN2280 | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | 12 |
| | Hexamethylenediamine solution | 8 | UN1783 | II | 8 | IB2, T7, TP2 | None | 202 | 242 | 1 L | 30 L | A | |
| | | | | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | |
| | Hexamethyleneimine | 3 | UN2493 | II | 3, 8 | IB2, T7, TP1 | 150 | 202 | 243 | 1 L | 5 L | B | 40 |
| | Hexamethylenetetramine | 4.1 | UN1328 | III | 4.1 | A1, IB8, IP3, T1, TP33 | 151 | 213 | 240 | 25 kg | 100 kg | A | |
| | *Hexamethylol benzene hexanitrate* | Forbidden | | | | | | | | | | | |
| | Hexanes | 3 | UN1208 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | E | |
| | *2,2',4,4',6,6'- Hexanitro-3,3'-dihydroxyazobenzene (dry)* | Forbidden | | | | | | | | | | | |
| | *Hexanitroazoxy benzene* | Forbidden | | | | | | | | | | | |
| | *N,N'-(hexanitrodiphenyl) ethylene dinitramine (dry)* | Forbidden | | | | | | | | | | | |
| | *Hexanitrodiphenyl urea* | Forbidden | | | | | | | | | | | |
| | *2,2',3',4,4',6-Hexanitrodiphenylamine* | Forbidden | | | | | | | | | | | |
| | Hexanitrodiphenylamine *or* Dipicrylamine *or* Hexyl | 1.1D | UN0079 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | *2,3',4,4',6,6'-Hexanitrodiphenylether* | Forbidden | | | | | | | | | | | |
| | *Hexanitroethane* | Forbidden | | | | | | | | | | | |
| | *Hexanitrooxanilide* | Forbidden | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Hexanitrostilbene | 1.1D | UN0392 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | *Hexanoic acid, see* Corrosive liquids, n.o.s. | | | | | | | | | | | | |
| | Hexanols | 3 | UN2282 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | 74 |
| | 1-Hexene | 3 | UN2370 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | E | |
| | Hexogen and cyclotetramethylenetetranitramine mixtures, wetted *or* desensitized *see* RDX and HMX mixtures, wetted *or* desensitized *etc* | | | | | | | | | | | | |
| | Hexogen and HMX mixtures, wetted *or* desensitized *see* RDX and HMX mixtures, wetted *or* desensitized *etc* | | | | | | | | | | | | |
| | Hexogen and octogen mixtures, wetted *or* desensitized *see* RDX and HMX mixtures, wetted *or* desensitized *etc* | | | | | | | | | | | | |
| | Hexogen, *see* Cyclotrimethylenetrinitramine, *etc* | | | | | | | | | | | | |
| | Hexolite, *or* Hexotol *dry or wetted with less than 15 percent water, by mass* | 1.1D | UN0118 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Hexotonal | 1.1D | UN0393 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Hexyl, *see* Hexanitrodiphenylamine | | | | | | | | | | | | |
| | Hexyltrichlorosilane | 8 | UN1784 | II | 8 | A7, B2, B6, IB2, N34, T7, TP2, TP13 | None | 202 | 242 | Forbidden | 30 L | C | 40 |
| | *High explosives, see individual explosives' entries* | | | | | | | | | | | | |
| | HMX, *see* Cyclotetramethylenete tranitramine, *etc* | | | | | | | | | | | | |
| | Hydrazine, anhydrous | 8 | UN2029 | I | 8, 3, 6.1 | A3, A6, A7, A10, B7, B16, B53 | None | 201 | 243 | Forbidden | 2.5 L | D | 40, 52, 125. |
| | Hydrazine, aqueous solution, *with not more than 37 percent hydrazine, by mass* | 6.1 | UN3293 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | 52. |
| | Hydrazine, aqueous solution, *with more than 37% hydrazine, by mass* | 8 | UN2030 | I | 8, 6.1 | B16, B53, T10, TP2, TP13 | None | 201 | 243 | Forbidden | 2.5 L | D | 40, 52 |
| | | | | II | 8, 6.1 | B16, B53, IB2, T7, TP2, TP13 | None | 202 | 243 | Forbidden | 30 L | D | 40, 52 |
| | | | | III | 8, 6.1 | B16, B53, IB3, T4, TP2 | 154 | 203 | 241 | 5 L | 60 L | D | 40, 52 |
| | *Hydrazine azide* | Forbidden | | | | | | | | | | | |
| | *Hydrazine chlorate* | Forbidden | | | | | | | | | | | |
| | *Hydrazine dicarbonic acid diazide* | Forbidden | | | | | | | | | | | |
| | Hydrazine aqueous solution, *with more than 37% hydrazine, by mass* | 8 | UN2030 | I | 8, 6.1 | 151, B16, B53, T10, | None | 201 | 243 | Forbidden | 2.5 L | D | 40 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | TP2, TP13 | | | | | | | |
| | | | | II | 8, 6.1 | B16, B53, IB2, T7, TP2, TP13 | None | 202 | 243 | Forbidden | 30 L | D | 40 |
| | | | | III | 8, 6.1 | B16, B53, IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | D | 40 |
| | *Hydrazine perchlorate* | Forbidden | | | | | | | | | | | |
| | *Hydrazine selenate* | Forbidden | | | | | | | | | | | |
| | *Hydriodic acid, anhydrous, see* Hydrogen iodide, anhydrous | | | | | | | | | | | | |
| | Hydriodic acid | 8 | UN1787 | II | 8 | A3, A6, B2, IB2, N41, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | C | |
| | | | | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | C | 8 |
| | *Hydrobromic acid, anhydrous, see* Hydrogen bromide, anhydrous | | | | | | | | | | | | |
| | Hydrobromic acid, *with more than 49 percent hydrobromic acid* | 8 | UN1788 | II | 8 | B2, B15, IB2, N41, T7, TP2 | 154 | 202 | 242 | Forbidden | Forbidden | C | |
| | | | | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | Forbidden | Forbidden | C | 8 |
| | Hydrobromic acid, *with not more than 49 percent hydrobromic acid* | 8 | UN1788 | II | 8 | A3, A6, B2, B15, IB2, N41, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | C | |
| | | | | III | 8 | A3, IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | C | 8 |
| | Hydrocarbon gas mixture, compressed, n.o.s. | 2.1 | UN1964 | | 2.1 | | 306 | 302 | 314, 315 | Forbidden | 150 kg | E | 40 |
| | Hydrocarbon gas mixture, liquefied, n.o.s. | 2.1 | UN1965 | | 2.1 | T50 | 306 | 304 | 314, 315 | Forbidden | 150 kg | E | 40 |
| | Hydrocarbons, liquid, n.o.s. | 3 | UN3295 | I | 3 | 144, T11, TP1, TP8, TP28 | 150 | 201 | 243 | 1 L | 30 L | E | |
| | | | | II | 3 | 144, IB2, T7, TP1, TP8, TP28 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | 144, B1, IB3, T4, TP1, TP29 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *Hydrochloric acid, anhydrous, see* Hydrogen chloride, anhydrous | | | | | | | | | | | | |
| | Hydrochloric acid | 8 | UN1789 | II | 8 | A3, A6, B3, B15, IB2, N41, T8, TP2, TP12 | 154 | 202 | 242 | 1 L | 30 L | C | |
| | | | | III | 8 | A3, IB3, T4, TP1, TP12 | 154 | 203 | 241 | 5 L | 60 L | C | 8 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Hydrocyanic acid, anhydrous, see* Hydrogen cyanide *etc* | | | | | | | | | | | | |
| | Hydrocyanic acid, aqueous solutions *or* Hydrogen cyanide, aqueous solutions *with not more than 20 percent hydrogen cyanide* | 6.1 | UN1613 | I | 6.1 | 2, B61, B65, B77, B82, T20, TP2, TP13 | None | 195 | 244 | Forbidden | Forbidden | D | 40 |
| D | Hydrocyanic acid, aqueous solutions *with less than 5 percent hydrogen cyanide* | 6.1 | NA1613 | II | 6.1 | IB1, T14, TP2, TP13, TP27 | None | 195 | 243 | Forbidden | 5 L | D | 40 |
| | *Hydrocyanic acid, liquefied, see* Hydrogen cyanide, *etc* | | | | | | | | | | | | |
| | *Hydrocyanic acid (prussic), unstabilized* | Forbidden | | | | | | | | | | | |
| | Hydrofluoric acid and Sulfuric acid mixtures | 8 | UN1786 | I | 8, 6.1 | A6, A7, B15, B23, N5, N34, T10, TP2, TP12, TP13 | None | 201 | 243 | Forbidden | 2.5 L | D | 40 |
| | *Hydrofluoric acid, anhydrous, see* Hydrogen fluoride, anhydrous | | | | | | | | | | | | |
| | Hydrofluoric acid, *with more than 60 percent strength* | 8 | UN1790 | I | 8, 6.1 | A6, A7, B4, B15, B23, N5, N34, T10, TP2, TP12, TP13 | None | 201 | 243 | 0.5 L | 2.5 L | D | 12, 40 |
| | Hydrofluoric acid, *with not more than 60 percent strength* | 8 | UN1790 | II | 8, 6.1 | A6, A7, B15, IB2, N5, N34, T8, TP2, TP12 | 154 | 202 | 243 | 1 L | 30 L | D | 12, 40 |
| | *Hydrofluoroboric acid, see* Fluoroboric acid | | | | | | | | | | | | |
| | *Hydrofluorosilicic acid, see* Fluorosilicic acid | | | | | | | | | | | | |
| | Hydrogen and Methane mixtures, compressed | 2.1 | UN2034 | | 2.1 | N89 | 306 | 302 | 302, 314, 315 | Forbidden | 150 kg | E | 40, 57 |
| | Hydrogen bromide, anhydrous | 2.3 | UN1048 | | 2.3, 8 | 3, B14, N86, N89 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40 |
| | Hydrogen chloride, anhydrous | 2.3 | UN1050 | | 2.3, 8 | 3, N86, N89 | None | 304 | None | Forbidden | Forbidden | D | 40 |
| | Hydrogen chloride, refrigerated liquid | 2.3 | UN2186 | | 2.3, 8 | 3, B6 | None | None | 314, 315 | Forbidden | Forbidden | B | 40 |
| | Hydrogen, compressed | 2.1 | UN1049 | | 2.1 | N89 | 306 | 302 | 302, 314 | Forbidden | 150 kg | E | 40, 57 |
| | Hydrogen cyanide, solution in alcohol *with not more than 45 percent hydrogen cyanide* | 6.1 | UN3294 | I | 6.1, 3 | 2, B9, B14, B32, B74, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 40 |
| | Hydrogen cyanide, stabilized *with less than 3 percent water* | 6.1 | UN1051 | I | 6.1, 3 | 1, B35, B61, B65, B77, B82 | None | 195 | 244 | Forbidden | Forbidden | D | 40 |
| | Hydrogen cyanide, stabilized, *with less than 3 percent water and absorbed in a porous inert material* | 6.1 | UN1614 | I | 6.1 | 5 | None | 195 | None | Forbidden | Forbidden | D | 25, 40 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Hydrogen fluoride, anhydrous | 8 | UN1052 | I | 8, 6.1 | 3, B7, B46, B71, B77, N86, T10, TP2 | None | 163 | 243 | Forbidden | Forbidden | D | 40 |
| | Hydrogen in a metal hydride storage system | 2.1 | UN3468 | | 2.1 | 167 | None | 214 | None | Forbidden | 100 kg gross | D | |
| | Hydrogen iodide, anhydrous | 2.3 | UN2197 | | 2.3 | 3, B14, N86, N89 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40 |
| | *Hydrogen iodide solution, see* Hydriodic acid | | | | | | | | | | | | |
| | | | | III | 8 | IB8, IP3, N3, N34, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | 25, 40, 52. |
| | Hydrogendifluoride, solid, n.o.s | 8 | UN1740 | II | 8 | IB8, IP2, IP4, N3, N34, T3, TP33 | None | 212 | 240 | 15 kg | 50 kg | A | 25, 40, 52 |
| | | | | III | 8 | IB8, IP3, N3, N34, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | 25, 40, 52 |
| | Hydrogendifluoride solution, n.o.s | 8 | UN3471 | II | 8, 6.1 | IB2, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | A | 25, 40, 52. |
| | | | | III | 8, 6.1 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | 25, 40, 52. |
| | Hydrogen peroxide and peroxyacetic acid mixtures, stabilized *with acids, water, and not more than 5 percent peroxyacetic acid* | 5.1 | UN3149 | II | 5.1, 8 | 145, A2, A3, A6, B53, IB2, IP5, T7, TP2, TP6, TP24 | None | 202 | 243 | 1 L | 5 L | D | 25, 66, 75. |
| | Hydrogen, peroxide, aqueous solutions *with more than 40 percent but not more than 60 percent hydrogen peroxide (stabilized as necessary)* | 5.1 | UN2014 | II | 5.1, 8 | 12, A60, B53, B80, B81, B85, IB2, IP5, T7, TP2, TP6, TP24, TP37 | None | 202 | 243 | Forbidden | Forbidden | D | 25, 66, 75 |
| | Hydrogen peroxide, aqueous solutions *with not less than 20 percent but not more than 40 percent hydrogen peroxide (stabilized as necessary)* | 5.1 | UN2014 | II | 5.1, 8 | A2, A3, A6, B53, IB2, IP5, T7, TP2, TP6, TP24, TP37 | None | 202 | 243 | 1 L | 5 L | D | 25, 66, 75. |
| | Hydrogen, peroxide, aqueous solutions *with not less than 8 percent but less than 20 percent hydrogen peroxide (stabilized as necessary)* | 5.1 | UN2984 | III | 5.1 | A1, IB2, IP5, T4, TP1, TP6, TP24, TP37 | 152 | 203 | 241 | 2.5 L | 30 L | B | 25, 66, 75 |
| | Hydrogen peroxide, stabilized *or* Hydrogen peroxide aqueous solutions, stabilized *with more than 60 percent hydrogen peroxide* | 5.1 | UN2015 | I | 5.1, 8 | 12, B53, B80, B81, B85, T9, TP2, TP6, TP24, TP37 | None | 201 | 243 | Forbidden | Forbidden | D | 25, 66, 75. |
| | Hydrogen, refrigerated liquid *)cryogenic liquid)* | 2.1 | UN1966 | | 2.1 | T75, TP5 | None | 316 | 318, 319 | Forbidden | Forbidden | D | 40 |
| | Hydrogen selenide, anhydrous | 2.3 | UN2202 | | 2.3, 2.1 | 1 | None | 192 | 245 | Forbidden | Forbidden | D | 40 |
| | *Hydrogen sulfate, see* Sulfuric acid | | | | | | | | | | | | |
| | Hydrogen sulfide | 2.3 | UN1053 | | 2.3, 2.1 | 2, B9, B14, N89 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Hydrosilicofluoric acid, see* Fluorosilicic acid | | | | | | | | | | | | |
| | *Hydroxyl amine iodide* | Forbidden | | | | | | | | | | | |
| | Hydroxylamine sulfate | 8 | UN2865 | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | |
| | Hypochlorite solutions | 8 | UN1791 | II | 8 | A7, B2, B15, IB2, IP5, N34, T7, TP2, TP24 | 154 | 202 | 242 | 1 L | 30 L | B | 26. |
| | Hypochlorites, inorganic, n.o.s. | 5.1 | UN3212 | II | 5.1 | A9, IB8, IP2, IP4, T3, TP33 | 152 | 212 | 240 | 5 kg | 25 kg | D | 4, 48, 52, 56, 58, 69, 106, 116 118 |
| | *Hyponitrous acid* | Forbidden | | | | | | | | | | | |
| | *Igniter fuse, metal clad, see* Fuse, *igniter, tubular, metal clad* | | | | | | | | | | | | |
| | Igniters | 1.1G | UN0121 | II | 1.1G | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Igniters | 1.2G | UN0314 | II | 1.2G | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Igniters | 1.3G | UN0315 | II | 1.3G | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Igniters | 1.4G | UN0325 | II | 1.4G | | None | 62 | None | Forbidden | 75 kg | 06 | |
| | Igniters | 1.4S | UN0454 | II | 1.4S | | None | 62 | None | 25 kg | 100 kg | 05 | |
| | 3,3′-Iminodipropylamine | 8 | UN2269 | III | 8 | IB3, T4, TP2 | 154 | 203 | 241 | 5 L | 60 L | A | |
| G | Infectious substances, affecting animals *only* | 6.2 | UN2900 | | 6.2 | A82 | 134 | 196 | None | 50 mL or 50 g | 4 L or 4 kg | B | 40 |
| G | Infectious substances, affecting humans | 6.2 | UN 2814 | | 6.2 | A82 | 134 | 196 | None | 50 mL or 50 g | 4 L or 4 kg | B | 40 |
| | *Inflammable, see Flammable* | | | | | | | | | | | | |
| | *Initiating explosives (dry)* | Forbidden | | | | | | | | | | | |
| | *Inositol hexanitrate (dry)* | Forbidden | | | | | | | | | | | |
| G | Insecticide gases, n.o.s. | 2.2 | UN1968 | | 2.2 | | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| G | Insecticide gases, flammable, n.o.s. | 2.1 | UN3354 | | 2.1 | T50 | 306 | 304 | 314, 315 | Forbidden | 150 kg | D | 40 |
| G | Insecticide gases, toxic, flammable, n.o.s. *Inhalation hazard Zone A* | 2.3 | UN3355 | | 2.3, 2.1 | 1 | None | 192 | 245 | Forbidden | Forbidden | D | 40 |
| G | Insecticide gases, toxic, flammable, n.o.s. *Inhalation hazard Zone B* | 2.3 | UN3355 | | 2.3, 2.1 | 2, B9, B14 | None | 302, 305 | 314, 315 | Forbidden | Forbidden | D | 40 |
| G | Insecticide gases, toxic, flammable, n.o.s. *Inhalation hazard Zone C* | 2.3 | UN3355 | | 2.3, 2.1 | 3, B14 | None | 302, 305 | 314, 315 | Forbidden | Forbidden | D | |
| G | Insecticide gases, toxic, flammable, n.o.s. *Inhalation hazard Zone D* | 2.3 | UN3355 | | 2.3, 2.1 | 4 | None | 302, | 314, | Forbidden | Forbidden | D | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 305 | 315 | | | | |
| G | Insecticide gases, toxic, n.o.s. | 2.3 | UN1967 | | 2.3 | 3 | None | 193, 334 | 245 | Forbidden | Forbidden | D | 40 |
| | *Inulin trinitrate (dry)* | Forbidden | | | | | | | | | | | |
| | *Iodine azide (dry)* | Forbidden | | | | | | | | | | | |
| | Iodine monochloride | 8 | UN1792 | II | 8 | B6, IB8, IP2, IP4, N41, T7, TP2 | None | 212 | 240 | Forbidden | 50 kg | D | 40, 66, 74, 89, 90 |
| | Iodine pentafluoride | 5.1 | UN2495 | I | 5.1, 6.1, 8 | | None | 205 | 243 | Forbidden | Forbidden | D | 25, 40, 52, 66, 90 |
| | 2-Iodobutane | 3 | UN2390 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Iodomethylpropanes | 3 | UN2391 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Iodopropanes | 3 | UN2392 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *Iodoxy compounds (dry)* | Forbidden | | | | | | | | | | | |
| | *Iridium nitratopentamine iridium nitrate* | Forbidden | | | | | | | | | | | |
| | *Iron chloride, see* Ferric chloride | | | | | | | | | | | | |
| | Iron oxide, spent, *or* Iron sponge, spent *obtained from coal gas purification* | 4.2 | UN1376 | III | 4.2 | B18, IB8, IP3, T1, TP33 | None | 213 | 240 | Forbidden | Forbidden | E | |
| | Iron pentacarbonyl | 6.1 | UN1994 | I | 6.1, 3 | 1, B9, B14, B30, B72, B77, T22, TP2, TP13, TP38, TP44 | None | 226 | 244 | Forbidden | Forbidden | D | 40 |
| | *Iron sesquichloride, see* Ferric chloride | | | | | | | | | | | | |
| | *Irritating material, see* Tear gas substances, *etc* | | | | | | | | | | | | |
| | Isobutane *see also* Petroleum gases, liquefied | 2.1 | UN1969 | | 2.1 | 19, T50 | 306 | 304 | 314, 315 | Forbidden | 150 kg | E | 40 |
| | Isobutanol *or* Isobutyl alcohol | 3 | UN1212 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Isobutyl acetate | 3 | UN1213 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Isobutyl acrylate, stabilized | 3 | UN2527 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Isobutyl alcohol, *see* Isobutanol | | | | | | | | | | | | |
| | Isobutyl aldehyde, *see* Isobutyraldehyde | | | | | | | | | | | | |
| D | Isobutyl chloroformate | 6.1 | NA2742 | I | 6.1, 3, 8 | 2, B9, B14, B32, B74, T20, TP4, TP12, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | A | 12, 13, 22, 25, 40, 48, 100 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Isobutyl formate | 3 | UN2393 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Isobutyl isobutyrate | 3 | UN2528 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| + | Isobutyl isocyanate | 3 | UN2486 | I | 3, 6.1 | 1, B9, B14, B30, B72, T22, TP2, TP13, TP27 | None | 226 | 244 | Forbidden | Forbidden | D | 40 |
| | Isobutyl methacrylate, stabilized | 3 | UN2283 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Isobutyl propionate | 3 | UN2394 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | B | |
| | Isobutylamine | 3 | UN1214 | II | 3, 8 | IB2, T7, TP1 | 150 | 202 | 243 | 1 L | 5 L | B | 40 |
| | Isobutylene *see also* Petroleum gases, liquefied | 2.1 | UN1055 | | 2.1 | 19, T50 | 306 | 304 | 314, 315 | Forbidden | 150 kg | E | 40 |
| | Isobutyraldehyde *or* Isobutyl aldehyde | 3 | UN2045 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | E | 40 |
| | Isobutyric acid | 3 | UN2529 | III | 3, 8 | B1, IB3, T4, TP1 | 150 | 203 | 242 | 5 L | 60 L | A | |
| | Isobutyronitrile | 3 | UN2284 | II | 3, 6.1 | IB2, T7, TP2, TP13 | 150 | 202 | 243 | 1 L | 60 L | E | 40 |
| | Isobutyryl chloride | 3 | UN2395 | II | 3, 8 | IB1, T7, TP2 | 150 | 202 | 243 | 1 L | 5 L | C | 40 |
| G | Isocyanates, flammable, toxic, n.o.s. *or* Isocyanate solutions, flammable, toxic, n.o.s. *flash point less than 23 degrees C* | 3 | UN2478 | II | 3, 6.1 | 5, A3, A7, IB2, T11, TP2, TP13, TP27 | 150 | 202 | 243 | 1 L | 60 L | D | 40 |
| | | | | III | 3, 6.1 | 5, A3, A7, IB3, T7, TP1, TP13, TP28 | 150 | 203 | 242 | 60 L | 220 L | A | |
| G | Isocyanates, toxic, flammable, n.o.s. *or* Isocyanate solutions, toxic, flammable, n.o.s., *flash point not less than 23 degrees C but not more than 61 degrees C and boiling point less than 300 degrees C* | 6.1 | UN3080 | II | 6.1, 3 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 25, 40, 48 |
| G | Isocyanates, toxic, n.o.s. *or* Isocyanate solutions, toxic, n.o.s., *flash point more than 61 degrees C and boiling point less than 300 degrees C* | 6.1 | UN2206 | II | 6.1 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | E | 25, 40, 48 |
| | | | | III | 6.1 | IB3, T7, TP1, TP13, TP28 | 153 | 203 | 241 | 60 L | 220 L | E | 25, 40, 48 |
| | Isocyanatobenzotrifluorides | 6.1 | UN2285 | II | 6.1, 3 | 5, IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | D | 25, 40, 48 |
| | Isoheptenes | 3 | UN2287 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Isohexenes | 3 | UN2288 | II | 3 | IB2, IP8, T11, TP1 | 150 | 202 | 242 | 5 L | 60 L | E | |
| | *Isooctane, see* Octanes | | | | | | | | | | | | |
| | Isooctenes | 3 | UN1216 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | *Isopentane, see* Pentane | | | | | | | | | | | | |
| | *Isopentanoic acid, see* Corrosive liquids, n.o.s. | | | | | | | | | | | | |
| | Isopentenes | 3 | UN2371 | I | 3 | T11, TP2 | 150 | 201 | 243 | 1 L | 30 L | E | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Isophorone diisocyanate | 6.1 | UN2290 | III | 6.1 | IB3, T4, TP2 | 153 | 203 | 241 | 60 L | 220 L | B | 40 |
| | Isophoronediamine | 8 | UN2289 | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | |
| | Isoprene, stabilized | 3 | UN1218 | I | 3 | T11, TP2 | 150 | 201 | 243 | 1 L | 30 L | E | |
| | Isopropanol *or* Isopropyl alcohol | 3 | UN1219 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Isopropenyl acetate | 3 | UN2403 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Isopropenylbenzene | 3 | UN2303 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Isopropyl acetate | 3 | UN1220 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Isopropyl acid phosphate | 8 | UN1793 | III | 8 | IB2, T4, TP1 | 154 | 213 | 240 | 25 kg | 100 kg | A | |
| | Isopropyl alcohol, *see* Isopropanol | | | | | | | | | | | | |
| | Isopropyl butyrate | 3 | UN2405 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Isopropyl chloroacetate | 3 | UN2947 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Isopropyl chloroformate | 6.1 | UN2407 | I | 6.1, 3, 8 | 2, B9, B14, B32, B74, B77, T20, TP2, TP13, TP38, TP44 | None | 227 | 244 | Forbidden | Forbidden | B | 40 |
| | Isopropyl 2-chloropropionate | 3 | UN2934 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Isopropyl isobutyrate | 3 | UN2406 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| + | Isopropyl isocyanate | 3 | UN2483 | I | 3, 6.1 | 1, B9, B14, B30, B72, T22, TP2, TP13, TP38, TP44 | None | 226 | 244 | Forbidden | Forbidden | D | 40 |
| | *Isopropyl mercaptan, see* Propanethiols | | | | | | | | | | | | |
| | Isopropyl nitrate | 3 | UN1222 | II | 3 | IB9 | 150 | 202 | None | 5 L | 60 L | D | |
| | *Isopropyl phosphoric acid, see* Isopropyl acid phosphate | | | | | | | | | | | | |
| | Isopropyl propionate | 3 | UN2409 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Isopropylamine | 3 | UN1221 | I | 3, 8 | T11, TP2 | None | 201 | 243 | 0.5 L | 2.5 L | E | |
| | Isopropylbenzene | 3 | UN1918 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *Isopropylcumyl hydroperoxide, with more than 72 percent in solution* | Forbidden | | | | | | | | | | | |
| | Isosorbide dinitrate mixture *with not less than 60 percent lactose, mannose, starch or calcium hydrogen phosphate* | 4.1 | UN2907 | II | 4.1 | IB6, IP2, N85 | None | 212 | None | 15 kg | 50 kg | E | 28, 36 |
| | Isosorbide-5-mononitrate | 4.1 | UN3251 | III | 4.1 | 66, IB8 | 151 | 213 | 240 | Forbidden | Forbidden | D | 12 |
| | *Isothiocyanic acid* | Forbidden | | | | | | | | | | | |
| | *Jet fuel, see* Fuel aviation, turbine engine | | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D | Jet perforating guns, charged oil well, with detonator | 1.1D | NA0124 | II | 1.1D | 55, 56 | None | 62 | None | Forbidden | Forbidden | 07 | |
| D | Jet perforating guns, charged oil well, with detonator | 1.4D | NA0494 | II | 1.4D | 55, 56 | None | 62 | None | Forbidden | Forbidden | 06 | |
| | Jet perforating guns, charged *oil well, without detonator* | 1.1D | UN0124 | II | 1.1D | 55 | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Jet perforating guns, charged, *oil well, without detonator* | 1.4D | UN0494 | II | 1.4D | 55, 114 | None | 62 | None | Forbidden | 300 kg | 06 | |
| | *Jet perforators, see* Charges, shaped, *etc* | | | | | | | | | | | | |
| | *Jet tappers, without detonator, see* Charges, shaped, *etc* | | | | | | | | | | | | |
| | *Jet thrust igniters, for rocket motors or Jato, see* Igniters | | | | | | | | | | | | |
| | *Jet thrust unit (Jato), see* Rocket motors | | | | | | | | | | | | |
| | Kerosene | 3 | UN1223 | III | 3 | 144, B1, IB3, T2, TP2 | 150 | 203 | 242 | 60 L | 220 L | A | |
| G | Ketones, liquid, n.o.s. | 3 | UN1224 | I | 3 | T11, TP1, TP8, TP27 | None | 201 | 243 | 1 L | 30 L | E | |
| | | | | II | 3 | IB2, T7, TP1, TP8, TP28 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, IB3, T4, TP1, TP29 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Krypton, compressed | 2.2 | UN1056 | | 2.2 | | 306 | 302 | None | 75 kg | 150 kg | A | |
| | Krypton, refrigerated liquid *(cryogenic liquid)* | 2.2 | UN1970 | | 2.2 | T75, TP5 | 320 | None | None | 50 kg | 500 kg | B | |
| | *Lacquer base or lacquer chips, nitrocellulose, dry, see* Nitrocellulose, etc. (UN 2557) | | | | | | | | | | | | |
| | *Lacquer base or lacquer chips, plastic, wet with alcohol or solvent, see* Nitrocellulose *(UN2059, UN2555, UN2556, UN2557) or* Paint etc.(UN1263) | | | | | | | | | | | | |
| | Lead acetate | 6.1 | UN1616 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Lead arsenates | 6.1 | UN1617 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Lead arsenites | 6.1 | UN1618 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | *Lead azide (dry)* | Forbidden | | | | | | | | | | | |
| | Lead azide, wetted *with not less than 20 percent water or mixture of alcohol and water, by mass* | 1.1A | UN0129 | II | 1.1A | 111, 117 | None | 62 | None | Forbidden | Forbidden | 12 | |
| | Lead compounds, soluble, n.o.s. | 6.1 | UN2291 | III | 6.1 | 138, IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Lead cyanide | 6.1 | UN1620 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 52 |
| | Lead dioxide | 5.1 | UN1872 | III | 5.1 | A1, IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | |
| | *Lead dross, see* Lead sulfate, *with more than 3 percent free acid* | | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Lead nitrate | 5.1 | UN1469 | II | 5.1, 6.1 | IB8, IP2, IP4, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | |
| | *Lead nitroresorcinate (dry)* | Forbidden | | | | | | | | | | | |
| | Lead perchlorate, solid | 5.1 | UN1470 | II | 5.1, 6.1 | IB6, IP2, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 56, 58 |
| | Lead perchlorate, solution | 5.1 | UN3408 | II | 5.1, 6.1 | IB2, T4, TP1 | 152 | 202 | 243 | 1 L | 5 L | A | 56, 58 |
| | | | | III | 5.1, 6.1 | IB2, T4, TP1 | 152 | 203 | 242 | 2.5 L | 30 L | A | 56, 58 |
| | *Lead peroxide, see* Lead dioxide | | | | | | | | | | | | |
| | Lead phosphite, dibasic | 4.1 | UN2989 | II | 4.1 | IB8, IP2, IP4, T3, TP33 | None | 212 | 240 | 15 kg | 50 kg | B | 34. |
| | | | | III | 4.1 | IB8, IP3, T1, TP33 | 151 | 213 | 240 | 25 kg | 100 kg | B | 34. |
| | *Lead picrate (dry)* | Forbidden | | | | | | | | | | | |
| | *Lead styphnate (dry)* | Forbidden | | | | | | | | | | | |
| | Lead styphnate, wetted *or* Lead trinitroresorcinate, wetted *with not less than 20 percent water or mixture of alcohol and water, by mass* | 1.1A | UN0130 | II | 1.1A | 111, 117 | None | 62 | None | Forbidden | Forbidden | 12 | |
| | Lead sulfate *with more than 3 percent free acid* | 8 | UN1794 | II | 8 | IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | |
| | Lead trinitroresorcinate, *see* Lead styphnate, *etc* | | | | | | | | | | | | |
| | Life-saving appliances, not self inflating *containing dangerous goods as equipment* | 9 | UN3072 | | None | | None | 219 | None | No limit | No limit | A | |
| | Life-saving appliances, self inflating | 9 | UN2990 | | None | | None | 219 | None | No limit | No limit | A | |
| | Lighters *containing flammable gas* | 2.1 | UN1057 | | 2.1 | 168 | 21,308 | 21,308 | None | 1 kg | 15 kg | B | 40 |
| | *Lighters, new or empty, purged of all residual fuel and vapors* | | | | | 168 | | | | | | | |
| | Lighters *, non-pressurized, containing flammable liquid,* | 3 | NA1057 | II | 3 | 168 | 21 | None | None | Forbidden | Forbidden | B | 40 |
| | Lighter refills *containing flammable gas not exceeding 4 fluid ounces (7.22 cubic inches) and 65 grams of flammable gas* | 2.1 | UN1057 | | 2.1 | 169 | 306 | 306 | None | 1 kg | 15 kg | B | 40 |
| | *Lighter replacement cartridges containing liquefied petroleum gases* see Lighter *refills containing flammable gas. Etc.* | | | | | | | | | | | | |
| | Lighters *containing flammable gas* | 2.1 | UN1057 | | 2.1 | 168 | 21,308 | 21,308 | None | 1 kg | 15 kg | B | 40 |
| | *Lighters, new or empty, purged of all residual fuel and vapors* | | | | | 168 | | | | | | | |
| | Lighters *, non-pressurized, containing flammable liquid,* | 3 | NA1057 | II | 3 | 168 | 21 | None | None | Forbidden | Forbidden | B | 40 |
| | Lighter refills *containing flammable gas not exceeding 4 fluid ounces (7.22 cubic inches) and 65 grams of flammable gas* | 2.1 | UN1057 | | 2.1 | 169 | 306 | 306 | None | 1 kg | 15 kg | B | 40 |
| | *Lighter replacement cartridges containing liquefied petroleum gases* see Lighter *refills containing flammable gas. Etc.* | | | | | | | | | | | | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Lighters, fuse | 1.4S | UN0131 | II | 1.4S | | None | 62 | None | 25 kg | 100 kg | 05 | |
| | *Lime, unslaked, see* Calcium oxide | | | | | | | | | | | | |
| G | Liquefied gas, flammable, n.o.s. | 2.1 | UN3161 | | 2.1 | T50 | 306 | 304 | 314, 315 | Forbidden | 150 kg | D | 40 |
| G | Liquefied gas, n.o.s. | 2.2 | UN3163 | | 2.2 | T50 | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| G | Liquefied gas, oxidizing, n.o.s. | 2.2 | UN3157 | | 2.2, 5.1 | A14 | 306 | 304 | 314, 315 | 75 kg | 150 kg | D | |
| G I | Liquefied gas, toxic, corrosive, n.o.s. *Inhalation Hazard Zone A* | 2.3 | UN3308 | | 2.3, 8 | 1 | None | 192 | 245 | Forbidden | Forbidden | D | 40 |
| G I | Liquefied gas, toxic, corrosive, n.o.s. *Inhalation Hazard Zone B* | 2.3 | UN3308 | | 2.3, 8 | 2, B9, B14 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40 |
| G I | Liquefied gas, toxic, corrosive, n.o.s. *Inhalation Hazard Zone C* | 2.3 | UN3308 | | 2.3, 8 | 3, B14 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40 |
| G I | Liquefied gas, toxic, corrosive, n.o.s. *Inhalation Hazard Zone D* | 2.3 | UN3308 | | 2.3, 8 | 4 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40 |
| G I | Liquefied gas, toxic, flammable, corrosive, n.o.s. *Inhalation Hazard Zone A* | 2.3 | UN3309 | | 2.3, 2.1, 8 | 1 | None | 192 | 245 | Forbidden | Forbidden | D | 17, 40 |
| G I | Liquefied gas toxic, flammable, corrosive, n.o.s. *Inhalation Hazard Zone B* | 2.3 | UN3309 | | 2.3, 2.1, 8 | 2, B9, B14 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 17, 40 |
| G I | Liquefied gas, toxic, flammable, corrosive, n.o.s. *Inhalation Hazard Zone C* | 2.3 | UN3309 | | 2.3, 2.1, 8 | 3, B14 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 17, 40 |
| G I | Liquefied gas, toxic, flammable, corrosive, n.o.s. *Inhalation Hazard Zone D* | 2.3 | UN3309 | | 2.3, 2.1, 8 | 4 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 17, 40 |
| G | Liquefied gas, toxic, flammable, n.o.s. *Inhalation Hazard Zone A* | 2.3 | UN3160 | | 2.3, 2.1 | 1 | None | 192 | 245 | Forbidden | Forbidden | D | 40 |
| G | Liquefied gas, toxic, flammable, n.o.s. *Inhalation Hazard Zone B* | 2.3 | UN3160 | | 2.3, 2.1 | 2, B9, B14 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40 |
| G | Liquefied gas, toxic, flammable, n.o.s. *Inhalation Hazard Zone C* | 2.3 | UN3160 | | 2.3, 2.1 | 3, B14 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40 |
| G | Liquefied gas, toxic, flammable, n.o.s. *Inhalation Hazard Zone D* | 2.3 | UN3160 | | 2.3, 2.1 | 4 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40 |
| G | Liquefied gas, toxic, n.o.s. *Inhalation Hazard Zone A* | 2.3 | UN3162 | | 2.3 | 1 | None | 192 | 245 | Forbidden | Forbidden | D | 40 |
| G | Liquefied gas, toxic, n.o.s. *Inhalation Hazard Zone B* | 2.3 | UN3162 | | 2.3 | 2, B9, B14 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40 |
| G | Liquefied gas, toxic, n.o.s. *Inhalation Hazard Zone C* | 2.3 | UN3162 | | 2.3 | 3, B14 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G | Liquefied gas, toxic, n.o.s. *Inhalation Hazard Zone D* | 2.3 | UN3162 | | 2.3 | 4 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40 |
| G I | Liquefied gas, toxic, oxidizing, corrosive, n.o.s. *Inhalation Hazard Zone A* | 2.3 | UN3310 | | 2.3, 5.1, 8 | 1 | None | 192 | 245 | Forbidden | Forbidden | D | 40, 89, 90 |
| G I | Liquefied gas, toxic, oxidizing, corrosive, n.o.s. *Inhalation Hazard Zone B* | 2.3 | UN3310 | | 2.3, 5.1, 8 | 2, B9, B14 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40, 89, 90 |
| G I | Liquefied gas, toxic, oxidizing, corrosive, n.o.s. *Inhalation Hazard Zone C* | 2.3 | UN3310 | | 2.3, 5.1, 8 | 3, B14 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40, 89, 90 |
| G I | Liquefied gas, toxic, oxidizing, corrosive, n.o.s. *Inhalation Hazard Zone D* | 2.3 | UN3310 | | 2.3, 5.1, 8 | 4 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40, 89, 90 |
| G | Liquefied gas, toxic, oxidizing, n.o.s. *Inhalation Hazard Zone A* | 2.3 | UN3307 | | 2.3, 5.1 | 1 | None | 192 | 245 | Forbidden | Forbidden | D | 40 |
| G | Liquefied gas, toxic, oxidizing, n.o.s. *Inhalation Hazard Zone B* | 2.3 | UN3307 | | 2.3, 5.1 | 2, B9, B14 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40 |
| G | Liquefied gas, toxic, oxidizing, n.o.s. *Inhalation Hazard Zone C* | 2.3 | UN3307 | | 2.3, 5.1 | 3, B14 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40 |
| G | Liquefied gas, toxic, oxidizing, n.o.s. *Inhalation Hazard Zone D* | 2.3 | UN3307 | | 2.3, 5.1 | 4 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40 |
| | Liquefied gases, *non-flammable charged with nitrogen, carbon dioxide or air* | 2.2 | UN1058 | | 2.2 | | 306 | 304 | None | 75 kg | 150 kg | A | |
| | *Liquefied hydrocarbon gas, see* Hydrocarbon gas mixture, liquefied, n.o.s. | | | | | | | | | | | | |
| | *Liquefied natural gas, see* Methane, etc. (UN 1972) | | | | | | | | | | | | |
| | Liquefied petroleum gas *see* Petroleum gases, liquefied | | | | | | | | | | | | |
| | Lithium | 4.3 | UN1415 | I | 4.3 | A7, A19, IB4, IP1, N45 | None | 211 | 244 | Forbidden | 15 kg | E | 52 |
| | *Lithium acetylide ethylenediamine complex, see* Water reactive solid *etc* | | | | | | | | | | | | |
| | Lithium alkyls, liquid | 4.2 | UN2445 | I | 4.2, 4.3 | 173, B11, T21, TP2, TP7 | None | 181 | 244 | Forbidden | Forbidden | D | |
| | Lithium alkyls, solid | 4.2 | UN3433 | I | 4.2, 4.3 | 173, B11, T21, TP7, TP33 | None | 181 | 244 | Forbidden | Forbidden | D | |
| | Lithium aluminum hydride | 4.3 | UN1410 | I | 4.3 | A19 | None | 211 | 242 | Forbidden | 15 kg | E | 52 |
| | Lithium aluminum hydride, ethereal | 4.3 | UN1411 | I | 4.3, 3 | A2, A3, A11, N34 | None | 201 | 244 | Forbidden | 1 L | D | 40 |
| | Lithium batteries, contained in equipment | 9 | UN3091 | II | 9 | 29, 188, 189, 190, A54, A55, A101, A104 | 185 | None | See A101, A104. | 35 kg | A | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Lithium batteries packed with equipment | 9 | UN3091 | II | 9 | 29, 188, 189, 190, A54, A55, A101, A103 | 185 | 185 | None | See A101, A103. | 35 kg gross | A | |
| | Lithium battery | 9 | UN3090 | II | 9 | 29, 188, 189, 190, A54, A55, A100. | 185 | 185 | None | See A100 | 35 kg gross | A | |
| | Lithium borohydride | 4.3 | UN1413 | I | 4.3 | A19, N40 | None | 211 | 242 | Forbidden | 15 kg | E | 52 |
| | Lithium ferrosilicon | 4.3 | UN2830 | II | 4.3 | A19, IB7, IP2, T3, TP33 | 151 | 212 | 241 | 15 kg | 50 kg | E | 40, 85, 103 |
| | Lithium hydride | 4.3 | UN1414 | I | 4.3 | A19, N40 | None | 211 | 242 | Forbidden | 15 kg | E | 52 |
| | Lithium hydride, fused solid | 4.3 | UN2805 | II | 4.3 | A8, A19, A20, IB4, T3, TP33 | 151 | 212 | 241 | 15 kg | 50 kg | E | 52 |
| | Lithium hydroxide | 8 | UN2680 | II | 8 | IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | 52. |
| | Lithium hydroxide, solution | 8 | UN2679 | II | 8 | B2, IB2, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | A | 29, 52. |
| | | | | III | 8 | IB3, T4, TP2 | 154 | 203 | 241 | 5 L | 60 L | A | 29, 52, 96. |
| | Lithium hypochlorite, dry *with more than 39% available chlorine (8.8% available oxygen) or* Lithium hypochlorite mixtures, dry *with more than 39% available chlorine (8.8% available oxygen)* | 5.1 | UN1471 | II | 5.1 | A9, IB8, IP2, IP4, N34 | 152 | 212 | 240 | 5 kg | 25 kg | A | 4, 48, 52, 56, 58, 69, 106, 116 |
| | *Lithium in cartridges, see* Lithium | | | | | | | | | | | | |
| | Lithium nitrate | 5.1 | UN2722 | III | 5.1 | A1, IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | |
| | Lithium nitride | 4.3 | UN2806 | I | 4.3 | A19, IB4, IP1, N40 | None | 211 | 242 | Forbidden | 15 kg | E | |
| | Lithium peroxide | 5.1 | UN1472 | II | 5.1 | A9, IB6, IP2, N34, T3, TP33 | 152 | 212 | None | 5 kg | 25 kg | A | 13, 52, 66, 75 |
| | Lithium silicon | 4.3 | UN1417 | II | 4.3 | A19, A20, IB7, IP2, T3, TP33 | 151 | 212 | 241 | 15 kg | 50 kg | A | 85, 103 |
| | *LNG, see* Methane etc. (UN 1972) | | | | | | | | | | | | |
| | London purple | 6.1 | UN1621 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | *LPG, see* Petroleum gases, liquefied | | | | | | | | | | | | |
| | *Lye, see* Sodium hydroxide, solutions | | | | | | | | | | | | |
| | Magnesium alkyls | 4.2 | UN3053 | I | 4.2, 4.3 | B11, T21, TP2, TP7 | None | 181 | 244 | Forbidden | Forbidden | D | 18 |
| | Magnesium aluminum phosphide | 4.3 | UN1419 | I | 4.3, 6.1 | A19, N34, N40 | None | 211 | 242 | Forbidden | 15 kg | E | 40, 52, 85 |
| + | Magnesium arsenate | 6.1 | UN1622 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | *Magnesium bisulfite solution, see* Bisulfites, aqueous solutions, n.o.s. | | | | | | | | | | | | |
| | Magnesium bromate | 5.1 | UN1473 | II | 5.1 | A1, IB8, IP4, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 56, 58 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Magnesium chlorate | 5.1 | UN2723 | II | 5.1 | IB8, IP2, IP4, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 56, 58 |
| | Magnesium diamide | 4.2 | UN2004 | II | 4.2 | A8, A19, A20, IB6, T3, TP33 | None | 212 | 241 | 15 kg | 50 kg | C | |
| | Magnesium diphenyl | 4.2 | UN2005 | I | 4.2 | 173, T21, TP7, TP33 | None | 187 | 244 | Forbidden | Forbidden | C | |
| | *Magnesium dross, wet or hot* | Forbidden | | | | | | | | | | | |
| | Magnesium fluorosilicate | 6.1 | UN2853 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 52 |
| | Magnesium granules, coated, *particle size not less than 149 microns* | 4.3 | UN2950 | III | 4.3 | A1, A19, IB8, IP4, T1, TP33 | 151 | 213 | 240 | 25 kg | 100 kg | A | 52 |
| | Magnesium hydride | 4.3 | UN2010 | I | 4.3 | A19, N40 | None | 211 | 242 | Forbidden | 15 kg | E | 52 |
| | Magnesium *or* Magnesium alloys *with more than 50 percent magnesium in pellets, turnings or ribbons* | 4.1 | UN1869 | III | 4.1 | A1, IB8, IP3, T1, TP33 | 151 | 213 | 240 | 25 kg | 100 kg | A | 39, 52, 53, 74, 101 |
| | Magnesium nitrate | 5.1 | UN1474 | III | 5.1 | A1, IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | |
| | Magnesium perchlorate | 5.1 | UN1475 | II | 5.1 | IB6, IP2, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 56, 58 |
| | Magnesium peroxide | 5.1 | UN1476 | II | 5.1 | IB6, IP2, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 13, 52, 66, 75 |
| | Magnesium phosphide | 4.3 | UN2011 | I | 4.3, 6.1 | A19, N40 | None | 211 | None | Forbidden | 15 kg | E | 40, 52, 85 |
| | Magnesium, powder *or* Magnesium alloys, powder | 4.3 | UN1418 | I | 4.3, 4.2 | A19, B56 | None | 211 | 244 | Forbidden | 15 kg | A | 39, 52 |
| | | | | II | 4.3, 4.2 | A19, B56, IB5, IP2, T3, TP33 | None | 212 | 241 | 15 kg | 50 kg | A | 39, 52 |
| | | | | III | 4.3, 4.2 | A19, B56, IB8, IP4, T1, TP33 | None | 213 | 241 | 25 kg | 100 kg | A | 39, 52 |
| | *Magnesium scrap, see* Magnesium, etc. (UN 1869) | | | | | | | | | | | | |
| | Magnesium silicide | 4.3 | UN2624 | II | 4.3 | A19, A20, IB7, IP2, T3, TP33 | 151 | 212 | 241 | 15 kg | 50 kg | B | 85, 103 |
| | *Magnetized material, see §173.21* | | | | | | | | | | | | |
| | Maleic anhydride | 8 | UN2215 | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | |
| | Maleic anhydride, molten | 8 | UN2215 | III | 8 | T4, TP3 | None | 213 | 240 | Forbidden | Forbidden | A | |
| | Malononitrile | 6.1 | UN2647 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 12 |
| | *Mancozeb (manganese ethylenebisdithiocarbamate complex with zinc) see* Maneb | | | | | | | | | | | | |
| | Maneb *or* Maneb preparations *with not less than 60 percent maneb* | 4.2 | UN2210 | III | 4.2, 4.3 | 57, A1, A19, IB6, T1, TP33 | None | 213 | 242 | 25 kg | 100 kg | A | 34 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Maneb stabilized *or* Maneb preparations, stabilized *against self-heating* | 4.3 | UN2968 | III | 4.3 | 54, A1, A19, IB8, IP4, T1, TP33 | 151 | 213 | 242 | 25 kg | 100 kg | B | 34, 52 |
| | Manganese nitrate | 5.1 | UN2724 | III | 5.1 | A1, IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | |
| | Manganese resinate | 4.1 | UN1330 | III | 4.1 | A1, IB6, T1, TP33 | 151 | 213 | 240 | 25 kg | 100 kg | A | |
| | *Mannitan tetranitrate* | Forbidden | | | | | | | | | | | |
| | *Mannitol hexanitrate (dry)* | Forbidden | | | | | | | | | | | |
| | Mannitol hexanitrate, wetted *or* Nitromannite, wetted *with not less than 40 percent water, or mixture of alcohol and water, by mass* | 1.1D | UN0133 | II | 1.1D | 121 | None | 62 | None | Forbidden | Forbidden | 10 | |
| | *Marine pollutants, liquid or solid, n.o.s., see* Environmentally hazardous substances, liquid *or* solid, n.o.s. | | | | | | | | | | | | |
| | *Matches, block, see* Matches, 'strike anywhere' | | | | | | | | | | | | |
| | Matches, fusee | 4.1 | UN2254 | III | 4.1 | | 186 | 186 | None | Forbidden | Forbidden | A | |
| | Matches, safety *(book, card or strike on box)* | 4.1 | UN1944 | III | 4.1 | | 186 | 186 | None | 25 kg | 100 kg | A | |
| | Matches, strike anywhere | 4.1 | UN1331 | III | 4.1 | | 186 | 186 | None | Forbidden | Forbidden | B | |
| | Matches, wax, Vesta | 4.1 | UN1945 | III | 4.1 | | 186 | 186 | None | 25 kg | 100 kg | B | |
| | *Matting acid, see* Sulfuric acid | | | | | | | | | | | | |
| | Medicine, liquid, flammable, toxic, n.o.s. | 3 | UN3248 | II | 3, 6.1 | 36, IB2 | 150 | 202 | None | 1 L | 5 L | B | 40 |
| | | | | III | 3, 6.1 | 36, IB3 | 150 | 203 | None | 5 L | 5 L | A | |
| | Medicine, liquid, toxic, n.o.s. | 6.1 | UN1851 | II | 6.1 | 36 | 153 | 202 | 243 | 5 L | 5 L | C | 40 |
| | | | | III | 6.1 | 36 | 153 | 203 | 241 | 5 L | 5 L | C | 40 |
| | Medicine, solid, toxic, n.o.s. | 6.1 | UN3249 | II | 6.1 | 36, T3, TP33 | 153 | 212 | None | 5 kg | 5 kg | C | 40 |
| | | | | III | 6.1 | 36, T1, TP33 | 153 | 213 | None | 5 kg | 5 kg | C | 40 |
| | *Memtetrahydrophthalic anhydride, see* Corrosive liquids, n.o.s. | | | | | | | | | | | | |
| | Mercaptans, liquid, flammable, n.o.s. *or* Mercaptan mixture, liquid, flammable, n.o.s. | 3 | UN3336 | I | 3 | T11, TP2 | 150 | 201 | 243 | 1 L | 30 L | E | 95 |
| | | | | II | 3 | IB2, T7, TP1, TP8, TP28 | 150 | 202 | 242 | 5 L | 60 L | B | 95 |
| | | | | III | 3 | B1, B52, IB3, T4, TP1, TP29 | 150 | 203 | 241 | 60 L | 220 L | B | 95 |
| | Mercaptans, liquid, flammable, toxic, n.o.s. *or* Mercaptan mixtures, liquid, flammable, toxic, n.o.s. | 3 | UN1228 | II | 3, 6.1 | IB2, T11, TP2, TP27 | None | 202 | 243 | Forbidden | 60 L | B | 40, 95 |
| | | | | III | 3, 6.1 | A6, B1, IB3, T7, TP1, | 150 | 203 | 242 | 5 L | 220 L | A | 40, 95 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | TP28 | | | | | | | |
| | Mercaptans, liquid, toxic, flammable, n.o.s. *or* Mercaptan mixtures, liquid, toxic, flammable, n.o.s. *, flash point not less than 23 degrees C* | 6.1 | UN3071 | II | 6.1, 3 | A6, IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | C | 40, 121 |
| | 5-Mercaptotetrazol-1-acetic acid | 1.4C | UN0448 | II | 1.4C | | None | 62 | None | Forbidden | 75 kg | 09 | |
| | Mercuric arsenate | 6.1 | UN1623 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Mercuric chloride | 6.1 | UN1624 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | *Mercuric compounds, see* Mercury compounds, *etc* | | | | | | | | | | | | |
| | Mercuric nitrate | 6.1 | UN1625 | II | 6.1 | IB8, IP2, IP4, N73, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| + | Mercuric potassium cyanide | 6.1 | UN1626 | I | 6.1 | IB7, IP1, N74, N75, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | 52 |
| | *Mercuric sulfocyanate, see* Mercury thiocyanate | | | | | | | | | | | | |
| | *Mercurol, see* Mercury nucleate | | | | | | | | | | | | |
| | *Mercurous azide* | Forbidden | | | | | | | | | | | |
| | *Mercurous compounds, see* Mercury compounds, *etc* | | | | | | | | | | | | |
| | Mercurous nitrate | 6.1 | UN1627 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| A W | Mercury | 8 | UN2809 | III | 8 | | 164 | 164 | 240 | 35 kg | 35 kg | B | 40, 97 |
| | Mercury acetate | 6.1 | UN1629 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | *Mercury acetylide* | Forbidden | | | | | | | | | | | |
| | Mercury ammonium chloride | 6.1 | UN1630 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Mercury based pesticides, liquid, flammable, toxic, *flash point less than 23 degrees C* | 3 | UN2778 | I | 3, 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | Forbidden | 30 L | B | 40 |
| | | | | II | 3, 6.1 | IB2, T11, TP2, TP13, TP27 | 150 | 202 | 243 | 1 L | 60 L | B | 40 |
| | Mercury based pesticides, liquid, toxic | 6.1 | UN3012 | I | 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1 | IB3, T7, TP2, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | 40 |
| | Mercury based pesticides, liquid, toxic, flammable, *flash point not less than 23 degrees C* | 6.1 | UN3011 | I | 6.1, 3 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1, 3 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | III | 6.1, 3 | IB3, T7, TP2, TP28 | 153 | 203 | 242 | 60 L | 220 L | A | 40 |
| | Mercury based pesticides, solid, toxic | 6.1 | UN2777 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | 40 |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 40 |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 40 |
| | Mercury benzoate | 6.1 | UN1631 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Mercury bromides | 6.1 | UN1634 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Mercury compounds, liquid, n.o.s. | 6.1 | UN2024 | I | 6.1 | | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1 | IB2 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1 | IB3 | 153 | 203 | 241 | 60 L | 220 L | B | 40 |
| | Mercury compounds, solid, n.o.s. | 6.1 | UN2025 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| A | Mercury *contained in manufactured articles* | 8 | UN2809 | III | 8 | | None | 164 | None | No limit | No limit | B | 40, 97 |
| | Mercury cyanide | 6.1 | UN1636 | II | 6.1 | IB8, IP2, IP4, N74, N75, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 52 |
| | Mercury fulminate, wetted *with not less than 20 percent water, or mixture of alcohol and water, by mass* | 1.1A | UN0135 | II | 1.1A | 111, 117 | None | 62 | None | Forbidden | Forbidden | 12 | |
| | Mercury gluconate | 6.1 | UN1637 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Mercury iodide | 6.1 | UN1638 | II | 6.1 | IB2, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | *Mercury iodide aquabasic ammonobasic (Iodide of Millon's base)* | Forbidden | | | | | | | | | | | |
| | *Mercury nitride* | Forbidden | | | | | | | | | | | |
| | Mercury nucleate | 6.1 | UN1639 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Mercury oleate | 6.1 | UN1640 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Mercury oxide | 6.1 | UN1641 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | *Mercury oxycyanide* | Forbidden | | | | | | | | | | | |
| | Mercury oxycyanide, desensitized | 6.1 | UN1642 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 52, 91 |
| | Mercury potassium iodide | 6.1 | UN1643 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Mercury salicylate | 6.1 | UN1644 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| + | Mercury sulfates | 6.1 | UN1645 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Mercury thiocyanate | 6.1 | UN1646 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mesityl oxide | 3 | UN1229 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| G | Metal carbonyls, liquid, n.o.s. | 6.1 | UN3281 | I | 6.1 | 5, T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1 | IB2, T11, TP2, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1 | IB3, T7, TP1, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | 40 |
| G | Metal carbonyls, solid, n.o.s. | 6.1 | UN3466 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | D | 40 |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | B | 40 |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | B | 40 |
| | Metal catalyst, dry | 4.2 | UN2881 | I | 4.2 | N34, T21, TP7, TP33 | None | 187 | None | Forbidden | Forbidden | C | |
| | | | | II | 4.2 | IB6, IP2, N34, T3, TP33 | None | 187 | 242 | Forbidden | 50 kg | C | |
| | | | | III | 4.2 | IB8, IP3, N34, T1, TP33 | None | 187 | 241 | 25 kg | 100 kg | C | |
| | Metal catalyst, wetted *with a visible excess of liquid* | 4.2 | UN1378 | II | 4.2 | A2, A8, IB1, N34, T3, TP33 | None | 212 | None | Forbidden | 50 kg | C | |
| | Metal hydrides, flammable, n.o.s. | 4.1 | UN3182 | II | 4.1 | A1, IB4, T3, TP33 | 151 | 212 | 240 | 15 kg | 50 kg | E | |
| | | | | III | 4.1 | A1, IB4, T1, TP33 | 151 | 213 | 240 | 25 kg | 100 kg | E | |
| | Metal hydrides, water reactive, n.o.s. | 4.3 | UN1409 | I | 4.3 | A19, N34, N40 | None | 211 | 242 | Forbidden | 15 kg | D | 52 |
| | | | | II | 4.3 | A19, IB4, N34, N40, T3, TP33 | 151 | 212 | 242 | 15 kg | 50 kg | D | 52 |
| | Metal powder, self-heating, n.o.s. | 4.2 | UN3189 | II | 4.2 | IB6, IP2, T3, TP33 | None | 212 | 241 | 15 kg | 50 kg | C | |
| | | | | III | 4.2 | IB8, IP3, T1, TP33 | None | 213 | 241 | 25 kg | 100 kg | C | |
| | Metal powders, flammable, n.o.s. | 4.1 | UN3089 | II | 4.1 | IB8, IP2, IP4, T3, TP33 | 151 | 212 | 240 | 15 kg | 50 kg | B | |
| | | | | III | 4.1 | IB6, T1, TP33 | 151 | 213 | 240 | 25 kg | 100 kg | B | |
| | *Metal salts of methyl nitramine (dry)* | Forbidden | | | | | | | | | | | |
| G | Metal salts of organic compounds, flammable, n.o.s. | 4.1 | UN3181 | II | 4.1 | A1, IB8, IP2, IP4, T3, TP33 | 151 | 212 | 240 | 15 kg | 50 kg | B | 40 |
| | | | | III | 4.1 | A1, IB8, IP3, T1, TP33 | 151 | 213 | 240 | 25 kg | 100 kg | B | 40 |
| | Metaldehyde | 4.1 | UN1332 | III | 4.1 | A1, IB8, IP3, T1, TP33 | 151 | 213 | 240 | 25 kg | 100 kg | A | |
| G | Metallic substance, water-reactive, n.o.s. | 4.3 | UN3208 | I | 4.3 | A7, IB4 | None | 211 | 242 | Forbidden | 15 kg | E | 40 |
| | | | | II | 4.3 | A7, IB7, IP2, T3, TP33 | 151 | 212 | 242 | 15 kg | 50 kg | E | 40 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | III | 4.3 | A7, IB8, IP4, T1, TP33 | 151 | 213 | 241 | 25 kg | 100 kg | E | 40 |
| G | Metallic substance, water-reactive, self-heating, n.o.s. | 4.3 | UN3209 | I | 4.3, 4.2 | A7 | None | 211 | 242 | Forbidden | 15 kg | E | 40 |
| | | | | II | 4.3, 4.2 | A7, IB5, IP2, T3, TP33 | None | 212 | 242 | 15 kg | 50 kg | E | 40 |
| | | | | III | 4.3, 4.2 | A7, IB8, IP4, T1, TP33 | None | 213 | 242 | 25 kg | 100 kg | E | 40 |
| | Methacrylaldehyde, stabilized | 3 | UN2396 | II | 3, 6.1 | 45, IB2, T7, TP1, TP13 | 150 | 202 | 243 | 1 L | 60 L | E | 40 |
| | Methacrylic acid, stabilized | 8 | UN2531 | II | 8 | IB2, T7, TP1, TP18, TP30 | 154 | 202 | 242 | 1 L | 30 L | C | 40 |
| + | Methacrylonitrile, stabilized | 3 | UN3079 | I | 3, 6.1 | 2, B9, B14, B32, B74, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 12, 40, 48 |
| | Methallyl alcohol | 3 | UN2614 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *Methane and hydrogen, mixtures, see* Hydrogen and methane, mixtures, *etc* | | | | | | | | | | | | |
| | Methane, compressed *or* Natural gas, compressed *(with high methane content)* | 2.1 | UN1971 | | 2.1 | | 306 | 302 | 302 | Forbidden | 150 kg | E | 40 |
| | Methane, refrigerated liquid *(cryogenic liquid) or* Natural gas, refrigerated liquid *(cryogenic liquid), with high methane content)* | 2.1 | UN1972 | | 2.1 | T75, TP5 | None | None | 318 | Forbidden | Forbidden | D | 40 |
| | Methanesulfonyl chloride | 6.1 | UN3246 | I | 6.1, 8 | 2, B9, B14, B32, B74, T20, TP2, TP12, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 40 |
| + I | Methanol | 3 | UN1230 | II | 3, 6.1 | IB2, T7, TP2 | 150 | 202 | 242 | 1 L | 60 L | B | 40 |
| D | Methanol | 3 | UN1230 | II | 3 | IB2, T7, TP2 | 150 | 202 | 242 | 1 L | 60 L | B | 40 |
| | *Methazoic acid* | Forbidden | | | | | | | | | | | |
| | 4-Methoxy-4-methylpentan-2-one | 3 | UN2293 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | 1-Methoxy-2-propanol | 3 | UN3092 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| + | Methoxymethyl isocyanate | 3 | UN2605 | I | 3, 6.1 | 1, B9, B14, B30, B72, T22, TP2, TP13, TP38, TP44 | None | 226 | 244 | Forbidden | Forbidden | D | 40 |
| | Methyl acetate | 3 | UN1231 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Methyl acetylene and propadiene mixtures, stabilized | 2.1 | UN1060 | | 2.1 | N88, T50 | 306 | 304 | 314, 315 | Forbidden | 150 kg | B | 40 |
| | Methyl acrylate, stabilized | 3 | UN1919 | II | 3 | IB2, T4, TP1, TP13 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | *Methyl alcohol, see* Methanol | | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Methyl allyl chloride | 3 | UN2554 | II | 3 | IB2, T4, TP1, TP13 | 150 | 202 | 242 | 5 L | 60 L | E | |
| | *Methyl amyl ketone, see* Amyl methyl ketone | | | | | | | | | | | | |
| | Methyl bromide | 2.3 | UN1062 | | 2.3 | 3, B14, N86, T50 | None | 193 | 314, 315 | Forbidden | Forbidden | D | 40 |
| | *Methyl bromide and chloropicrin mixtures with more than 2 percent chloropicrin, see* Chloropicrin and methyl bromide mixtures | | | | | | | | | | | | |
| | *Methyl bromide and chloropicrin mixtures with not more than 2 percent chloropicrin, see* Methyl bromide | | | | | | | | | | | | |
| | Methyl bromide and ethylene dibromide mixtures, liquid | 6.1 | UN1647 | I | 6.1 | 2, B9, B14, B32, B74, N65, T20, TP2, TP13, TP38, TP44 | None | 227 | 244 | Forbidden | Forbidden | C | 40 |
| | Methyl bromoacetate | 6.1 | UN2643 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | D | 40 |
| | 2-Methylbutanal | 3 | UN3371 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | 2-Methyl-1-butene | 3 | UN2459 | I | 3 | T11, TP2 | None | 201 | 243 | 1 L | 30 L | E | |
| | 2-Methyl-2-butene | 3 | UN2460 | II | 3 | IB2, IP8, T7, TP1 | None | 202 | 242 | 5 L | 60 L | E | |
| | 3-Methyl-1-butene | 3 | UN2561 | I | 3 | T11, TP2 | None | 201 | 243 | 1 L | 30 L | E | |
| | Methyl tert-butyl ether | 3 | UN2398 | II | 3 | IB2, T7, TP1 | 150 | 202 | 242 | 5 L | 60 L | E | |
| | Methyl butyrate | 3 | UN1237 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Methyl chloride or Refrigerant gas R 40 | 2.1 | UN1063 | | 2.1 | N86, T50 | 306 | 304 | 314, 315 | 5 kg | 100 kg | D | 40 |
| | *Methyl chloride and chloropicrin mixtures, see* Chloropicrin and methyl chloride mixtures | | | | | | | | | | | | |
| | Methyl chloride and methylene chloride mixtures | 2.1 | UN1912 | | 2.1 | N86, T50 | 306 | 304 | 314, 315 | Forbidden | 150 kg | D | 40 |
| | Methyl chloroacetate | 6.1 | UN2295 | I | 6.1, 3 | T14, TP2, TP13 | None | 201 | 243 | 1 L | 30 L | D | |
| | *Methyl chlorocarbonate, see* Methyl chloroformate | | | | | | | | | | | | |
| | *Methyl chloroform, see* 1,1,1-Trichloroethane | | | | | | | | | | | | |
| | Methyl chloroformate | 6.1 | UN1238 | I | 6.1, 3, 8 | 1, B9, B14, B30, B72, N34, T22, TP2, TP13, TP38, TP44 | None | 226 | 244 | Forbidden | Forbidden | D | 21, 40, 100 |
| | Methyl chloromethyl ether | 6.1 | UN1239 | I | 6.1, 3 | 1, B9, B14, B30, B72, T22, TP2, TP38, TP44 | None | 226 | 244 | Forbidden | Forbidden | D | 40 |
| | Methyl 2-chloropropionate | 3 | UN2933 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Methyl dichloroacetate | 6.1 | UN2299 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | *Methyl ethyl ether, see* Ethyl methyl ether | | | | | | | | | | | | |
| | Methyl ethyl ketone, *see* Ethyl methyl ketone | | | | | | | | | | | | |
| | *Methyl ethyl ketone peroxide, in solution with more than 9 percent by mass active oxygen* | Forbidden | | | | | | | | | | | |
| | 2-Methyl-5-ethylpyridine | 6.1 | UN2300 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | Methyl fluoride, *or* Refrigerant gas R 41 | 2.1 | UN2454 | | 2.1 | | 306 | 304 | 314, 315 | Forbidden | 150 kg | E | 40 |
| | Methyl formate | 3 | UN1243 | I | 3 | T11, TP2 | 150 | 201 | 243 | 1 L | 30 L | E | |
| | 2-Methyl-2-heptanethiol | 6.1 | UN3023 | I | 6.1, 3 | 2, B9, B14, B32, B74, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 40, 102 |
| | Methyl iodide | 6.1 | UN2644 | I | 6.1 | 2, B9, B14, B32, B74, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | A | 12, 40 |
| | Methyl isobutyl carbinol | 3 | UN2053 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Methyl isobutyl ketone | 3 | UN1245 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | *Methyl isobutyl ketone peroxide, in solution with more than 9 percent by mass active oxygen* | Forbidden | | | | | | | | | | | |
| | Methyl isocyanate | 6.1 | UN2480 | I | 6.1, 3 | 1, B9, B14, B30, B72, T22, TP2, TP13, TP38, TP44 | None | 226 | 244 | Forbidden | Forbidden | D | 40, 52 |
| | Methyl isopropenyl ketone, stabilized | 3 | UN1246 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Methyl isothiocyanate | 6.1 | UN2477 | I | 6.1, 3 | 2, B9, B14, B32, B74, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | A | |
| | Methyl isovalerate | 3 | UN2400 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Methyl magnesium bromide, in ethyl ether | 4.3 | UN1928 | I | 4.3, 3 | | None | 201 | 243 | Forbidden | 1 L | D | |
| | Methyl mercaptan | 2.3 | UN1064 | | 2.3, 2.1 | 3, B7, B9, B14, N89, T50 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40 |
| | *Methyl mercaptopropionaldehyde, see* 4-Thiapentanal | | | | | | | | | | | | |
| | Methyl methacrylate monomer, stabilized | 3 | UN1247 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | 40 |
| | *Methyl nitramine (dry)* | Forbidden | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Methyl nitrate* | Forbidden | | | | | | | | | | | |
| | *Methyl nitrite* | Forbidden | | | | | | | | | | | |
| | *Methyl norbornene dicarboxylic anhydride, see* Corrosive liquids, n.o.s. | | | | | | | | | | | | |
| | Methyl orthosilicate | 6.1 | UN2606 | I | 6.1, 3 | 2, B9, B14, B32, B74, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | E | 40 |
| D | Methyl phosphonic dichloride | 6.1 | NA9206 | I | 6.1, 8 | 2, B9, B14, B32, B74, N34, N43, T20, TP4, TP12, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | C | |
| | *Methyl phosphonothioic dichloride, anhydrous, see* Corrosive liquid, n.o.s. | | | | | | | | | | | | |
| D | Methyl phosphonous dichloride, *pyrophoric liquid* | 6.1 | NA2845 | I | 6.1, 4.2 | 2, B9, B14, B16, B32, B74, T20, TP4, TP12, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 18 |
| | *Methyl picric acid (heavy metal salts of)* | Forbidden | | | | | | | | | | | |
| | Methyl propionate | 3 | UN1248 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Methyl propyl ether | 3 | UN2612 | II | 3 | IB2, IP8, T7, TP2 | 150 | 202 | 242 | 5 L | 60 L | E | 40 |
| | Methyl propyl ketone | 3 | UN1249 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | *Methyl sulfate, see* Dimethyl sulfate | | | | | | | | | | | | |
| | *Methyl sulfide, see* Dimethyl sulfide | | | | | | | | | | | | |
| | Methyl trichloroacetate | 6.1 | UN2533 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | *Methyl trimethylol methane trinitrate* | Forbidden | | | | | | | | | | | |
| | Methyl vinyl ketone, stabilized | 6.1 | UN1251 | I | 6.1, 3, 8 | 1, B9, B14, B30, B72, T22, TP2, TP13, TP38, TP44 | None | 226 | 244 | Forbidden | Forbidden | B | 40 |
| | Methylal | 3 | UN1234 | II | 3 | IB2, IP8, T7, TP2 | None | 202 | 242 | 5 L | 60 L | E | |
| | Methylamine, anhydrous | 2.1 | UN1061 | | 2.1 | N87, T50 | 306 | 304 | 314, 315 | Forbidden | 150 kg | B | 40 |
| | Methylamine, aqueous solution | 3 | UN1235 | II | 3, 8 | B1, IB2, T7, TP1 | 150 | 202 | 243 | 1 L | 5 L | E | 52, 135. |
| | *Methylamine dinitramine and dry salts thereof* | Forbidden | | | | | | | | | | | |
| | *Methylamine nitroform* | Forbidden | | | | | | | | | | | |
| | *Methylamine perchlorate (dry)* | Forbidden | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Methylamyl acetate | 3 | UN1233 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | N-Methylaniline | 6.1 | UN2294 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | alpha-Methylbenzyl alcohol, liquid | 6.1 | UN2937 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | alpha-Methylbenzyl alcohol, solid | 6.1 | UN3438 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | 3-Methylbutan-2-one | 3 | UN2397 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | N-Methylbutylamine | 3 | UN2945 | II | 3, 8 | IB2, T7, TP1 | 150 | 202 | 243 | 1 L | 5 L | B | 40 |
| | Methylchlorosilane | 2.3 | UN2534 | | 2.3, 2.1, 8 | 2, B9, B14, N34 | None | 226 | 314, 315 | Forbidden | Forbidden | D | 17, 40 |
| | Methylcyclohexane | 3 | UN2296 | II | 3 | B1, IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Methylcyclohexanols, *flammable* | 3 | UN2617 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Methylcyclohexanone | 3 | UN2297 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Methylcyclopentane | 3 | UN2298 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| D | Methyldichloroarsine | 6.1 | NA1556 | I | 6.1 | 2, T20, TP4, TP12, TP13, TP38, TP45 | None | 192 | None | Forbidden | Forbidden | D | 40 |
| | Methyldichlorosilane | 4.3 | UN1242 | I | 4.3, 8, 3 | A2, A3, A7, B6, B77, N34, T10, TP2, TP7, TP13 | None | 201 | 243 | Forbidden | 1 L | D | 21, 28, 40, 49, 100 |
| | *Methylene chloride, see* Dichloromethane | | | | | | | | | | | | |
| | *Methylene glycol dinitrate* | Forbidden | | | | | | | | | | | |
| | 2-Methylfuran | 3 | UN2301 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | E | |
| | *a-Methylglucoside tetranitrate* | Forbidden | | | | | | | | | | | |
| | *a-Methylglycerol trinitrate* | Forbidden | | | | | | | | | | | |
| | 5-Methylhexan-2-one | 3 | UN2302 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Methylhydrazine | 6.1 | UN1244 | I | 6.1, 3, 8 | 1, B7, B9, B14, B30, B72, B77, N34, T22, TP2, TP13, TP38, TP44 | None | 226 | 244 | Forbidden | Forbidden | D | 21, 40, |
| | 4-Methylmorpholine *or* n-methylmorpholine | 3 | UN2535 | II | 3, 8 | B6, IB2, T7, TP1 | 150 | 202 | 243 | 1 L | 5 L | B | 40 |
| | Methylpentadienes | 3 | UN2461 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | E | |
| | 2-Methylpentan-2-ol | 3 | UN2560 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *Methylpentanes, see* Hexanes | | | | | | | | | | | | |
| | Methylphenyldichlorosilane | 8 | UN2437 | II | 8 | IB2, T7, TP2, TP13 | None | 202 | 242 | 1 L | 30 L | C | 40. |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1-Methylpiperidine | 3 | UN2399 | II | 3, 8 | IB2, T7, TP1 | 150 | 202 | 243 | 1 L | 5 L | B | 52. |
| | Methyltetrahydrofuran | 3 | UN2536 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Methyltrichlorosilane | 3 | UN1250 | I | 3, 8 | A7, B6, B77, N34, T11, TP2, TP13 | None | 201 | 243 | Forbidden | 2.5 L | B | 40 |
| | alpha-Methylvaleraldehyde | 3 | UN2367 | II | 3 | B1, IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | *Mine rescue equipment containing carbon dioxide, see* Carbon dioxide | | | | | | | | | | | | |
| | Mines *with bursting charge* | 1.1F | UN0136 | II | 1.1F | | | 62 | None | Forbidden | Forbidden | 08 | |
| | Mines *with bursting charge* | 1.1D | UN0137 | II | 1.1D | | | 62 | None | Forbidden | Forbidden | 03 | |
| | Mines *with bursting charge* | 1.2D | UN0138 | II | 1.2D | | | 62 | None | Forbidden | Forbidden | 03 | |
| | Mines *with bursting charge* | 1.2F | UN0294 | II | 1.2F | | | 62 | None | Forbidden | Forbidden | 08 | |
| | *Mixed acid, see* Nitrating acid, mixtures *etc* | | | | | | | | | | | | |
| | *Mobility aids, see* Battery powered equipment *or* Battery powered vehicle' | | | | | | | | | | | | |
| D | Model rocket motor | 1.4C | NA0276 | II | 1.4C | 51 | None | 62 | None | Forbidden | 75 kg | 06 | |
| D | Model rocket motor | 1.4S | NA0323 | II | 1.4S | 51 | None | 62 | None | 25 kg | 100 kg | 05 | |
| | Molybdenum pentachloride | 8 | UN2508 | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | C | 40 |
| | *Monochloroacetone (unstabilized)* | Forbidden | | | | | | | | | | | |
| | *Monochloroethylene, see* Vinyl chloride, stabilized | | | | | | | | | | | | |
| | *Monoethanolamine, see* Ethanolamine, solutions | | | | | | | | | | | | |
| | *Monoethylamine, see* Ethylamine | | | | | | | | | | | | |
| | Morpholine | 8 | UN2054 | I | 8, 3 | A6, T10, TP2 | None | 201 | 243 | 0.5 L | 2.5 L | A | |
| | *Morpholine, aqueous, mixture, see* Corrosive liquids, n.o.s. | | | | | | | | | | | | |
| | Motor fuel anti-knock compounds *see* Motor fuel anti-knock mixtures | | | | | | | | | | | | |
| + | Motor fuel anti-knock mixtures | 6.1 | UN1649 | I | 6.1 | 14, 151, B9, B90, T14, TP2, TP13 | None | 201 | 244 | Forbidden | 30 L | D | 25, 40. |
| | Motor spirit, *see* Gasoline | | | | | | | | | | | | |
| | *Muriatic acid, see* Hydrochloric acid | | | | | | | | | | | | |
| | Musk xylene, *see* 5-tert-Butyl-2,4,6-trinitro-m-xylene | | | | | | | | | | | | |
| | *Naphtha see* Petroleum distillates n.o.s. | | | | | | | | | | | | |
| | Naphthalene, crude *or* Naphthalene, refined | 4.1 | UN1334 | III | 4.1 | A1, IB8, IP3, T1, TP33 | 151 | 213 | 240 | 25 kg | 100 kg | A | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Naphthalene diozonide* | Forbidden | | | | | | | | | | | |
| | beta-Naphthylamine, solid | 6.1 | UN1650 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | beta-Naphthylamine solution | 6.1 | UN3411 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | |
| | | | | III | 6.1 | IB2, T7, TP2 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | alpha-Naphthylamine | 6.1 | UN2077 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Naphthalene, molten | 4.1 | UN2304 | III | 4.1 | IB1, T1, TP3 | 151 | 213 | 241 | Forbidden | Forbidden | C | |
| | *Naphthylamineperchlorate* | Forbidden | | | | | | | | | | | |
| | Naphthylthiourea | 6.1 | UN1651 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Naphthylurea | 6.1 | UN1652 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | *Natural gases (with high methane content), see* Methane, etc. (UN 1971, UN 1972) | | | | | | | | | | | | |
| | *Neohexane, see* Hexanes | | | | | | | | | | | | |
| | Neon, compressed | 2.2 | UN1065 | | 2.2 | | 306 | 302 | 302 | 75 kg | 150 kg | A | |
| | Neon, refrigerated liquid *(cryogenic liquid)* | 2.2 | UN1913 | | 2.2 | T75, TP5 | 320 | 316 | None | 50 kg | 500 kg | B | |
| | *New explosive or explosive device, see §§173.51 and 173.56* | | | | | | | | | | | | |
| | Nickel carbonyl | 6.1 | UN1259 | I | 6.1, 3 | 1 | None | 198 | None | Forbidden | Forbidden | D | 18, 40 |
| | Nickel cyanide | 6.1 | UN1653 | II | 6.1 | IB8, IP2, IP4, N74, N75, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 52 |
| | Nickel nitrate | 5.1 | UN2725 | III | 5.1 | A1, IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | |
| | Nickel nitrite | 5.1 | UN2726 | III | 5.1 | A1, IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | 56, 58 |
| | *Nickel picrate* | Forbidden | | | | | | | | | | | |
| | Nicotine | 6.1 | UN1654 | II | 6.1 | IB2 | 153 | 202 | 243 | 5 L | 60 L | A | |
| | Nicotine compounds, liquid, n.o.s. *or* Nicotine preparations, liquid, n.o.s. | 6.1 | UN3144 | I | 6.1 | A4 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1 | IB2, T11, TP2, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1 | IB3, T7, TP1, TP28 | 153 | 203 | 241 | 60 L | 220 L | B | 40 |
| | Nicotine compounds, solid, n.o.s. *or* Nicotine preparations, solid, n.o.s. | 6.1 | UN1655 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | B | |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Nicotine hydrochloride liquid *or* solution | 6.1 | UN1656 | II | 6.1 | IB2 | 153 | 202 | 243 | 5 L | 60 L | A | |
| | | | | III | 6.1 | IB3 | 153 | 203 | 241 | 60 L | 220 L | A | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Nicotine hydrochloride, solid | 6.1 | UN3444 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Nicotine salicylate | 6.1 | UN1657 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Nicotine sulfate solution | 6.1 | UN1658 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | |
| | | | | III | 6.1 | IB3, T7, TP2 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | Nicotine sulphate, solid | 6.1 | UN3445 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Nicotine tartrate | 6.1 | UN1659 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | *Nitrated paper (unstable)* | Forbidden | | | | | | | | | | | |
| | Nitrates, inorganic, aqueous solution, n.o.s. | 5.1 | UN3218 | II | 5.1 | 58, IB2, T4, TP1 | 152 | 202 | 242 | 1 L | 5 L | B | 56, 58, 133 |
| | | | | III | 5.1 | 58, IB2, T4, TP1 | 152 | 203 | 241 | 2.5 L | 30 L | B | 56, 58, 133 |
| | Nitrates, inorganic, n.o.s. | 5.1 | UN1477 | II | 5.1 | IB8, IP2, IP4, T3, TP33 | 152 | 212 | 240 | 5 kg | 25 kg | A | 56, 58 |
| | | | | III | 5.1 | IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | 56, 58 |
| | *Nitrates of diazonium compounds* | Forbidden | | | | | | | | | | | |
| | Nitrating acid mixtures, spent *with more than 50 percent nitric acid* | 8 | UN1826 | I | 8, 5.1 | A7, T10, TP2, TP12, TP13 | None | 158 | 243 | Forbidden | 2.5 L | D | 40, 66 |
| | Nitrating acid mixtures spent *with not more than 50 percent nitric acid* | 8 | UN1826 | II | 8 | A7, B2, IB2, T8, TP2, TP12 | None | 158 | 242 | Forbidden | 30 L | D | 40 |
| | Nitrating acid mixtures *with more than 50 percent nitric acid* | 8 | UN1796 | I | 8, 5.1 | A7, T10, TP2, TP12, TP13 | None | 158 | 243 | Forbidden | 2.5 L | D | 40, 66 |
| | Nitrating acid mixtures *with not more than 50 percent nitric acid* | 8 | UN1796 | II | 8 | A7, B2, IB2, T8, TP2, TP12, TP13 | None | 158 | 242 | Forbidden | 30 L | D | 40 |
| | Nitric acid *other than red fuming, with more than 70 percent nitric acid* | 8 | UN2031 | I | 8, 5.1 | A3, B47, B53, T10, TP2, TP12, TP13 | None | 158 | 243 | Forbidden | 2.5 L | D | 44, 66, 89, 90, 110, 111 |
| | Nitric acid *other than red fuming with not more than 20 percent nitric acid* | 8 | UN2031 | II | 8 | A6, B2, B47, B53, IB2, T8, TP2, TP12 | None | 158 | 242 | 1 L | 30 L | D | |
| | Nitric acid *other than red fuming, with not more than 70 percent nitric acid* | 8 | UN2031 | II | 8 | A6, B2, B47, B53, IB2, T8, TP2, TP12 | None | 158 | 242 | Forbidden | 30 L | D | 44, 66, 89, 90, 110, 111 |
| + | Nitric acid, red fuming | 8 | UN2032 | I | 8, 5.1, 6.1 | 2, B9, B32, B74, T20, TP2, TP12, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 40, 66, 74, 89, 90 |
| | Nitric oxide, compressed | 2.3 | UN1660 | | 2.3, | 1, B37, B46, B50, B60, | None | 337 | None | Forbidden | Forbidden | D | 40, 89, 90 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 5.1, 8 | B77 | | | | | | | |
| | Nitric oxide and dinitrogen tetroxide mixtures *or* Nitric oxide and nitrogen dioxide mixtures | 2.3 | UN1975 | | 2.3, 5.1, 8 | 1, B7, B9, B14, B45, B46, B61, B66, B67, B77 | None | 337 | None | Forbidden | Forbidden | D | 40, 89, 90 |
| G | Nitriles, flammable, toxic, n.o.s. | 3 | UN3273 | I | 3, 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | Forbidden | 30 L | E | 40, 52 |
| | | | | II | 3, 6.1 | IB2, T11, TP2, TP13, TP27 | 150 | 202 | 243 | 1 L | 60 L | B | 40, 52 |
| G | Nitriles, toxic, flammable, n.o.s. | 6.1 | UN3275 | I | 6.1, 3 | 5, T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40, 52 |
| | | | | II | 6.1, 3 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40, 52 |
| G | Nitriles, toxic, liquid, n.o.s. | 6.1 | UN3276 | I | 6.1 | 5, T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 52 |
| | | | | II | 6.1 | IB2, T11, TP2, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 52 |
| | | | | III | 6.1 | IB3, T7, TP1, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | 52 |
| G | Nitriles, toxic, solid, n.o.s. | 6.1 | UN3439 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | D | 52 |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | B | 52 |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 52 |
| | Nitrites, inorganic, aqueous solution, n.o.s. | 5.1 | UN3219 | II | 5.1 | IB1, T4, TP1 | 152 | 202 | 242 | 1 L | 5 L | B | 46, 56, 58, 133 |
| | | | | III | 5.1 | IB2, T4, TP1 | 152 | 203 | 241 | 2.5 L | 30 L | B | 46, 56, 58, 133 |
| | Nitrites, inorganic, n.o.s. | 5.1 | UN2627 | II | 5.1 | 33, IB8, IP4, T3, TP33 | 152 | 212 | None | 5 kg | 25 kg | A | 46, 56, 58, 133 |
| | 3-Nitro-4-chlorobenzotrifluoride | 6.1 | UN2307 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | 40 |
| | *6-Nitro-4-diazotoluene-3-sulfonic acid (dry)* | Forbidden | | | | | | | | | | | |
| | *Nitro isobutane triol trinitrate* | Forbidden | | | | | | | | | | | |
| | *N-Nitro-N-methylglycolamide nitrate* | Forbidden | | | | | | | | | | | |
| | *2-Nitro-2-methylpropanol nitrate* | Forbidden | | | | | | | | | | | |
| | Nitro urea | 1.1D | UN0147 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | *N-Nitroaniline* | Forbidden | | | | | | | | | | | |
| + | Nitroanilines ( *o-; m-; p-;* ) | 6.1 | UN1661 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Nitroanisole, liquid | 6.1 | UN2730 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | Nitroanisoles, solid | 6.1 | UN3458 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| + | Nitrobenzene | 6.1 | UN1662 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | 40 |
| | *m-Nitrobenzene diazonium perchlorate* | Forbidden | | | | | | | | | | | |
| | Nitrobenzenesulfonic acid | 8 | UN2305 | II | 8 | B2, B4, IB8, IP2, IP4, T3, TP33 | 154 | 202 | 242 | 1 L | 30 L | A | |
| | *Nitrobenzol, see* Nitrobenzene | | | | | | | | | | | | |
| | 5-Nitrobenzotriazol | 1.1D | UN0385 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Nitrobenzotrifluorides, liquid | 6.1 | UN2306 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | 40 |
| | Nitrobenzotrifluorides, solid | 6.1 | UN3431 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 40 |
| | Nitrobromobenzenes, liquid | 6.1 | UN2732 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | Nitrobromobenzenes, solid | 6.1 | UN3459 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Nitrocellulose, *dry or wetted with less than 25 percent water (or alcohol), by mass* | 1.1D | UN0340 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 13 | 27E |
| | Nitrocellulose, *with not more than 12.6 percent, by dry mass* mixture with *or* without plasticizer, with *or* without pigment | 4.1 | UN2557 | II | 4.1 | 44 | 151 | 212 | None | 1 kg | 15 kg | D | 28 |
| | Nitrocellulose membrane filters, *with not more than 12.6% nitrogen, by dry mass* | 4.1 | UN3270 | II | 4.1 | 43, A1 | 151 | 212 | 240 | 1 kg | 15 kg | D | |
| | Nitrocellulose, plasticized *with not less than 18 percent plasticizing substance, by mass* | 1.3C | UN0343 | II | 1.3C | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Nitrocellulose, solution, flammable *with not more than 12.6 percent nitrogen, by mass, and not more than 55 percent nitrocellulose* | 3 | UN2059 | I | 3 | T11, TP1, TP8, TP27 | None | 201 | 243 | 1 L | 30 L | E | |
| | | | | II | 3 | IB2, T4, TP1, TP8 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Nitrocellulose, *unmodified or plasticized with less than 18 percent plasticizing substance, by mass* | 1.1D | UN0341 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 13 | 27E |
| | Nitrocellulose, wetted *with not less than 25 percent alcohol, by mass* | 1.3C | UN0342 | II | 1.3C | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Nitrocellulose with alcohol *with not less than 25 percent alcohol by mass, and with not more than 12.6 percent nitrogen, by dry mass* | 4.1 | UN2556 | II | 4.1 | | 151 | 212 | None | 1 kg | 15 kg | D | 28 |
| | Nitrocellulose with water *with not less than 25 percent water, by mass* | 4.1 | UN2555 | II | 4.1 | | 151 | 212 | None | 15 kg | 50 kg | E | 28 |
| | *Nitrochlorobenzene, see* Chloronitrobenzenes *etc* | | | | | | | | | | | | |
| | Nitrocresols, liquid | 6.1 | UN3434 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Nitrocresols, solid | 6.1 | UN2446 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Nitroethane | 3 | UN2842 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *Nitroethyl nitrate* | Forbidden | | | | | | | | | | | |
| | *Nitroethylene polymer* | Forbidden | | | | | | | | | | | |
| | Nitrogen, compressed | 2.2 | UN1066 | | 2.2 | | 306, 307 | 302 | 314, 315 | 75 kg | 150 kg | A | |
| | Nitrogen dioxide, *see* Dinitrogen tetroxide | | | | | | | | | | | | |
| | *Nitrogen fertilizer solution, see* Fertilizer ammoniating solution *etc* | | | | | | | | | | | | |
| | *Nitrogen peroxide, see* Dinitrogen tetroxide | | | | | | | | | | | | |
| | Nitrogen, refrigerated liquid *cryogenic liquid* | 2.2 | UN1977 | | 2.2 | T75, TP5 | 320 | 316 | 318 | 50 kg | 500 kg | D | |
| | *Nitrogen tetroxide and nitric oxide mixtures, see* Nitric oxide and nitrogen tetroxide mixtures | | | | | | | | | | | | |
| | *Nitrogen tetroxide, see* Dinitrogen tetroxide | | | | | | | | | | | | |
| | *Nitrogen trichloride* | Forbidden | | | | | | | | | | | |
| | Nitrogen trifluoride | 2.2 | UN2451 | | 2.2, 5.1 | | None | 302 | None | 75 kg | 150 kg | D | 40 |
| | *Nitrogen triiodide* | Forbidden | | | | | | | | | | | |
| | *Nitrogen triiodide monoamine* | Forbidden | | | | | | | | | | | |
| | Nitrogen trioxide | 2.3 | UN2421 | | 2.3, 5.1, 8 | 1 | None | 336 | 245 | Forbidden | Forbidden | D | 40, 89, 90 |
| | Nitroglycerin, desensitized *with not less than 40 percent non-volatile water insoluble phlegmatizer, by mass* | 1.1D | UN0143 | II | 1.1D, 6.1 | 125 | None | 62 | None | Forbidden | Forbidden | 13 | 21E |
| | *Nitroglycerin, liquid, not desensitized* | Forbidden | | | | | | | | | | | |
| | Nitroglycerin mixture, desensitized, liquid, flammable, n.o.s. *with not more than 30 percent nitroglycerin, by mass* | 3 | UN3343 | | 3 | 129 | None | 214 | None | Forbidden | Forbidden | D | |
| | Nitroglycerin mixture, desensitized, liquid, n.o.s. *with not more than 30% nitroglycerin, by mass* | 3 | UN3357 | II | 3 | 142 | None | 202 | 243 | 5 L | 60 L | E | |
| | Nitroglycerin mixture, desensitized, solid, n.o.s. *with more than 2 percent but not more than 10 percent nitroglycerin, by mass* | 4.1 | UN3319 | II | 4.1 | 118 | None | None | None | Forbidden | 0.5 kg | E | |
| | Nitroglycerin, solution in alcohol, *with more than 1 percent but not more than 5 percent nitroglycerin* | 3 | UN3064 | II | 3 | N8 | None | 202 | None | Forbidden | 5 L | E | |
| | Nitroglycerin, solution in alcohol, *with more than 1 percent but not more than 10 percent nitrogylcerin* | 1.1D | UN0144 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | 21E |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Nitroglycerin solution in alcohol *with not more than 1 percent nitroglycerin* | 3 | UN1204 | II | 3 | IB2, N34 | 150 | 202 | None | 5 L | 60 L | B | |
| | *Nitroguanidine nitrate* | Forbidden | | | | | | | | | | | |
| | Nitroguanidine *or* Picrite, *dry or wetted with less than 20 percent water, by mass* | 1.1D | UN0282 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Nitroguanidine, wetted *or* Picrite, wetted *with not less than 20 percent water, by mass* | 4.1 | UN1336 | I | 4.1 | 23, A8, A19, A20, N41 | None | 211 | None | 1 kg | 15 kg | E | 28 |
| | *1-Nitrohydantoin* | Forbidden | | | | | | | | | | | |
| | Nitrohydrochloric acid | 8 | UN1798 | I | 8 | A3, B10, N41, T10, TP2, TP12, TP13 | None | 201 | 243 | Forbidden | 2.5 L | D | 40, 66, 74, 89, 90 |
| | *Nitromannite (dry)* | Forbidden | | | | | | | | | | | |
| | Nitromannite, wetted, *see* Mannitol hexanitrate, *etc* | | | | | | | | | | | | |
| | Nitromethane | 3 | UN1261 | II | 3 | | 150 | 202 | None | Forbidden | 60 L | A | |
| | *Nitromuriatic acid, see* Nitrohydrochloric acid | | | | | | | | | | | | |
| | Nitronaphthalene | 4.1 | UN2538 | III | 4.1 | A1, IB8, IP3, T1, TP33 | 151 | 213 | 240 | 25 kg | 100 kg | A | |
| + | Nitrophenols ( *o-; m-; p-;* ) | 6.1 | UN1663 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | *m-Nitrophenyldinitro methane* | Forbidden | | | | | | | | | | | |
| | Nitropropanes | 3 | UN2608 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | p-Nitrosodimethylaniline | 4.2 | UN1369 | II | 4.2 | A19, A20, IB6, IP2, N34, T3, TP33 | None | 212 | 241 | 15 kg | 50 kg | D | 34 |
| | Nitrostarch, *dry or wetted with less than 20 percent water, by mass* | 1.1D | UN0146 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Nitrostarch, wetted *with not less than 20 percent water, by mass* | 4.1 | UN1337 | I | 4.1 | 23, A8, A19, A20, N41 | None | 211 | None | 1 kg | 15 kg | D | 28 |
| | *Nitrosugars (dry)* | Forbidden | | | | | | | | | | | |
| | Nitrosyl chloride | 2.3 | UN1069 | | 2.3, 8 | 3, B14 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40 |
| | Nitrosylsulfuric acid, liquid | 8 | UN2308 | II | 8 | A3, A6, A7, B2, IB2, N34, T8, TP2, TP12 | 154 | 202 | 242 | 1 L | 30 L | D | 40, 66, 74, 89, 90 |
| | Nitrosylsulphuric acid, solid | 8 | UN3456 | II | 8 | IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | D | 40, 66, 74, 89, 90 |
| | Nitrotoluenes, liquid | 6.1 | UN1664 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | |
| | Nitrotoluenes, solid | 6.1 | UN3446 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Nitrotoluidines (mono) | 6.1 | UN2660 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Nitrotriazolone *or* NTO | 1.1D | UN0490 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | *Nitrous oxide and carbon dioxide mixtures, see* Carbon dioxide and nitrous oxide mixtures | | | | | | | | | | | | |
| | Nitrous oxide | 2.2 | UN1070 | | 2.2, 5.1 | A14 | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | 40 |
| | Nitrous oxide, refrigerated liquid | 2.2 | UN2201 | | 2.2, 5.1 | B6, T75, TP5, TP22 | None | 304 | 314, 315 | Forbidden | Forbidden | B | 40 |
| | Nitroxylenes, liquid | 6.1 | UN1665 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | |
| | Nitroxylenes, solid | 6.1 | UN3447 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | *Nitroxylol, see* Nitroxylenes | | | | | | | | | | | | |
| | Nonanes | 3 | UN1920 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *Non-flammable gas, n.o.s., see* Compressed gas, etc. or Liquefied gas, *etc* | | | | | | | | | | | | |
| | *Nonliquefied gases, see* Compressed gases, *etc* | | | | | | | | | | | | |
| | *Nonliquefied hydrocarbon gas, see* Hydrocarbon gas mixture, compressed, n.o.s. | | | | | | | | | | | | |
| | Nonyltrichlorosilane | 8 | UN1799 | II | 8 | A7, B2, B6, IB2, N34, T7, TP2, TP13 | None | 202 | 242 | Forbidden | 30 L | C | 40 |
| | *Nordhausen acid, see* Sulfuric acid, fuming *etc* | | | | | | | | | | | | |
| | *2,5-Norbornadiene, stabilized, see* Bicyclo 2,2,1 hepta-2,5-diene, stabilized | | | | | | | | | | | | |
| | Octadecyltrichlorosilane | 8 | UN1800 | II | 8 | A7, B2, B6, IB2, N34, T7, TP2, TP13 | None | 202 | 242 | Forbidden | 30 L | C | 40 |
| | Octadiene | 3 | UN2309 | II | 3 | B1, IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | *1,7-Octadine-3,5-diyne-1,8-dimethoxy-9-octadecynoic acid* | Forbidden | | | | | | | | | | | |
| | Octafluorobut-2-ene *or* Refrigerant gas R 1318 | 2.2 | UN2422 | | 2.2 | | None | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | Octafluorocyclobutane, *or* Refrigerant gas RC 318 | 2.2 | UN1976 | | 2.2 | T50 | None | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | Octafluoropropane *or* Refrigerant gas R 218 | 2.2 | UN2424 | | 2.2 | T50 | None | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | Octanes | 3 | UN1262 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Octogen, etc. *see* Cyclotetramethylene tetranitramine, etc. | | | | | | | | | | | | |
| | Octolite *or* Octol, *dry or wetted with less than 15 percent water, by mass* | 1.1D | UN0266 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Octonal | 1.1D | UN0496 | | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Octyl aldehydes | 3 | UN1191 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Octyltrichlorosilane | 8 | UN1801 | II | 8 | A7, B2, B6, IB2, N34, T7, TP2, TP13 | None | 202 | 242 | Forbidden | 30 L | C | 40 |
| | Oil gas, compressed | 2.3 | UN1071 | | 2.3, 2.1 | 6 | None | 304 | 314, 315 | Forbidden | 25 kg | D | 40 |
| | *Oleum, see* Sulfuric acid, fuming | | | | | | | | | | | | |
| | *Organic peroxide type A, liquid or solid* | Forbidden | | | | | | | | | | | |
| G | Organic peroxide type B, liquid | 5.2 | UN3101 | II | 5.2, 1 | 53 | 152 | 225 | None | Forbidden | Forbidden | D | 12, 40, 52, 53 |
| G | Organic peroxide type B, liquid, temperature controlled | 5.2 | UN3111 | II | 5.2, 1 | 53 | None | 225 | None | Forbidden | Forbidden | D | 2, 40, 52, 53 |
| G | Organic peroxide type B, solid | 5.2 | UN3102 | II | 5.2, 1 | 53 | 152 | 225 | None | Forbidden | Forbidden | D | 12, 40, 52, 53 |
| G | Organic peroxide type B, solid, temperature controlled | 5.2 | UN3112 | II | 5.2, 1 | 53 | None | 225 | None | Forbidden | Forbidden | D | 2, 40, 52, 53 |
| G | Organic peroxide type C, liquid | 5.2 | UN3103 | II | 5.2 | | 152 | 225 | None | 5 L | 10 L | D | 12, 40, 52, 53 |
| G | Organic peroxide type C, liquid, temperature controlled | 5.2 | UN3113 | II | 5.2 | | None | 225 | None | Forbidden | Forbidden | D | 2, 40, 52, 53 |
| G | Organic peroxide type C, solid | 5.2 | UN3104 | II | 5.2 | | 152 | 225 | None | 5 kg | 10 kg | D | 12, 40, 52, 53 |
| G | Organic peroxide type C, solid, temperature controlled | 5.2 | UN3114 | II | 5.2 | | None | 225 | None | Forbidden | Forbidden | D | 2, 40, 52, 53 |
| G | Organic peroxide type D, liquid | 5.2 | UN3105 | II | 5.2 | | 152 | 225 | None | 5 L | 10 L | D | 12, 40, 52, 53 |
| G | Organic peroxide type D, liquid, temperature controlled | 5.2 | UN3115 | II | 5.2 | | None | 225 | None | Forbidden | Forbidden | D | 2, 40, 52, 53 |
| G | Organic peroxide type D, solid | 5.2 | UN3106 | II | 5.2 | | 152 | 225 | None | 5 kg | 10 kg | D | 12, 40, 52, 53 |
| G | Organic peroxide type D, solid, temperature controlled | 5.2 | UN3116 | II | 5.2 | | None | 225 | None | Forbidden | Forbidden | D | 2, 40, 52, 53 |
| G | Organic peroxide type E, liquid | 5.2 | UN3107 | II | 5.2 | | 152 | 225 | None | 10 L | 25 L | D | 12, 40, 52, 53 |
| G | Organic peroxide type E, liquid, temperature controlled | 5.2 | UN3117 | II | 5.2 | | None | 225 | None | Forbidden | Forbidden | D | 2, 40, 52, |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | 53 |
| G | Organic peroxide type E, solid | 5.2 | UN3108 | II | 5.2 | | 152 | 225 | None | 10 kg | 25 kg | D | 12, 40, 52, 53 |
| G | Organic peroxide type E, solid, temperature controlled | 5.2 | UN3118 | II | 5.2 | | None | 225 | None | Forbidden | Forbidden | D | 2, 40, 52, 53 |
| G | Organic peroxide type F, liquid | 5.2 | UN3109 | II | 5.2 | IP5 | 152 | 225 | 225 | 10 L | 25 L | D | 12, 40, 52, 53 |
| G | Organic peroxide type F, liquid, temperature controlled | 5.2 | UN3119 | II | 5.2 | IP5 | None | 225 | 225 | Forbidden | Forbidden | D | 2, 40, 52, 53 |
| G | Organic peroxide type F, solid | 5.2 | UN3110 | II | 5.2 | TP33 | 152 | 225 | 225 | 10 kg | 25 kg | D | 12, 40, 52, 53 |
| G | Organic peroxide type F, solid, temperature controlled | 5.2 | UN3120 | II | 5.2 | TP33 | None | 225 | 225 | Forbidden | Forbidden | D | 2, 52, 53 |
| D | Organic phosphate, mixed with compressed gas *or* Organic phosphate compound, mixed with compressed gas *or* Organic phosphorus compound, mixed with compressed gas | 2.3 | NA1955 | | 2.3 | 3 | None | 334 | None | Forbidden | Forbidden | D | 40 |
| | Organic pigments, self-heating | 4.2 | UN3313 | II | 4.2 | IB8, IP2, IP4, T3, TP33 | None | 212 | 241 | 15 kg | 50 kg | C | |
| | | | | III | 4.2 | IB8, IP3, T1, TP33 | None | 213 | 241 | 25 kg | 100 kg | C | |
| G | Organoarsenic compound, liquid, n.o.s. | 6.1 | UN3280 | I | 6.1 | 5, T14, TP2, TP13, TP27 | None | 201 | 242 | 1 L | 30 L | B | |
| | | | | II | 6.1 | IB2, T11, TP2, TP27 | 153 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 6.1 | IB3, T7, TP1, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | |
| G | Organoarsenic compound, solid, n.o.s. | 6.1 | UN3465 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | B | |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | B | |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Organochlorine pesticides liquid, flammable, toxic, *flash point less than 23 degrees C* | 3 | UN2762 | I | 3, 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | Forbidden | 30 L | B | 40 |
| | | | | II | 3, 6.1 | IB2, T11, TP2, TP13, TP27 | 150 | 202 | 243 | 1 L | 60 L | B | 40 |
| | Organochlorine pesticides, liquid, toxic | 6.1 | UN2996 | I | 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1 | IB3, T7, TP2, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | 40 |
| | Organochlorine pesticides, liquid, toxic, flammable, *flash point not less* | 6.1 | UN2995 | I | 6.1, 3 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *than 23 degrees C* | | | | | | | | | | | | |
| | | | | II | 6.1, 3 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1, 3 | B1, IB3, T7, TP2, TP28 | 153 | 203 | 242 | 60 L | 220 L | A | 40 |
| | Organochlorine pesticides, solid, toxic | 6.1 | UN2761 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | 40 |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 40 |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 40 |
| G | Organometallic compound, toxic, liquid, n.o.s. | 6.1 | UN3282 | I | 6.1 | T14, TP2, TP13, TP27 | None | 201 | 242 | 1 L | 30 L | B | |
| | | | | II | 6.1 | IB2, T11, TP2, TP27 | 153 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 6.1 | IB3, T7, TP1, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | |
| G | Organometallic compound, toxic, solid, n.o.s. | 6.1 | UN3467 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | B | |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | B | |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| G | Organometallic substance, liquid, pyrophoric | 4.2 | UN3392 | I | 4.2 | B11, T21, TP2, TP7 | None | 181 | 244 | Forbidden | Forbidden | D | 143 |
| G | Organometallic substance, liquid, pyrophoric, water-reactive | 4.2 | UN3394 | I | 4.2, 4.3 | B11, T21, TP2, TP7 | None | 181 | 244 | Forbidden | Forbidden | D | |
| G | Organometallic substance, liquid, water-reactive | 4.3 | UN3398 | I | 4.3 | T13, TP2, TP7 | None | 201 | 244 | Forbidden | 1 L | E | 40, 52 |
| | | | | II | 4.3 | IB1, T7, TP2, TP7 | None | 202 | 243 | 1 L | 5 L | E | 40, 52 |
| | | | | III | 4.3 | IB2, T7, TP2, TP7 | None | 203 | 242 | 5 L | 60 L | E | 40, 52 |
| G | Organometallic substance, liquid, water-reactive, flammable | 4.3 | UN3399 | I | 4.3, 3 | T13, TP2, TP7 | None | 201 | 244 | Forbidden | 1 L | E | 40, 52 |
| | | | | II | 4.3, 3 | IB1, IP2, T7, TP2, TP7 | None | 202 | 243 | 1 L | 5 L | E | 40, 52 |
| | | | | III | 4.3, 3 | IB2, IP4, T7, TP2, TP7 | None | 203 | 242 | 5 L | 60 L | E | 40, 52 |
| G | Organometallic substance, solid, pyrophoric | 4.2 | UN3391 | I | 4.2 | T21, TP7, TP33 | None | 187 | 244 | Forbidden | Forbidden | D | |
| G | Organometallic substance, solid, pyrophoric, water-reactive | 4.2 | UN3393 | I | 4.2, 4.3 | B11, T21, TP7, TP33 | None | 187 | 244 | Forbidden | Forbidden | D | 52. |
| G | Organometallic substance, solid, self-heating | 4.2 | UN3400 | II | 4.2 | IB6, T3, TP33 | None | 212 | 242 | 15 kg | 50 kg | C | |
| | | | | III | 4.2 | IB8, T1, TP33 | None | 203 | 242 | 25 kg | 100 kg | C | |
| G | Organometallic substance, solid, water-reactive, flammable | 4.3 | UN3396 | I | 4.3, 4.1 | N40, T9, TP7, TP33 | None | 211 | 242 | Forbidden | Forbidden | E | 40, 52 |
| | | | | II | 4.3, 4.1 | IB4, T3, TP33 | 151 | 212 | 242 | 15 kg | 50 kg | E | 40, 52 |
| | | | | III | 4.3, 4.1 | IB6, T1, TP33 | 151 | 213 | 241 | 25 kg | 100 kg | E | 40, 52 |
| G | Organometallic substance, solid, water-reactive, self-heating | 4.3 | UN3397 | I | 4.3, 4.2 | N40, T9, TP7, TP33 | None | 211 | 242 | Forbidden | Forbidden | E | 40, 52 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | II | 4.3, 4.2 | IB4, T3, TP33 | None | 212 | 242 | 15 kg | 50 kg | E | 40, 52 |
| | | | | III | 4.3, 4.2 | IB6, T1, TP33 | None | 213 | 241 | 25 kg | 100 kg | E | 40, 52 |
| | Organophosphorus compound, toxic, flammable, n.o.s. | 6.1 | UN3279 | I | 6.1, 3 | 5, T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1, 3 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| G | Organophosphorus compound, toxic, liquid, n.o.s. | 6.1 | UN3278 | I | 6.1 | 5, T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | |
| | | | | II | 6.1 | IB2, T11, TP2, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | |
| | | | | III | 6.1 | IB3, T7, TP1, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | |
| G | Organophosphorus compound, toxic, solid, n.o.s. | 6.1 | UN3464 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | B | |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | B | |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Organophosphorus pesticides, liquid, flammable, toxic, *flash point less than 23 degrees C* | 3 | UN2784 | I | 3, 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | Forbidden | 30 L | B | 40 |
| | | | | II | 3, 6.1 | IB2, T11, TP2, TP13, TP27 | 150 | 202 | 243 | 1 L | 60 L | B | 40 |
| | Organophosphorus pesticides, liquid, toxic | 6.1 | UN3018 | I | 6.1 | N76, T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1 | IB2, N76, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1 | IB3, N76, T7, TP2, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | 40 |
| | Organophosphorus pesticides, liquid, toxic, flammable, *flash point not less than 23 degrees C* | 6.1 | UN3017 | I | 6.1, 3 | N76, T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1, 3 | IB2, N76, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1, 3 | B1, IB3, N76, T7, TP2, TP28 | 153 | 203 | 242 | 60 L | 220 L | A | 40 |
| | Organophosphorus pesticides, solid, toxic | 6.1 | UN2783 | I | 6.1 | IB7, IP1, N77, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | 40 |
| | | | | II | 6.1 | IB8, IP2, IP4, N77, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 40 |
| | | | | III | 6.1 | IB8, IP3, N77, T1, | 153 | 213 | 240 | 100 kg | 200 kg | A | 40 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | TP33 | | | | | | | |
| | Organotin compounds, liquid, n.o.s. | 6.1 | UN2788 | I | 6.1 | A3, N33, N34, T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1 | A3, IB2, N33, N34, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | A | 40 |
| | | | | III | 6.1 | IB3, T7, TP2, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | 40 |
| | Organotin compounds, solid, n.o.s. | 6.1 | UN3146 | I | 6.1 | A5, IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | B | 40 |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 40 |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 40 |
| | Organotin pesticides, liquid, flammable, toxic, *flash point less than 23 degrees C* | 3 | UN2787 | I | 3, 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | Forbidden | 30 L | B | 40 |
| | | | | II | 3, 6.1 | IB2, T11, TP2, TP13, TP27 | 150 | 202 | 243 | 1 L | 60 L | B | 40 |
| | Organotin pesticides, liquid, toxic | 6.1 | UN3020 | I | 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1 | IB3, T7, TP2, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | 40 |
| | Organotin pesticides, liquid, toxic, flammable, *flash point not less than 23 degrees C* | 6.1 | UN3019 | I | 6.1, 3 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1, 3 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1, 3 | B1, IB3, T7, TP2, TP28 | 153 | 203 | 242 | 60 L | 220 L | A | 40 |
| | Organotin pesticides, solid, toxic | 6.1 | UN2786 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | 40 |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 40 |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 40 |
| | *Orthonitroaniline, see* Nitroanilines *etc* | | | | | | | | | | | | |
| | Osmium tetroxide | 6.1 | UN2471 | I | 6.1 | A8, IB7, IP1, N33, N34, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | B | 40 |
| D G | Other regulated substances, liquid, n.o.s. | 9 | NA3082 | III | 9 | IB3, T2, TP1 | 155 | 203 | 241 | No limit | No limit | A | |
| D G | Other regulated substances, solid, n.o.s. | 9 | NA3077 | III | 9 | B54, IB8, IP2, T1, TP33 | 155 | 213 | 240 | No limit | No limit | A | |
| G | Oxidizing liquid, corrosive, n.o.s. | 5.1 | UN3098 | I | 5.1, 8 | A6 | None | 201 | 244 | Forbidden | 2.5 L | D | 13, 56, 58, |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | 106, 138 |
| | | | | II | 5.1, 8 | IB1 | None | 202 | 243 | 1 L | 5 L | B | 34, 56, 58, 106, 138 |
| | | | | III | 5.1, 8 | IB2 | 152 | 203 | 242 | 2.5 L | 30 L | B | 34, 56, 58, 106, 138 |
| G | Oxidizing liquid, n.o.s. | 5.1 | UN3139 | I | 5.1 | 127, A2, A6 | None | 201 | 243 | Forbidden | 2.5 L | D | 56, 58, 106, 138 |
| | | | | II | 5.1 | 127, A2, IB2 | 152 | 202 | 242 | 1 L | 5 L | B | 56, 58, 106, 138 |
| | | | | III | 5.1 | 127, A2, IB2 | 152 | 203 | 241 | 2.5 L | 30 L | B | 56, 58, 106, 138 |
| G | Oxidizing liquid, toxic, n.o.s. | 5.1 | UN3099 | I | 5.1, 6.1 | A6 | None | 201 | 244 | Forbidden | 2.5 L | D | 56, 58, 106, 138 |
| | | | | II | 5.1, 6.1 | IB1 | 152 | 202 | 243 | 1 L | 5 L | B | 56, 58, 95, 106, 138 |
| | | | | III | 5.1, 6.1 | IB2 | 152 | 203 | 242 | 2.5 L | 30 L | B | 56, 58, 95, 106, 138 |
| G | Oxidizing solid, corrosive, n.o.s. | 5.1 | UN3085 | I | 5.1, 8 | | None | 211 | 242 | 1 kg | 15 kg | D | 13, 56, 58, 106, 138 |
| | | | | II | 5.1, 8 | IB6, IP2, T3, TP33 | None | 212 | 242 | 5 kg | 25 kg | B | 13, 34, 56, 58, 106, 138 |
| | | | | III | 5.1, 8 | IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | B | 13, 34, 56, 58, 106, 138 |
| G | Oxidizing solid, flammable, n.o.s. | 5.1 | UN3137 | I | 5.1, 4.1 | | None | 214 | 214 | Forbidden | Forbidden | | |
| G | Oxidizing solid, n.o.s. | 5.1 | UN1479 | I | 5.1 | IB5, IP1 | None | 211 | 242 | 1 kg | 15 kg | D | 56, 58, 106, 138 |
| | | | | II | 5.1 | IB8, IP2, IP4, T3, TP33 | 152 | 212 | 240 | 5 kg | 25 kg | B | 56, 58, 106, 138 |
| | | | | III | 5.1 | IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | B | 56, 58, 106, 138 |
| G | Oxidizing solid, self-heating, n.o.s. | 5.1 | UN3100 | I | 5.1, 4.2 | | None | 214 | 214 | Forbidden | Forbidden | | |
| | | | | II | 5.1, 4.2 | | None | 214 | 214 | Forbidden | Forbidden | | |
| G | Oxidizing solid, toxic, n.o.s. | 5.1 | UN3087 | I | 5.1, 6.1 | | None | 211 | 242 | 1 kg | 15 kg | D | 56, 58, |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | 106, 138 |
| | | | | II | 5.1, 6.1 | IB6, IP2, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | B | 56, 58, 95, 106, 138 |
| | | | | III | 5.1, 6.1 | IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | B | 56, 58, 95, 106, 138 |
| G | Oxidizing solid, water-reactive, n.o.s. | 5.1 | UN3121 | | 5.1, 4.3 | | None | 214 | 214 | Forbidden | Forbidden | | |
| | *Oxygen and carbon dioxide mixtures, see* Carbon dioxide and oxygen mixtures | | | | | | | | | | | | |
| | Oxygen, compressed | 2.2 | UN1072 | | 2.2, 5.1 | A14, A52 | 306 | 302 | 314, 315 | 75 kg | 150 kg | A | |
| | Oxygen difluoride, compressed | 2.3 | UN2190 | | 2.3, 5.1, 8 | 1, N86 | None | 304 | None | Forbidden | Forbidden | D | 13, 40, 89, 90 |
| | Oxygen generator, chemical *(including when contained in associated equipment, e.g., passenger service units (PSUs), portable breathing equipment (PBE), etc).* | 5.1 | UN3356 | II | 5.1 | 60, A51 | None | 212 | None | Forbidden | 25 kg gross | D | 56, 58, 69, 106 |
| + | Oxygen generator, chemical, spent | 9 | NA3356 | III | 9 | 61 | None | 213 | None | Forbidden | Forbidden | A | |
| | *Oxygen, mixtures with rare gases, see* Rare gases and oxygen mixtures | | | | | | | | | | | | |
| | Oxygen, refrigerated liquid *(cryogenic liquid)* | 2.2 | UN1073 | | 2.2, 5.1 | T75, TP5, TP22 | 320 | 316 | 318 | Forbidden | Forbidden | D | |
| | Paint *including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base* | 3 | UN1263 | I | 3 | T11, TP1, TP8, TP27 | 150 | 201 | 243 | 1 L | 30 L | E | |
| | | | | II | 3 | 149, B52, IB2, T4, TP1, TP8, TP28 | 150 | 173 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, B52, IB3, T2, TP1, TP29 | 150 | 173 | 242 | 60 L | 220 L | A | |
| | Paint *or* Paint related material | 8 | UN3066 | II | 8 | B2, IB2, T7, TP2, TP28 | 154 | 173 | 242 | 1 L | 30 L | A | |
| | | | | III | 8 | B52, IB3, T4, TP1, TP29 | 154 | 173 | 241 | 5 L | 60 L | A | |
| | Paint related material *including paint thinning, drying, removing, or reducing compound* | 3 | UN1263 | I | 3 | T11, TP1, TP8, TP27 | 150 | 201 | 243 | 1 L | 30 L | E | |
| | | | | II | 3 | 149, B52, IB2, T4, TP1, TP8, TP28 | 150 | 173 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, B52, IB3, T2, TP1, TP29 | 150 | 173 | 242 | 60 L | 220 L | A | |
| | Paint, corrosive, flammable *(including paint, lacquer, enamel, stain,* | 8 | UN3470 | II | 8, 3 | IB2, T7, TP2, TP8, | 154 | 202 | 243 | 1 L | 30 L | B | 40. |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *shellac, varnish, polish, liquid filler and liquid lacquer base)* | | | | | TP28 | | | | | | | |
| | Paint related material corrosive, flammable *(including paint thinning or reducing compound)* | 8 | UN3470 | II | 8, 3 | IB2, T7, TP2, TP8, TP28 | 154 | 202 | 243 | 1 L | 30 L | B | 40. |
| | Paint, flammable, corrosive *(including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base)* | 3 | UN3469 | I | 3, 8 | T11, TP2, TP27 | None | 201 | 243 | 0.5 L | 2.5 L | E | 40. |
| | | | | II | 3, 8 | IB2, T7, TP2, TP8, TP28 | 150 | 202 | 243 | 1 L | 5 L | B | 40. |
| | | | | III | 3, 8 | IB3, T4, TP1, TP29 | 150 | 203 | 242 | 5 L | 60 L | A | 40. |
| | Paper, unsaturated oil treated *incompletely dried (including carbon paper)* | 4.2 | UN1379 | III | 4.2 | IB8, IP3 | None | 213 | 241 | Forbidden | Forbidden | A | |
| | Paraformaldehyde | 4.1 | UN2213 | III | 4.1 | A1, IB8, IP3, T1, TP33 | 151 | 213 | 240 | 25 kg | 100 kg | A | |
| | Paraldehyde | 3 | UN1264 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *Paranitroaniline, solid, see* Nitroanilines *etc* | | | | | | | | | | | | |
| D | Parathion and compressed gas mixture | 2.3 | NA1967 | | 2.3 | 3 | None | 334 | 245 | Forbidden | Forbidden | E | 40 |
| | *Paris green, solid, see* Copper acetoarsenite | | | | | | | | | | | | |
| A W | PCB, *see* Polychlorinated biphenyls | | | | | | | | | | | | |
| + | Pentaborane | 4.2 | UN1380 | I | 4.2, 6.1 | 1 | None | 205 | 245 | Forbidden | Forbidden | D | |
| | Pentachloroethane | 6.1 | UN1669 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | 40 |
| | Pentachlorophenol | 6.1 | UN3155 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | *Pentaerythrite tetranitrate (dry)* | Forbidden | | | | | | | | | | | |
| | Pentaerythrite tetranitrate mixture, desensitized, solid, n.o.s. *with more than 10 percent but not more than 20 percent PETN, by mass* | 4.1 | UN3344 | II | 4.1 | 118, N85 | None | 214 | None | Forbidden | Forbidden | E | |
| | Pentaerythrite tetranitrate *or* Pentaerythritol tetranitrate *or* PETN, *with not less than 7 percent wax by mass* | 1.1D | UN0411 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Pentaerythrite tetranitrate, wetted *or* Pentaerythritol tetranitrate, wetted, *or* PETN, wetted *with not less than 25 percent water, by mass, or* Pentaerythrite tetranitrate, *or* Pentaerythritol tetranitrate *or* PETN, desensitized *with not less than 15 percent phlegmatizer by mass* | 1.1D | UN0150 | II | 1.1D | 121 | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Pentaerythritol tetranitrate, *see* Pentaerythrite tetranitrate, *etc* | | | | | | | | | | | | |
| | Pentafluoroethane *or* Refrigerant gas R 125 | 2.2 | UN3220 | | 2.2 | T50 | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | Pentamethylheptane | 3 | UN2286 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Pentane-2,4-dione | 3 | UN2310 | III | 3, 6.1 | B1, IB3, T4, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Pentanes | 3 | UN1265 | I | 3 | T11, TP2 | 150 | 201 | 243 | 1 L | 30 L | E | |
| | | | | II | 3 | IB2, IP8, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | E | |
| | *Pentanitroaniline (dry)* | Forbidden | | | | | | | | | | | |
| | Pentanols | 3 | UN1105 | II | 3 | IB2, T4, TP1, TP29 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, B3, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | 1-Pentene *(n-amylene)* | 3 | UN1108 | I | 3 | T11, TP2 | 150 | 201 | 243 | 1 L | 30 L | E | |
| | 1-Pentol | 8 | UN2705 | II | 8 | B2, IB2, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | B | 26, 27 |
| | Pentolite, *dry or wetted with less than 15 percent water, by mass* | 1.1D | UN0151 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | *Pepper spray, see* Aerosols, etc. or Self-defense spray, non-pressurized | | | | | | | | | | | | |
| | Perchlorates, inorganic, aqueous solution, n.o.s. | 5.1 | UN3211 | II | 5.1 | IB2, T4, TP1 | 152 | 202 | 242 | 1 L | 5 L | B | 56, 58, 133 |
| | | | | III | 5.1 | IB2, T4, TP1 | 152 | 202 | 241 | 2.5 L | 30 L | B | 56, 58, 69, 133 |
| | Perchlorates, inorganic, n.o.s. | 5.1 | UN1481 | II | 5.1 | IB6, IP2, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 56, 58 |
| | | | | III | 5.1 | IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | 56, 58 |
| | *Perchloric acid, with more than 72 percent acid by mass* | Forbidden | | | | | | | | | | | |
| | Perchloric acid *with more than 50 percent but not more than 72 percent acid, by mass* | 5.1 | UN1873 | I | 5.1, 8 | A2, A3, N41, T10, TP1, TP12 | None | 201 | 243 | Forbidden | 2.5 L | D | 66 |
| | Perchloric acid *with not more than 50 percent acid by mass* | 8 | UN1802 | II | 8, 5.1 | IB2, N41, T7, TP2 | None | 202 | 243 | Forbidden | 30 L | C | 66 |
| | *Perchloroethylene, see* Tetrachloroethylene | | | | | | | | | | | | |
| | Perchloromethyl mercaptan | 6.1 | UN1670 | I | 6.1 | 2, B9, B14, B32, B74, N34, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 40 |
| | Perchloryl fluoride | 2.3 | UN3083 | | 2.3, 5.1 | 2, B9, B14 | None | 302 | 314, 315 | Forbidden | Forbidden | D | 40 |
| | *Percussion caps, see* Primers, cap type | | | | | | | | | | | | |
| | *Perfluoro-2-butene, see* Octafluorobut-2-ene | | | | | | | | | | | | |
| | Perfluoro(ethyl vinyl ether) | 2.1 | UN3154 | | 2.1 | | 306 | 302, 304, 305 | 314, 315 | Forbidden | 150 kg | E | 40 |
| | Perfluoro(methyl vinyl ether) | 2.1 | UN3153 | | 2.1 | T50 | 306 | 302, 304, 305 | 314, 315 | Forbidden | 150 kg | E | 40 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Perfumery products *with flammable solvents* | 3 | UN1266 | II | 3 | 149, IB2, T4, TP1, TP8 | 150 | 202 | 242 | 15 L | 60 L | B | |
| | | | | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Permanganates, inorganic, aqueous solution, n.o.s. | 5.1 | UN3214 | II | 5.1 | 26, IB2, T4, TP1 | 152 | 202 | 242 | 1 L | 5 L | D | 56, 58, 133, 138 |
| | Permanganates, inorganic, n.o.s. | 5.1 | UN1482 | II | 5.1 | 26, A30, IB6, IP2, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | D | 56, 58, 138 |
| | | | | III | 5.1 | 26, A30, IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | D | 56, 58, 138 |
| | Peroxides, inorganic, n.o.s. | 5.1 | UN1483 | II | 5.1 | A7, A20, IB6, IP2, N34, T3, TP33 | None | 212 | 242 | 5 kg | 25 kg | A | 13, 52, 66, 75 |
| | | | | III | 5.1 | A7, A20, IB8, IP3, N34, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | 13, 52, 66, 75 |
| | *Peroxyacetic acid, with more than 43 percent and with more than 6 percent hydrogen peroxide* | Forbidden | | | | | | | | | | | |
| | Persulfates, inorganic, aqueous solution, n.o.s. | 5.1 | UN3216 | III | 5.1 | IB2, T4, TP1, TP29 | 152 | 203 | 241 | 2.5 L | 30 L | A | 56, 133 |
| | Persulfates, inorganic, n.o.s. | 5.1 | UN3215 | III | 5.1 | IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | 56, 58 |
| G | Pesticides, liquid, flammable, toxic, *flash point less than 23 degrees C* | 3 | UN3021 | I | 3, 6.1 | B5, T14, TP2, TP13, TP27 | None | 201 | 243 | Forbidden | 30 L | B | |
| | | | | II | 3, 6.1 | IB2, T11, TP2, TP13, TP27 | 150 | 202 | 243 | 1 L | 60 L | B | |
| G | Pesticides, liquid, toxic, flammable, n.o.s. *flash point not less than 23 degrees C* | 6.1 | UN2903 | I | 6.1, 3 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1, 3 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1, 3 | B1, IB3, T7, TP2 | 153 | 203 | 242 | 60 L | 220 L | A | 40 |
| G | Pesticides, liquid, toxic, n.o.s. | 6.1 | UN2902 | I | 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1 | IB3, T7, TP2, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | 40 |
| G | Pesticides, solid, toxic, n.o.s. | 6.1 | UN2588 | I | 6.1 | IB7, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | 40 |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 40 |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 40 |
| | PETN, *see* Pentaerythrite tetranitrate | | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PETN/TNT, *see* Pentolite, *etc* | | | | | | | | | | | | |
| | Petrol, *see* Gasoline | | | | | | | | | | | | |
| | Petroleum crude oil | 3 | UN1267 | I | 3 | 144, T11, TP1, TP8 | 150 | 201 | 243 | 1 L | 30 L | E | |
| | | | | II | 3 | 144, IB2, T4, TP1, TP8 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | 144, B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Petroleum distillates, n.o.s. *or* Petroleum products, n.o.s. | 3 | UN1268 | I | 3 | 144, T11, TP1, TP8 | 150 | 201 | 243 | 1 L | 30 L | E | |
| | | | | II | 3 | 144, IB2, T7, TP1, TP8, TP28 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | 144, B1, IB3, T4, TP1, TP29 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Petroleum gases, liquefied *or* Liquefied petroleum gas | 2.1 | UN1075 | | 2.1 | T50 | 306 | 304 | 314, 315 | Forbidden | 150 kg | E | 40 |
| D | Petroleum oil | 3 | NA1270 | I | 3 | 144, T11, TP1 | None | 201 | 243 | 1 L | 30 L | E | |
| | | | | II | 3 | 144, IB2, T7, TP1, TP8, TP28 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | 144, B1, IB3, T4, TP1, TP29 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Phenacyl bromide | 6.1 | UN2645 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | B | 40 |
| + | Phenetidines | 6.1 | UN2311 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | Phenol, molten | 6.1 | UN2312 | II | 6.1 | B14, T7, TP3 | None | 202 | 243 | Forbidden | Forbidden | B | 40 |
| + | Phenol, solid | 6.1 | UN1671 | II | 6.1 | IB8, IP2, IP4, N78, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Phenol solutions | 6.1 | UN2821 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | |
| | | | | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | Phenolsulfonic acid, liquid | 8 | UN1803 | II | 8 | B2, IB2, N41, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | C | 14 |
| | Phenoxyacetic acid derivative pesticide, liquid, flammable, toxic *flash point less than 23 degrees C* | 3 | UN3346 | I | 3, 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | Forbidden | 30 L | B | 40 |
| | | | | II | 3, 6.1 | IB2, T11, TP2, TP13, TP27 | 150 | 202 | 243 | 1 L | 60 L | B | 40 |
| | Phenoxyacetic acid derivative pesticide, liquid, toxic | 6.1 | UN3348 | I | 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1 | IB2, T11, TP2, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1 | IB3, T7, TP2, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | 40 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Phenoxyacetic acid derivative pesticide, liquid, toxic, flammable, *flash point not less than 23 degrees C* | 6.1 | UN3347 | I | 6.1, 3 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1, 3 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1, 3 | IB3, T7, TP2, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | 40 |
| | Phenoxyacetic acid derivative pesticide, solid, toxic | 6.1 | UN3345 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | 40 |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 40 |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 40 |
| | Phenyl chloroformate | 6.1 | UN2746 | II | 6.1, 8 | IB2, T7, TP2, TP13 | 153 | 202 | 243 | 1 L | 30 L | A | 12, 13, 21, 25, 40, 100 |
| | Phenyl isocyanate | 6.1 | UN2487 | I | 6.1, 3 | 2, B9, B14, B32, B74, B77, N33, N34, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 40 |
| | Phenyl mercaptan | 6.1 | UN2337 | I | 6.1, 3 | 2, B9, B14, B32, B74, B77, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | B | 40, 52 |
| | Phenyl phosphorus dichloride | 8 | UN2798 | II | 8 | B2, B15, IB2, T7, TP2 | 154 | 202 | 242 | Forbidden | 30 L | B | 40 |
| | Phenyl phosphorus thiodichloride | 8 | UN2799 | II | 8 | B2, B15, IB2, T7, TP2 | 154 | 202 | 242 | Forbidden | 30 L | B | 40 |
| | Phenyl urea pesticides, liquid, toxic | 6.1 | UN3002 | I | 6.1 | T14, TP2 TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1 | T7, TP2 | None | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1 | T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | 40 |
| | Phenylacetonitrile, liquid | 6.1 | UN2470 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | 52 |
| | Phenylacetyl chloride | 8 | UN2577 | II | 8 | B2, IB2, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | C | 40 |
| | Phenylcarbylamine chloride | 6.1 | UN1672 | I | 6.1 | 2, B9, B14, B32, B74, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 40 |
| | *m-Phenylene diaminediperchlorate (dry)* | Forbidden | | | | | | | | | | | |
| + | Phenylenediamines *(o-; m-; p-;)* | 6.1 | UN1673 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Phenylhydrazine | 6.1 | UN2572 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | 40 |
| | Phenylmercuric acetate | 6.1 | UN1674 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Phenylmercuric compounds, n.o.s. | 6.1 | UN2026 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Phenylmercuric hydroxide | 6.1 | UN1894 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Phenylmercuric nitrate | 6.1 | UN1895 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Phenyltrichlorosilane | 8 | UN1804 | II | 8 | A7, B6, IB2, N34, T7, TP2 | None | 202 | 242 | Forbidden | 30 L | C | 40 |
| | Phosgene | 2.3 | UN1076 | | 2.3, 8 | 1, B7, B46 | None | 192 | 314 | Forbidden | Forbidden | D | 40 |
| | 9-Phosphabicyclononanes *or* Cyclooctadiene phosphines | 4.2 | UN2940 | II | 4.2 | A19, IB6, IP2, T3, TP33 | None | 212 | 241 | 15 kg | 50 kg | A | |
| | Phosphine | 2.3 | UN2199 | | 2.3, 2.1 | 1 | None | 192 | 245 | Forbidden | Forbidden | D | 40 |
| | Phosphoric acid solution | 8 | UN1805 | III | 8 | A7, IB3, N34, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | |
| | Phosphoric acid, solid | 8 | UN3453 | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | |
| | *Phosphoric acid triethyleneimine, see* Tris-(1-aziridiyl)phosphine oxide, solution | | | | | | | | | | | | |
| | *Phosphoric anhydride, see* Phosphorus pentoxide | | | | | | | | | | | | |
| | Phosphorous acid | 8 | UN2834 | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | 48 |
| | Phosphorus, amorphous | 4.1 | UN1338 | III | 4.1 | A1, A19, B1, B9, B26, IB8, IP3, T1, TP33 | None | 213 | 243 | 25 kg | 100 kg | A | 74 |
| | *Phosphorus bromide, see* Phosphorus tribromide | | | | | | | | | | | | |
| | *Phosphorus chloride, see* Phosphorus trichloride | | | | | | | | | | | | |
| | Phosphorus heptasulfide, *free from yellow or white phosphorus* | 4.1 | UN1339 | II | 4.1 | A20, IB4, N34, T3, TP33 | None | 212 | 240 | 15 kg | 50 kg | B | 74 |
| | Phosphorus oxybromide | 8 | UN1939 | II | 8 | B8, IB8, IP2, IP4, N41, N43, T3, TP33 | None | 212 | 240 | Forbidden | 50 kg | C | 12, 40 |
| | Phosphorus oxybromide, molten | 8 | UN2576 | II | 8 | B2, B8, IB1, N41, N43, T7, TP3, TP13 | None | 202 | 242 | Forbidden | Forbidden | C | 40 |
| + | Phosphorus oxychloride | 8 | UN1810 | II | 8, 6.1 | 2, B9, B14, B32, B74, B77, N34, T20, TP2, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | C | 40 |
| | Phosphorus pentabromide | 8 | UN2691 | II | 8 | A7, IB8, IP2, IP4, N34, T3, TP33 | 154 | 212 | 240 | Forbidden | 50 kg | B | 12, 40, 53, 55 |
| | Phosphorus pentachloride | 8 | UN1806 | II | 8 | A7, IB8, IP2, IP4, N34, T3, TP33 | None | 212 | 240 | Forbidden | 50 kg | C | 40, 44, 89, 100, 141 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Phosphorus Pentafluoride | 2.3 | UN2198 | | 2.3, 8 | 2, B9, B14 | None | 302, 304 | 314, 315 | Forbidden | Forbidden | D | 40 |
| | Phosphorus pentasulfide, *free from yellow or white phosphorus* | 4.3 | UN1340 | II | 4.3, 4.1 | A20, B59, IB4, T3, TP33 | 151 | 212 | 242 | 15 kg | 50 kg | B | 74 |
| | Phosphorus pentoxide | 8 | UN1807 | II | 8 | A7, IB8, IP2, IP4, N34, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | |
| | Phosphorus sesquisulfide, *free from yellow or white phosphorus* | 4.1 | UN1341 | II | 4.1 | A20, IB4, N34, T3, TP33 | None | 212 | 240 | 15 kg | 50 kg | B | 74 |
| | Phosphorus tribromide | 8 | UN1808 | II | 8 | A3, A6, A7, B2, B25, IB2, N34, N43, T7, TP2 | None | 202 | 242 | Forbidden | 30 L | C | 40 |
| | Phosphorus trichloride | 6.1 | UN1809 | I | 6.1, 8 | 2, B9, B14, B15, B32, B74, B77, N34, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | C | 40 |
| | Phosphorus trioxide | 8 | UN2578 | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | 12 |
| | Phosphorus trisulfide, *free from yellow or white phosphorus* | 4.1 | UN1343 | II | 4.1 | A20, IB4, N34, T3, TP33 | None | 212 | 240 | 15 kg | 50 kg | B | 74 |
| | Phosphorus, white dry *or* Phosphorus, white, under water *or* Phosphorus white, in solution *or* Phosphorus, yellow dry *or* Phosphorus, yellow, under water *or* Phosphorus, yellow, in solution | 4.2 | UN1381 | I | 4.2, 6.1 | B9, B26, N34, T9, TP3, TP31 | None | 188 | 243 | Forbidden | Forbidden | E | |
| | Phosphorus white, molten | 4.2 | UN2447 | I | 4.2, 6.1 | B9, B26, N34, T21, TP3, TP7, TP26 | None | 188 | 243 | Forbidden | Forbidden | D | |
| | *Phosphorus (white or red) and a chlorate, mixtures of* | Forbidden | | | | | | | | | | | |
| | *Phosphoryl chloride, see* Phosphorus oxychloride | | | | | | | | | | | | |
| | Phthalic anhydride *with more than .05 percent maleic anhydride* | 8 | UN2214 | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | |
| | Picolines | 3 | UN2313 | III | 3 | B1, IB3, T4, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | 40 |
| | Picric acid, *see* Trinitrophenol, *etc* | | | | | | | | | | | | |
| | Picrite, *see* Nitroguanidine, *etc* | | | | | | | | | | | | |
| | Picryl chloride, *see* Trinitrochlorobenzene | | | | | | | | | | | | |
| | Pine oil | 3 | UN1272 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | alpha-Pinene | 3 | UN2368 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Piperazine | 8 | UN2579 | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | 12, 52 |
| | Piperidine | 8 | UN2401 | I | 8, 3 | A10, T10, TP2 | None | 201 | 243 | 0.5 L | 2.5 L | B | 52 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Pivaloyl chloride, see* Trimethylacetyl chloride | | | | | | | | | | | | |
| | Plastic molding compound *in dough, sheet or extruded rope form evolving flammable vapor* | 9 | UN3314 | III | 9 | 32, IB8, IP3, IP7 | 155 | 221 | 221 | 100 kg | 200 kg | E | 19, 21, 25, 87, 144. |
| | *Plastic solvent, n.o.s., see* Flammable liquids, n.o.s. | | | | | | | | | | | | |
| | Plastics, nitrocellulose-based, self-heating, n.o.s. | 4.2 | UN2006 | III | 4.2 | | None | 213 | None | Forbidden | Forbidden | C | |
| | *Poisonous gases, n.o.s., see* Compressed *or* liquefied gases, flammable *or* toxic, n.o.s. | | | | | | | | | | | | |
| | *Polyalkylamines, n.o.s., see* Amines, *etc* | | | | | | | | | | | | |
| | Polychlorinated biphenyls, liquid | 9 | UN2315 | II | 9 | 9, 81, 140, IB3, T4, TP1 | 155 | 202 | 241 | 100 L | 220 L | A | 95 |
| | Polychlorinated biphenyls, solid | 9 | UN3432 | II | 9 | 9, 81, 140, IB8, T3, TP33 | 155 | 212 | 240 | 100 kg | 200 kg | A | 95 |
| | Polyester resin kit | 3 | UN3269 | | 3 | 40, 149 | 152 | 225 | None | 5 kg | 5 kg | B | |
| | Polyhalogenated biphenyls, liquid *or* Polyhalogenated terphenyls liquid | 9 | UN3151 | II | 9 | IB2 | 155 | 204 | 241 | 100 L | 220 L | A | 95 |
| | Polyhalogenated biphenyls, solid *or* Polyhalogenated terphenyls, solid | 9 | UN3152 | II | 9 | IB8, IP2, IP4, T3, TP33 | 155 | 204 | 241 | 100 kg | 200 kg | A | 95 |
| | Polymeric beads expandable, *evolving flammable vapor* | 9 | UN2211 | III | 9 | 32, IB8, IP3, IP7, T1, TP33 | 155 | 221 | 221 | 100 kg | 200 kg | E | 19, 21. 25, 87, 144. |
| | Potassium | 4.3 | UN2257 | I | 4.3 | A7, A19, A20, B27, IB4, IP1, N6, N34, T9, TP7, TP33 | None | 211 | 244 | Forbidden | 15 kg | D | 52 |
| | Potassium arsenate | 6.1 | UN1677 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Potassium arsenite | 6.1 | UN1678 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | *Potassium bisulfite solution, see* Bisulfites, aqueous solutions, n.o.s. | | | | | | | | | | | | |
| | Potassium borohydride | 4.3 | UN1870 | I | 4.3 | A19, N40 | None | 211 | 242 | Forbidden | 15 kg | E | 52 |
| | Potassium bromate | 5.1 | UN1484 | II | 5.1 | IB8, IP4, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 56, 58 |
| | *Potassium carbonyl* | Forbidden | | | | | | | | | | | |
| | Potassium chlorate | 5.1 | UN1485 | II | 5.1 | A9, IB8, IP4, N34, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 56, 58 |
| | Potassium chlorate, aqueous solution | 5.1 | UN2427 | II | 5.1 | A2, IB2, T4, TP1 | 152 | 202 | 241 | 1 L | 5 L | B | 56, 58, 133 |
| | | | | III | 5.1 | A2, IB2, T4, TP1 | 152 | 203 | 241 | 2.5 L | 30 L | B | 56, 58, 69, 133 |
| | *Potassium chlorate mixed with mineral oil, see* Explosive, blasting, type | | | | | | | | | | | | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | C | | | | | | | | | | | | |
| | Potassium cuprocyanide | 6.1 | UN1679 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 52 |
| | Potassium cyanide, solid | 6.1 | UN1680 | I | 6.1 | B69, B77, IB7, IP1, N74, N75, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | B | 52 |
| | Potassium cyanide solution | 6.1 | UN3413 | I | 6.1 | B69, B77, N74, N75, T14, TP2, TP13 | None | 201 | 243 | 1 L | 30 L | B | 52 |
| | | | | II | 6.1 | B69, B77, IB2, N74, N75, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 52 |
| | | | | III | 6.1 | B69, B77, IB3, N74, N75, T7, TP2, TP13, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | 52 |
| | *Potassium dichloro isocyanurate or Potassium dichloro-s-triazinetrione, see* Dichloroisocyanuric acid, dry *or* Dichloroisocyanuric acid salts *etc* | | | | | | | | | | | | |
| | Potassium dithionite *or* Potassium hydrosulfite | 4.2 | UN1929 | II | 4.2 | A8, A19, A20, IB6, IP2, T3, TP33 | None | 212 | 241 | 15 kg | 50 kg | E | 13 |
| | Potassium fluoride, solid | 6.1 | UN1812 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 52 |
| | Potassium fluoride solution | 6.1 | UN3422 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | 52 |
| | Potassium fluoroacetate | 6.1 | UN2628 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | E | |
| | Potassium fluorosilicate | 6.1 | UN2655 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 52 |
| | *Potassium hydrate, see* Potassium hydroxide, solid | | | | | | | | | | | | |
| | *Potassium hydrogen fluoride, see* Potassium hydrogen difluoride | | | | | | | | | | | | |
| | *Potassium hydrogen fluoride solution, see* Corrosive liquid, n.o.s. | | | | | | | | | | | | |
| | Potassium hydrogen sulfate | 8 | UN2509 | II | 8 | A7, IB8, IP2, IP4, N34, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | |
| | Potassium hydrogendifluoride solid | 8 | UN1811 | II | 8, 6.1 | IB8, IP2, IP4, N3, N34, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | 25, 40, 52 |
| | Potassium hydrogendifluoride solution | 8 | UN3421 | II | 8, 6.1 | IB2, N3, N34, T7, TP2 | 154 | 202 | 243 | 1 L | 30 L | A | 25, 40, 52 |
| | | | | III | 8, 6.1 | IB3, N3, N34, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | 40, 52 |
| | Potassium hydrosulfite, *see* Potassium dithionite | | | | | | | | | | | | |
| | *Potassium hydroxide, liquid, see* Potassium hydroxide solution | | | | | | | | | | | | |
| | Potassium hydroxide, solid | 8 | UN1813 | II | 8 | IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | 52. |
| | Potassium hydroxide, solution | 8 | UN1814 | II | 8 | B2, IB2, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | A | 52. |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | 52. |
| | *Potassium hypochlorite, solution, see* Hypochlorite solutions, *etc* | | | | | | | | | | | | |
| | Potassium, metal alloys, liquid | 4.3 | UN1420 | I | 4.3 | A7, A19, A20, B27 | None | 201 | 244 | Forbidden | 1 L | E | 40, 52 |
| | Potassium, metal alloys, solid | 4.3 | UN3403 | I | 4.3 | A19, A20, B27, IB4, IP1, T9, TP7, TP33 | None | 211 | 244 | Forbidden | 15 kg | D | |
| | Potassium metavanadate | 6.1 | UN2864 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Potassium monoxide | 8 | UN2033 | II | 8 | IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | 29, 52. |
| | Potassium nitrate | 5.1 | UN1486 | III | 5.1 | A1, A29, IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | |
| | Potassium nitrate and sodium nitrite mixtures | 5.1 | UN1487 | II | 5.1 | B78, IB8, IP4, T3, TP33 | 152 | 212 | 240 | 5 kg | 25 kg | A | 56, 58 |
| | Potassium nitrite | 5.1 | UN1488 | II | 5.1 | IB8, IP4, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 56, 58 |
| | Potassium perchlorate | 5.1 | UN1489 | II | 5.1 | IB6, IP2, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 56, 58 |
| | Potassium permanganate | 5.1 | UN1490 | II | 5.1 | IB8, IP4, T3, TP33 | 152 | 212 | 240 | 5 kg | 25 kg | D | 56, 58, 138 |
| | Potassium peroxide | 5.1 | UN1491 | I | 5.1 | A20, IB6, IP1, N34 | None | 211 | None | Forbidden | 15 kg | B | 13, 52, 66, 75 |
| | Potassium persulfate | 5.1 | UN1492 | III | 5.1 | A1, A29, IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | 56, 58 |
| | Potassium phosphide | 4.3 | UN2012 | I | 4.3, 6.1 | A19, N40 | None | 211 | None | Forbidden | 15 kg | E | 40, 52, 85 |
| | *Potassium selenate, see* Selenates *or* Selenites | | | | | | | | | | | | |
| | *Potassium selenite, see* Selenates *or* Selenites | | | | | | | | | | | | |
| | Potassium solium alloys, liquid | 4.3 | UN1422 | I | 4.3 | A7, A19, B27, N34, N40, T9, TP3, TP7, TP31 | None | 201 | 244 | Forbidden | 1 L | E | 40, 52 |
| | Potassium sodium alloys, solid | 4.3 | UN3404 | I | 4.3 | A19, B27, N34, N40, T9, TP7, TP33 | None | 211 | 244 | Forbidden | 15 kg | D | 52 |
| | Potassium sulfide, anhydrous *or* Potassium sulfide *with less than 30 percent water of crystallization* | 4.2 | UN1382 | II | 4.2 | A19, A20, B16, IB6, IP2, N34, T3, TP33 | None | 212 | 241 | 15 kg | 50 kg | A | 52 |
| | Potassium sulfide, hydrated *with not less than 30 percent water of crystallization* | 8 | UN1847 | II | 8 | IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | 52 |
| | Potassium superoxide | 5.1 | UN2466 | I | 5.1 | A20, IB6, IP1 | None | 211 | None | Forbidden | 15 kg | B | 13, 52, 66, 75 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Powder cake, wetted *or* Powder paste, wetted *with not less than 17 percent alcohol by mass* | 1.1C | UN0433 | II | 1.1C | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Powder cake, wetted *or* Powder paste, wetted *with not less than 25 percent water, by mass* | 1.3C | UN0159 | II | 1.3C | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Powder paste, *see* Powder cake, *etc* | | | | | | | | | | | | |
| | Powder, smokeless | 1.1C | UN0160 | II | 1.1C | | None | 62 | None | Forbidden | Forbidden | | 26E |
| | Powder, smokeless | 1.3C | UN0161 | II | 1.3C | | None | 62 | None | Forbidden | Forbidden | | 26E |
| | *Power device, explosive, see* Cartridges, power device | | | | | | | | | | | | |
| | Primers, cap type | 1.4S | UN0044 | II | None | | None | 62 | None | 25 kg | 100 kg | 05 | |
| | Primers, cap type | 1.1B | UN0377 | II | 1.1B | | None | 62 | None | Forbidden | Forbidden | 11 | |
| | Primers, cap type | 1.4B | UN0378 | II | 1.4B | | None | 62 | None | Forbidden | 75 kg | 06 | |
| | *Primers, small arms, see* Primers, cap type | | | | | | | | | | | | |
| | Primers, tubular | 1.3G | UN0319 | II | 1.3G | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Primers, tubular | 1.4G | UN0320 | II | 1.4G | | None | 62 | None | Forbidden | 75 kg | 06 | |
| | Primers, tubular | 1.4S | UN0376 | II | None | | None | 62 | None | 25 kg | 100 kg | 05 | |
| | Printing ink, *flammable or* Printing ink related material *(including printing ink thinning or reducing compound), flammable* | 3 | UN1210 | I | 3 | T11, TP1, TP8 | 150 | 173 | 243 | 1 L | 30 L | E | |
| | | | | II | 3 | 149, IB2, T4, TP1, TP8 | 150 | 173 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, IB3, T2, TP1 | 150 | 173 | 242 | 60 L | 220 L | A | |
| | *Projectiles, illuminating, see* Ammunition, illuminating, *etc* | | | | | | | | | | | | |
| | Projectiles, *inert with tracer* | 1.4S | UN0345 | II | 1.4S | | | 62 | None | 25 kg | 100 kg | 01 | |
| | Projectiles, *inert, with tracer* | 1.3G | UN0424 | II | 1.3G | | | 62 | None | Forbidden | Forbidden | 03 | |
| | Projectiles, *inert, with tracer* | 1.4G | UN0425 | II | 1.4G | | | 62 | None | Forbidden | 75 kg | 02 | |
| | Projectiles, *with burster or expelling charge* | 1.2D | UN0346 | II | 1.2D | | | 62 | None | Forbidden | Forbidden | 03 | |
| | Projectiles, *with burster or expelling charge* | 1.4D | UN0347 | II | 1.4D | | | 62 | None | Forbidden | 75 kg | 02 | |
| | Projectiles, *with burster or expelling charge* | 1.2F | UN0426 | II | 1.2F | | | 62 | None | Forbidden | Forbidden | 08 | |
| | Projectiles, *with burster or expelling charge* | 1.4F | UN0427 | II | 1.4F | | | 62 | None | Forbidden | Forbidden | 08 | |
| | Projectiles, *with burster or expelling charge* | 1.2G | UN0434 | II | 1.2G | | | 62 | None | Forbidden | Forbidden | 03 | |
| | Projectiles, *with burster or expelling charge* | 1.4G | UN0435 | II | 1.4G | | | 62 | None | Forbidden | 75 kg | 02 | |
| | Projectiles, *with bursting charge* | 1.1F | UN0167 | II | 1.1F | | | 62 | None | Forbidden | Forbidden | 08 | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Projectiles, *with bursting charge* | 1.1D | UN0168 | II | 1.1D | | | 62 | None | Forbidden | Forbidden | 03 | |
| | Projectiles, *with bursting charge* | 1.2D | UN0169 | II | 1.2D | | | 62 | None | Forbidden | Forbidden | 03 | |
| | Projectiles, *with bursting charge* | 1.2F | UN0324 | II | 1.2F | | | 62 | None | Forbidden | Forbidden | 08 | |
| | Projectiles, *with bursting charge* | 1.4D | UN0344 | II | 1.4D | | | 62 | None | Forbidden | 75 kg | 02 | |
| | Propadiene, stabilized | 2.1 | UN2200 | | 2.1 | | None | 304 | 314, 315 | Forbidden | 150 kg | B | 40 |
| | *Propadiene mixed with methyl acetylene, see* Methyl acetylene and propadiene mixtures, stabilized | | | | | | | | | | | | |
| | Propane *see also* Petroleum gases, liquefied | 2.1 | UN1978 | | 2.1 | 19, T50 | 306 | 304 | 314, 315 | Forbidden | 150 kg | E | 40 |
| | Propanethiols | 3 | UN2402 | II | 3 | A6, IB2, T4, TP1, TP13 | 150 | 202 | 242 | 5 L | 60 L | E | 95, 102 |
| | n-Propanol *or* Propyl alcohol, normal | 3 | UN1274 | II | 3 | B1, IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Propellant, liquid | 1.3C | UN0495 | II | 1.3C | 37 | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Propellant, liquid | 1.1C | UN0497 | II | 1.1C | 37 | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Propellant, solid | 1.1C | UN0498 | II | 1.1C | | None | 62 | None | Forbidden | Forbidden | | 26E |
| | Propellant, solid | 1.3C | UN0499 | II | 1.3C | | None | 62 | None | Forbidden | Forbidden | | 26E |
| | Propellant, solid | 1.4C | UN0501 | | 1.4C | | None | 62 | None | Forbidden | Forbidden | A | 24E |
| | Propionaldehyde | 3 | UN1275 | II | 3 | IB2, T7, TP1 | 150 | 202 | 242 | 5 L | 60 L | E | |
| | Propionic acid *with not less than 90% acid by mass* | 8 | UN3463 | II | 8, 3 | IB2, T7, TP2 | 154 | 202 | 243 | 1 L | 30 L | A. | |
| | Propionic acid *with not less than 10% and less than 90% acid by mass* | 8 | UN1848 | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A. | |
| | Propionic anhydride | 8 | UN2496 | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | |
| | Propionitrile | 3 | UN2404 | II | 3, 6.1 | IB2, T7, TP1, TP13 | None | 202 | 243 | Forbidden | 60 L | E | 40 |
| | Propionyl chloride | 3 | UN1815 | II | 3, 8 | IB1, T7, TP1 | 150 | 202 | 243 | 1 L | 5 L | B | 40 |
| | n-Propyl acetate | 3 | UN1276 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Propyl alcohol, *see* Propanol | | | | | | | | | | | | |
| | n-Propyl benzene | 3 | UN2364 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | n-Propyl chloroformate | 6.1 | UN2740 | I | 6.1, 3, 8 | 2, B9, B14, B32, B74, B77, N34, T20, TP2, TP13, TP38, TP44 | None | 227 | 244 | Forbidden | Forbidden | B | 21, 40, 100 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Propyl chloride see* 1-Chloropropane | | | | | | | | | | | | |
| | Propyl formates | 3 | UN1281 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | n-Propyl isocyanate | 6.1 | UN2482 | I | 6.1, 3 | 1, B9, B14, B30, B72, T22, TP2, TP13, TP38, TP44 | None | 226 | 244 | Forbidden | Forbidden | D | 40 |
| | *Propyl mercaptan, see* Propanethiols | | | | | | | | | | | | |
| | n-Propyl nitrate | 3 | UN1865 | II | 3 | IB9 | 150 | 202 | None | 5 L | 60 L | D | 44, 89, 90, 100 |
| | Propylamine | 3 | UN1277 | II | 3, 8 | A7, IB2, N34, T7, TP1 | 150 | 202 | 243 | 1 L | 5 L | E | 40 |
| | Propylene *see also* Petroleum gases, liquefied | 2.1 | UN1077 | | 2.1 | 19, T50 | 306 | 304 | 314, 315 | Forbidden | 150 kg | E | 40 |
| | Propylene chlorohydrin | 6.1 | UN2611 | II | 6.1, 3 | IB2, T7, TP2, TP13 | 153 | 202 | 243 | 5 L | 60 L | A | 12, 40, 48 |
| | Propylene oxide | 3 | UN1280 | I | 3 | A3, N34, T11, TP2, TP7 | None | 201 | 243 | 1 L | 30 L | E | 40 |
| | Propylene tetramer | 3 | UN2850 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | 1,2-Propylenediamine | 8 | UN2258 | II | 8, 3 | A3, A6, IB2, N34, T7, TP2 | None | 202 | 243 | 1 L | 30 L | A | 40 |
| | Propyleneimine, stabilized | 3 | UN1921 | I | 3, 6.1 | A3, N34, T14, TP2, TP13 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | Propyltrichlorosilane | 8 | UN1816 | II | 8, 3 | A7, B2, B6, IB2, N34, T7, TP2, TP13 | None | 202 | 243 | Forbidden | 30 L | C | 40 |
| | *Prussic acid, see* Hydrogen cyanide | | | | | | | | | | | | |
| | Pyrethroid pesticide, liquid, flammable, toxic, *flash point less than 23 degrees C* | 3 | UN3350 | I | 3, 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | Forbidden | 30 L | B | 40 |
| | | | | II | 3, 6.1 | IB2, T11, TP2, TP13, TP27 | 150 | 202 | 243 | 1 L | 60 L | B | 40 |
| | Pyrethroid pesticide, liquid toxic | 6.1 | UN3352 | I | 6.1 | T14, TP2, TP13, TP27 | None | 211 | 242 | 1 L | 30 L | A | 40 |
| | | | | II | 6.1 | IB2, T11, TP2, TP27 | 153 | 212 | 242 | 5 L | 60 L | A | 40 |
| | | | | III | 6.1 | IB3, T7, TP2, TP28 | 153 | 213 | 240 | 60 L | 220 L | A | 40 |
| | Pyrethroid pesticide, liquid, toxic, flammable, *flash point not less than 23 degrees C* | 6.1 | UN3351 | I | 6.1, 3 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1, 3 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | III | 6.1, 3 | IB3, T7, TP2, TP28 | 153 | 203 | 241 | 60 L | 220 L | B | 40 |
| | Pyrethroid pesticide, solid, toxic | 6.1 | UN3349 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | 40 |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 40 |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 40 |
| | Pyridine | 3 | UN1282 | II | 3 | IB2, T4, TP2 | None | 202 | 242 | 5 L | 60 L | B | 21, 100 |
| | *Pyridine perchlorate* | Forbidden | | | | | | | | | | | |
| G | Pyrophoric liquid, inorganic, n.o.s. | 4.2 | UN3194 | I | 4.2 | | None | 181 | 244 | Forbidden | Forbidden | D | 18 |
| G | Pyrophoric liquids, organic, n.o.s. | 4.2 | UN2845 | I | 4.2 | B11, T22, TP2, TP7 | None | 181 | 244 | Forbidden | Forbidden | D | 18 |
| G | Pyrophoric metals, n.o.s., *or* Pyrophoric alloys, n.o.s. | 4.2 | UN1383 | I | 4.2 | B11, T21, TP7, TP33 | None | 187 | 242 | Forbidden | Forbidden | D | |
| G | Pyrophoric solid, inorganic, n.o.s. | 4.2 | UN3200 | I | 4.2 | T21, TP7, TP33 | None | 187 | 242 | Forbidden | Forbidden | D | |
| G | Pyrophoric solids, organic, n.o.s. | 4.2 | UN2846 | I | 4.2 | | None | 187 | 242 | Forbidden | Forbidden | D | |
| | Pyrosulfuryl chloride | 8 | UN1817 | II | 8 | B2, IB2, T8, TP2, TP12 | 154 | 202 | 242 | 1 L | 30 L | C | 40 |
| | *Pyroxylin solution or solvent, see* Nitrocellulose | | | | | | | | | | | | |
| | Pyrrolidine | 3 | UN1922 | II | 3, 8 | IB2, T7, TP1 | 150 | 202 | 243 | 1 L | 5 L | B | 40, 52 |
| | *Quebrachitol pentanitrate* | Forbidden | | | | | | | | | | | |
| | *Quicklime, see* Calcium oxide | | | | | | | | | | | | |
| | Quinoline | 6.1 | UN2656 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | 12 |
| | *R 12, see* Dichlorodifluoromethane | | | | | | | | | | | | |
| | *R 12B1, see* Chlorodifluorobromomethane | | | | | | | | | | | | |
| | *R 13, see* Chlorotrifluoromethane | | | | | | | | | | | | |
| | *R 13B1, see* Bromotrifluoromethane | | | | | | | | | | | | |
| | *R 14, see* Tetrafluoromethane | | | | | | | | | | | | |
| | *R 21, see* Dichlorofluoromethane | | | | | | | | | | | | |
| | *R 22, see* Chlorodifluoromethane | | | | | | | | | | | | |
| | *R 114, see* Dichlorotetrafluoroethane | | | | | | | | | | | | |
| | *R 115, see* Chloropentafluoroethane | | | | | | | | | | | | |
| | *R 116, see* Hexafluoroethane | | | | | | | | | | | | |
| | *R 124, see* Chlorotetrafluoroethane | | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *R 133a, see* Chlorotrifluoroethane | | | | | | | | | | | | |
| | *R 152a, see* Difluoroethane | | | | | | | | | | | | |
| | *R 500, see* Dichlorodifluoromethane and difluorethane, *etc* | | | | | | | | | | | | |
| | *R 502, see* Chlorodifluoromethane and chloropentafluoroethane mixture, *etc* | | | | | | | | | | | | |
| | *R 503, see* Chlorotrifluoromethane and trifluoromethane, *etc* | | | | | | | | | | | | |
| | Radioactive material, excepted package-articles manufactured from natural uranium *or* depleted uranium *or* natural thorium | 7 | UN2909 | | None | | 422, 426 | 422, 426 | 422, 426 | | | A | |
| | Radioactive material, excepted package-empty packaging | 7 | UN2908 | | Empty | | 422, 428 | 422, 428 | 422, 428 | | | A | |
| | Radioactive material, excepted package-instruments *or* articles | 7 | UN2911 | | None | | 422, 424 | 422, 424 | | | | A | |
| | Radioactive material, excepted package-limited quantity of material | 7 | UN2910 | | None | | 421, 422 | 421, 422 | 421, 422 | | | A | |
| | Radioactive material, low specific activity (LSA-I) *non fissile or fissile-excepted* | 7 | UN2912 | | 7 | A56, T5, TP4, W7 | 421, 422, 428 | 427 | 427 | | | A | 95, 129 |
| | Radioactive material, low specific activity (LSA-II) *non fissile or fissile-excepted* | 7 | UN3321 | | 7 | A56, T5, TP4, W7 | 421, 422, 428 | 427 | 427 | | | A | 95, 129 |
| | Radioactive material, low specific activity (LSA-III) *non fissile or fissile excepted* | 7 | UN3322 | | 7 | A56, T5, TP4, W7 | 421, 422, 428 | 427 | 427 | | | A | 95, 129 |
| | Radioactive material, surface contaminated objects (SCO-I *or* SCO-II) *non fissile or fissile-excepted* | 7 | UN2913 | | 7 | A56 | 421, 422, 428 | 427 | 427 | | | A | 95 |
| | Radioactive material, transported under special arrangement, *non fissile or fissile excepted* | 7 | UN2919 | | 7 | A56, 139 | | | | | | A | 95, 105 |
| | Radioactive material, transported under special arrangement, fissile | 7 | UN3331 | | 7 | A56, 139 | | | | | | A | 95, 105 |
| | Radioactive material, Type A package, fissile *non-special form* | 7 | UN3327 | | 7 | A56, W7, W8 | 453 | 417 | 417 | | | A | 95, 105, 131 |
| | Radioactive material, Type A package *non-special form, non fissile or fissile-excepted* | 7 | UN2915 | | 7 | A56, W7, W8 | | 415, 418 | 415, 419 | | | A | 95, 130 |
| | Radioactive material, Type A package, special form *non fissile or fissile-excepted* | 7 | UN3332 | | 7 | A56, W7, W8 | | 415, 476 | 415, 476 | | | A | 95 |
| | Radioactive material, Type A package, special form, fissile | 7 | UN3333 | | 7 | A56, W7, W8 | 453 | 417, 476 | 417, 476 | | | A | 95, 105 |
| | Radioactive material, Type B(M) package, fissile | 7 | UN3329 | | 7 | A56 | 453 | 417 | 417 | | | A | 95, 105 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Radioactive material, Type B(M) package *non fissile or fissile-excepted* | 7 | UN2917 | | 7 | A56 | | 416 | 416 | | | A | 95, 105 |
| | Radioactive material, Type B(U) package, fissile | 7 | UN3328 | | 7 | A56 | 453 | 417 | 417 | | | A | 95, 105 |
| | Radioactive material, Type B(U) package *non fissile or fissile-excepted* | 7 | UN2916 | | 7 | A56 | | 416 | 416 | | | A | 95, 105 |
| | Radioactive material, uranium hexafluoride *non fissile or fissile-excepted* | 7 | UN2978 | | 7, 8 | | 423 | 420, 427 | 420, 427 | | | A | 95, 132 |
| | Radioactive material, uranium hexafluoride, fissile | 7 | UN2977 | | 7, 8 | | 453 | 417, 420 | 417, 420 | | | A | 95, 132 |
| A W | Rags, oily | 4.2 | UN1856 | III | 4.2 | | 151 | 213 | 240 | Forbidden | Forbidden | A | |
| | *Railway torpedo, see* Signals, railway track, explosive | | | | | | | | | | | | |
| | *RC 318, see* Octafluorocyclobutane | | | | | | | | | | | | |
| | RDX and cyclotetramethylenetetranitramine, wetted *or* desensitized *see* RDX and HMX mixtures, wetted or desensitized | | | | | | | | | | | | |
| | RDX and HMX mixtures, wetted *with not less than 15 percent water by mass or* RDX and HMX mixtures, desensitized *with not less than 10 percent phlegmatizer by mass* | 1.1D | UN0391 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | RDX and Octogen mixtures, wetted *or* desensitized *see* RDX and HMX mixtures, wetted *or* desensitized *etc* | | | | | | | | | | | | |
| | *RDX, see* Cyclotrimethylene trinitramine, *etc* | | | | | | | | | | | | |
| | Receptacles, small, containing agas (gas cartridges) *non-flammable, without release device, not refillable and not exceeding 1 L capacity* | 2.2 | UN2037 | | 2.2, 5.1 | A14 | 306 | 304 | None | 1 kg | 15 kg | B | 40 |
| | Receptacles, small, containing gas (gas cartridges) *flammable, without release device, not refillable and not exceeding 1 L capacity* | 2.1 | UN2037 | | 2.1 | | 306 | 304 | None | 1 kg | 15 kg | B | 40 |
| | Receptacles, small, containing gas (gas cartridges) *non-flammable, without release device, not refillable and not exceeding 1 L capacity.* | 2.2 | UN2037 | | 2.2 | | 306 | 304 | None | 1 kg | 15 kg | B | 40 |
| | *Red phosphorus, see* Phosphorus, amorphous | | | | | | | | | | | | |
| | Refrigerant gas R 404A | 2.2 | UN3337 | | 2.2 | T50 | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | Refrigerant gas R 407A | 2.2 | UN3338 | | 2.2 | T50 | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | Refrigerant gas R 407B | 2.2 | UN3339 | | 2.2 | T50 | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | Refrigerant gas R 407C | 2.2 | UN3340 | | 2.2 | T50 | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| G | Refrigerant gases, n.o.s. | 2.2 | UN1078 | | 2.2 | T50 | 306 | 304 | 314, | 75 kg | 150 kg | A | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 315 | | | | |
| D | Refrigerant gases, n.o.s. *or* Dispersant gases, n.o.s. | 2.1 | NA1954 | | 2.1 | T50 | 306 | 304 | 314, 315 | Forbidden | 150 kg | D | 40 |
| | Refrigerating machines, *containing flammable, non-toxic, liquefied gas* | 2.1 | UN3358 | | 2.1 | | 306, 307 | 306 | 306 | Forbidden | Forbidden | D | 40 |
| | Refrigerating machines, *containing non-flammable, non-toxic gases, or ammonia solutions (UN2672)* | 2.2 | UN2857 | | 2.2 | A53 | 306, 307 | 306 | 306, 307 | 450 kg | 450 kg | A | |
| | Regulated medical waste, n.o.s. *or* Clinical waste, unspecified, n.o.s. *or* (BIO) Medical waste, n.o.s | 6.2 | UN3291 | II | 6.2 | A13 | 134 | 197 | 197 | No limit | No limit | B | 40. |
| | Release devices, explosive | 1.4S | UN0173 | II | 1.4S | | None | 62 | None | 25 kg | 100 kg | 05 | |
| | Resin solution, *flammable* | 3 | UN1866 | I | 3 | B52, T11, TP1, TP8, TP28 | 150 | 201 | 243 | 1 L | 30 L | E | |
| | | | | II | 3 | 149, B52, IB2, T4, TP1, TP8 | 150 | 173 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, B52, IB3, T2, TP1 | 150 | 173 | 242 | 60 L | 220 L | A | |
| | Resorcinol | 6.1 | UN2876 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | *Rifle grenade, see* Grenades, *hand or rifle, etc* | | | | | | | | | | | | |
| | *Rifle powder, see* Powder, smokeless *(UN 0160)* | | | | | | | | | | | | |
| | Rivets, explosive | 1.4S | UN0174 | II | 1.4S | | None | 62 | None | 25 kg | 100 kg | 05 | |
| | *Road asphalt or tar liquid, see* Tars, liquid, *etc* | | | | | | | | | | | | |
| | Rocket motors | 1.3C | UN0186 | II | 1.3C | 109 | None | 62 | None | Forbidden | 220 kg | 03 | |
| | Rocket motors | 1.1C | UN0280 | II | 1.1C | 109 | None | 62 | None | Forbidden | Forbidden | 03 | |
| | Rocket motors | 1.2C | UN0281 | II | 1.2C | 109 | None | 62 | None | Forbidden | Forbidden | 03 | |
| | Rocket motors, liquid fueled | 1.2J | UN0395 | II | 1.2J | 109 | None | 62 | None | Forbidden | Forbidden | 04 | 23E |
| | Rocket motors, liquid fueled | 1.3J | UN0396 | II | 1.3J | 109 | None | 62 | None | Forbidden | Forbidden | 04 | 23E |
| | Rocket motors with hypergolic liquids *with or without an expelling charge* | 1.3L | UN0250 | II | 1.3L | 109 | None | 62 | None | Forbidden | Forbidden | 08 | 8E, 14E, 15E |
| | Rocket motors with hypergolic liquids *with or without an expelling charge* | 1.2L | UN0322 | II | 1.2L | 109 | None | 62 | None | Forbidden | Forbidden | 08 | 8E, 14E, 15E |
| | Rockets, line-throwing | 1.2G | UN0238 | II | 1.2G | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Rockets, line-throwing | 1.3G | UN0240 | II | 1.3G | | None | 62 | None | Forbidden | 75 kg | 07 | |
| | Rockets, line-throwing | 1.4G | UN0453 | II | 1.4G | | None | 62 | None | Forbidden | 75 kg | 06 | |
| | Rockets, liquid fueled *with bursting charge* | 1.1J | UN0397 | II | 1.1J | | None | 62 | None | Forbidden | Forbidden | 04 | 23E |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Rockets, liquid fueled *with bursting charge* | 1.2J | UN0398 | II | 1.2J | | None | 62 | None | Forbidden | Forbidden | 04 | 23E |
| | Rockets, *with bursting charge* | 1.1F | UN0180 | II | 1.1F | | None | 62 | None | Forbidden | Forbidden | 08 | |
| | Rockets, *with bursting charge* | 1.1E | UN0181 | II | 1.1E | | None | 62 | None | Forbidden | Forbidden | 03 | |
| | Rockets, *with bursting charge* | 1.2E | UN0182 | II | 1.2E | | None | 62 | None | Forbidden | Forbidden | 03 | |
| | Rockets, *with bursting charge* | 1.2F | UN0295 | II | 1.2F | | None | 62 | None | Forbidden | Forbidden | 08 | |
| | Rockets, *with expelling charge* | 1.2C | UN0436 | II | 1.2C | | None | 62 | None | Forbidden | Forbidden | 03 | |
| | Rockets, *with expelling charge* | 1.3C | UN0437 | II | 1.3C | | None | 62 | None | Forbidden | Forbidden | 03 | |
| | Rockets, *with expelling charge* | 1.4C | UN0438 | II | 1.4C | | None | 62 | None | Forbidden | 75 kg | 02 | |
| | Rockets, *with inert head* | 1.3C | UN0183 | II | 1.3C | | None | 62 | None | Forbidden | Forbidden | 03 | |
| | Rockets, *with inert head* | 1.2C | UN0502 | | 1.2C | | None | 62 | None | Forbidden | Forbidden | B | 1E, 5E |
| | Rosin oil | 3 | UN1286 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Rubber solution | 3 | UN1287 | II | 3 | 149, IB2, T4, TP1, TP8 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Rubber scrap *or* shoddy, *powdered or granulated, not exceeding 840 microns and rubber contend exceeding 45%* | 4.1 | UN1345 | II | 4.1 | IB8, IP2, IP4, T3, TP33 | 151 | 212 | 240 | 15 kg | 50 kg | A | |
| | Rubidium | 4.3 | UN1423 | I | 4.3 | 22, A7, A19, IB4, IP1, N34, N40, N45 | None | 211 | 242 | Forbidden | 15 kg | D | 52 |
| | Rubidium hydroxide | 8 | UN2678 | II | 8 | IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | 29, 52. |
| | Rubidium hydroxide solution | 8 | UN2677 | II | 8 | B2, IB2, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | A | 29, 52. |
| | | | | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | 29, 52. |
| | *Safety fuse, see* Fuse, safety | | | | | | | | | | | | |
| G | Samples, explosive, *other than initiating explosives* | | UN0190 | II | | 113 | None | 62 | None | Forbidden | Forbidden | 14 | |
| | *Sand acid, see* Fluorosilicic acid | | | | | | | | | | | | |
| | Seed cake, *containing vegetable oil solvent extractions and expelled seeds, with not more than 10 percent of oil and when the amount of moisture is higher than 11 percent, with not more than 20 percent of oil and moisture combined* | 4.2 | UN1386 | III | None | IB8, IP3, IP7, N7 | None | 213 | 241 | Forbidden | Forbidden | A | 13 |
| I | Seed cake *with more than 1.5 percent oil and not more than 11 percent moisture* | 4.2 | UN1386 | III | None | IB8, IP3, IP7, N7 | None | 213 | 241 | Forbidden | Forbidden | E | 13 |
| I | Seed cake *with not more than 1.5 percent oil and not more than 11 percent moisture* | 4.2 | UN2217 | III | None | IB8, IP3, IP7, N7 | None | 213 | 241 | Forbidden | Forbidden | A | 13 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Selenates *or* Selenites | 6.1 | UN2630 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | E | |
| | Selenic acid | 8 | UN1905 | I | 8 | IB7, IP1, N34, T6, TP33 | None | 211 | 242 | Forbidden | 25 kg | A | |
| | Selenium compound, liquid, n.o.s | 6.1 | UN3440 | I | 6.1 | T14, TP2, TP27 | None | 201 | 243 | 1L | 30L | B | |
| | | | | II | 6.1 | IIB2, T11, TP2, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | |
| | | | | III | 6.1 | IB3, T7, TP1, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | Selenium compound, solid, n.o.s. | 6.1 | UN3283 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | B | |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | B | |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Selenium disulfide | 6.1 | UN2657 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Selenium hexafluoride | 2.3 | UN2194 | | 2.3, 8 | 1 | None | 302 | None | Forbidden | Forbidden | D | 40 |
| | *Selenium nitride* | Forbidden | | | | | | | | | | | |
| | Selenium oxychloride | 8 | UN2879 | I | 8, 6.1 | A3, A6, A7, N34, T10, TP2, TP12, TP13 | None | 201 | 243 | 0.5 L | 2.5 L | E | 40 |
| | *Self-defense spray, aerosol, see* Aerosols, *etc* | | | | | | | | | | | | |
| + A D | Self-defense spray, non-pressurized | 9 | NA3334 | III | 9 | A37 | 155 | 203 | None | No limit | No limit | A | |
| G | Self-heating liquid, corrosive, inorganic, n.o.s. | 4.2 | UN3188 | II | 4.2, 8 | IB2 | None | 202 | 243 | 1 L | 5 L | C | |
| | | | | III | 4.2, 8 | IB2 | None | 203 | 241 | 5 L | 60 L | C | |
| G | Self-heating liquid, corrosive, organic, n.o.s. | 4.2 | UN3185 | II | 4.2, 8 | IB2 | None | 202 | 243 | 1 L | 5 L | C | |
| | | | | III | 4.2, 8 | IB2 | None | 203 | 241 | 5 L | 60 L | C | |
| G | Self-heating liquid, inorganic, n.o.s. | 4.2 | UN3186 | II | 4.2 | IB2 | None | 202 | 242 | 1 L | 5 L | C | |
| | | | | III | 4.2 | IB2 | None | 203 | 241 | 5 L | 60 L | C | |
| G | Self-heating liquid, organic, n.o.s. | 4.2 | UN3183 | II | 4.2 | IB2 | None | 202 | 242 | 1 L | 5 L | C | |
| | | | | III | 4.2 | IB2 | None | 203 | 241 | 5 L | 60 L | C | |
| G | Self-heating liquid, toxic, inorganic, n.o.s. | 4.2 | UN3187 | II | 4.2, 6.1 | IB2 | None | 202 | 243 | 1 L | 5 L | C | |
| | | | | III | 4.2, 6.1 | IB2 | None | 203 | 241 | 5 L | 60 L | C | |
| G | Self-heating liquid, toxic, organic, n.o.s. | 4.2 | UN3184 | II | 4.2, 6.1 | IB2 | None | 202 | 243 | 1 L | 5 L | C | |
| | | | | III | 4.2, 6.1 | IB2 | None | 203 | 241 | 5 L | 60 L | C | |
| G | Self-heating solid, corrosive, inorganic, n.o.s. | 4.2 | UN3192 | II | 4.2, 8 | IB5, IP2, T3, TP33 | None | 212 | 242 | 15 kg | 50 kg | C | |
| | | | | III | 4.2, 8 | IB8, IP3, T1, TP33 | None | 213 | 242 | 25 kg | 100 kg | C | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G | Self-heating, solid, corrosive, organic, n.o.s. | 4.2 | UN3126 | II | 4.2, 8 | IB5, IP2, T3, TP33 | None | 212 | 242 | 15 kg | 50 kg | C | |
| | | | | III | 4.2, 8 | IB8, IP3, T1, TP33 | None | 213 | 242 | 25 kg | 100 kg | C | |
| G | Self-heating solid, inorganic, n.o.s. | 4.2 | UN3190 | II | 4.2 | IB6, IP2, T3, TP33 | None | 212 | 241 | 15 kg | 50 kg | C | |
| | | | | III | 4.2 | IB8, IP3, T1, TP33 | None | 213 | 241 | 25 kg | 100 kg | C | |
| G | Self-heating, solid, organic, n.o.s. | 4.2 | UN3088 | II | 4.2 | IB6, IP2, T3, TP33 | None | 212 | 241 | 15 kg | 50 kg | C | |
| | | | | III | 4.2 | IB8, IP3, T1, TP33 | None | 213 | 241 | 25 kg | 100 kg | C | |
| G | Self-heating, solid, oxidizing, n.o.s. | 4.2 | UN3127 | | 4.2, 5.1 | | None | 214 | 214 | Forbidden | Forbidden | | |
| G | Self-heating solid, toxic, inorganic, n.o.s. | 4.2 | UN3191 | II | 4.2, 6.1 | IB5, IP2, T3, TP33 | None | 212 | 242 | 15 kg | 50 kg | C | |
| | | | | III | 4.2, 6.1 | IB8, IP3, T1, TP33 | None | 213 | 242 | 25 kg | 100 kg | C | |
| G | Self-heating, solid, toxic, organic, n.o.s. | 4.2 | UN3128 | II | 4.2, 6.1 | IB5, IP2, T3, TP33 | None | 212 | 242 | 15 kg | 50 kg | C | |
| | | | | III | 4.2, 6.1 | IB8, IP3, T1, TP33 | None | 213 | 242 | 25 kg | 100 kg | C | |
| | *Self-propelled vehicle, see* Engines *or* Batteries *etc* | | | | | | | | | | | | |
| G | Self-reactive liquid type B | 4.1 | UN3221 | II | 4.1 | 53 | None | 224 | None | Forbidden | Forbidden | D | 52, 53 |
| G | Self-reactive liquid type B, temperature controlled | 4.1 | UN3231 | II | 4.1 | 53 | None | 224 | None | Forbidden | Forbidden | D | 2, 52, 53 |
| G | Self-reactive liquid type C | 4.1 | UN3223 | II | 4.1 | | None | 224 | None | 5 L | 10 L | D | 52, 53 |
| G | Self-reactive liquid type C, temperature controlled | 4.1 | UN3233 | II | 4.1 | | None | 224 | None | Forbidden | Forbidden | D | 2, 52, 53 |
| G | Self-reactive liquid type D | 4.1 | UN3225 | II | 4.1 | | None | 224 | None | 5 L | 10 L | D | 52, 53 |
| G | Self-reactive liquid type D, temperature controlled | 4.1 | UN3235 | II | 4.1 | | None | 224 | None | Forbidden | Forbidden | D | 2, 52, 53 |
| G | Self-reactive liquid type E | 4.1 | UN3227 | II | 4.1 | | None | 224 | None | 10 L | 25 L | D | 52, 53 |
| G | Self-reactive liquid type E, temperature controlled | 4.1 | UN3237 | II | 4.1 | | None | 224 | None | Forbidden | Forbidden | D | 2, 52, 53 |
| G | Self-reactive liquid type F | 4.1 | UN3229 | II | 4.1 | | None | 224 | None | 10 L | 25 L | D | 52, 53 |
| G | Self-reactive liquid type F, temperature controlled | 4.1 | UN3239 | II | 4.1 | | None | 224 | None | Forbidden | Forbidden | D | 2, 52, 53 |
| G | Self-reactive solid type B | 4.1 | UN3222 | II | 4.1 | 53 | None | 224 | None | Forbidden | Forbidden | D | 52, 53 |
| G | Self-reactive solid type B, temperature controlled | 4.1 | UN3232 | II | 4.1 | 53 | None | 224 | None | Forbidden | Forbidden | D | 2, 52, 53 |
| G | Self-reactive solid type C | 4.1 | UN3224 | II | 4.1 | | None | 224 | None | 5 kg | 10 kg | D | 52, 53 |
| G | Self-reactive solid type C, temperature controlled | 4.1 | UN3234 | II | 4.1 | | None | 224 | None | Forbidden | Forbidden | D | 2, 52, 53 |
| G | Self-reactive solid type D | 4.1 | UN3226 | II | 4.1 | | None | 224 | None | 5 kg | 10 kg | D | 52, 53 |
| G | Self-reactive solid type D, temperature controlled | 4.1 | UN3236 | II | 4.1 | | None | 224 | None | Forbidden | Forbidden | D | 2, 52, 53 |
| G | Self-reactive solid type E | 4.1 | UN3228 | II | 4.1 | | None | 224 | None | 10 kg | 25 kg | D | 52, 53 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G | Self-reactive solid type E, temperature controlled | 4.1 | UN3238 | II | 4.1 | | None | 224 | None | Forbidden | Forbidden | D | 2, 52, 53 |
| G | Self-reactive solid type F | 4.1 | UN3230 | II | 4.1 | | None | 224 | None | 10 kg | 25 kg | D | 52, 53 |
| G | Self-reactive solid type F, temperature controlled | 4.1 | UN3240 | II | 4.1 | | None | 224 | None | Forbidden | Forbidden | D | 2, 52, 53 |
| | Shale oil | 3 | UN1288 | I | 3 | T11, TP1, TP8, TP27 | None | 201 | 243 | 1 L | 30 L | B | |
| | | | | II | 3 | IB2, T4, TP1, TP8 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *Shaped charges, see* Charges, shaped, *etc* | | | | | | | | | | | | |
| | Signal devices, hand | 1.4G | UN0191 | II | 1.4G | | None | 62 | None | Forbidden | 75 kg | 06 | |
| | Signal devices, hand | 1.4S | UN0373 | II | 1.4S | | None | 62 | None | 25 kg | 100 kg | 05 | |
| | Signals, distress, *ship* | 1.1G | UN0194 | II | 1.1G | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Signals, distress, *ship* | 1.3G | UN0195 | II | 1.3G | | None | 62 | None | Forbidden | 75 kg | 07 | |
| | *Signals, highway, see* Signal devices, hand | | | | | | | | | | | | |
| | Signals, railway track, explosive | 1.1G | UN0192 | II | 1.1G | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Signals, railway track, explosive | 1.4S | UN0193 | II | 1.4S | | None | 62 | None | 25 kg | 100 kg | 05 | |
| | Signals, railway track, explosive | 1.3G | UN0492 | | 1.3G | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Signals, railway track, explosive | 1.4G | UN0493 | | 1.4G | | None | 62 | None | Forbidden | 75 kg | 06 | |
| | *Signals, ship distress, water-activated, see* Contrivances, water-activated, *etc* | | | | | | | | | | | | |
| | Signals, smoke | 1.1G | UN0196 | II | 1.1G | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Signals, smoke | 1.4G | UN0197 | II | 1.4G | | None | 62 | None | Forbidden | 75 kg | 06 | |
| | Signals, smoke | 1.2G | UN0313 | II | 1.2G | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Signals, smoke | 1.3G | UN0487 | II | 1.3G | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Silane | 2.1 | UN2203 | | 2.1 | | None | 302 | None | Forbidden | Forbidden | E | 40, 57, 104 |
| | *Silicofluoric acid, see* Fluorosilicic acid | | | | | | | | | | | | |
| | *Silicon chloride, see* Silicon tetrachloride | | | | | | | | | | | | |
| | Silicon powder, amorphous | 4.1 | UN1346 | III | 4.1 | A1, IB8, IP3, T1, TP33 | None | 213 | 240 | 25 kg | 100 kg | A | 74 |
| | Silicon tetrachloride | 8 | UN1818 | II | 8 | A3, A6, B2, B6, IB2, T7, TP2, TP7 | 154 | 202 | 242 | 1 L | 30 L | C | 40 |
| | Silicon tetrafluoride | 2.3 | UN1859 | | 2.3, 8 | 2 | None | 302 | None | Forbidden | Forbidden | D | 40 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Silver acetylide (dry)* | Forbidden | | | | | | | | | | | |
| | Silver arsenite | 6.1 | UN1683 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | *Silver azide (dry)* | Forbidden | | | | | | | | | | | |
| | *Silver chlorite (dry)* | Forbidden | | | | | | | | | | | |
| | Silver cyanide | 6.1 | UN1684 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 40, 52 |
| | *Silver fulminate (dry)* | Forbidden | | | | | | | | | | | |
| | Silver nitrate | 5.1 | UN1493 | II | 5.1 | IB8, IP4, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | |
| | *Silver oxalate (dry)* | Forbidden | | | | | | | | | | | |
| | *Silver picrate (dry)* | Forbidden | | | | | | | | | | | |
| | Silver picrate, wetted *with not less than 30 percent water, by mass* | 4.1 | UN1347 | I | 4.1 | 23 | None | 211 | None | Forbidden | Forbidden | D | 28, 36 |
| | Sludge, acid | 8 | UN1906 | II | 8 | A3, A7, B2, IB2, N34, T8, TP2, TP12, TP28 | None | 202 | 242 | Forbidden | 30 L | C | 14 |
| D | Smokeless powder for small arms ( *100 pounds or less* ) | 4.1 | NA3178 | I | 4.1 | 16 | None | 171 | None | Forbidden | 7.3 kg | A | |
| | Soda lime *with more than 4 percent sodium hydroxide* | 8 | UN1907 | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | 52. |
| | Sodium | 4.3 | UN1428 | I | 4.3 | A7, A8, A19, A20, B9, B48, B68, IB4, IP1, N34, T9, TP7, TP33, TP46 | None | 211 | 244 | Forbidden | 15 kg | D | 52 |
| | Sodium aluminate, solid | 8 | UN2812 | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | |
| | Sodium aluminate, solution | 8 | UN1819 | II | 8 | B2, IB2, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | A | 52. |
| | | | | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | 52. |
| | Sodium aluminum hydride | 4.3 | UN2835 | II | 4.3 | A8, A19, A20, IB4, T3, TP33 | 151 | 212 | 242 | Forbidden | 50 kg | E | 52 |
| | Sodium ammonium vanadate | 6.1 | UN2863 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Sodium arsanilate | 6.1 | UN2473 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Sodium arsenate | 6.1 | UN1685 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Sodium arsenite, aqueous solutions | 6.1 | UN1686 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | |
| | | | | III | 6.1 | IB3, T4, TP2 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | Sodium arsenite, solid | 6.1 | UN2027 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Sodium azide | 6.1 | UN1687 | II | 6.1 | IB8, IP2, IP4 | 153 | 212 | 242 | 25 kg | 100 kg | A | 36, 52, 91 |
| | *Sodium bifluoride, see* Sodium hydrogendifluoride | | | | | | | | | | | | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Sodium bisulfite, solution, see* Bisulfites, aqueous solutions, n.o.s. | | | | | | | | | | | | |
| | Sodium borohydride | 4.3 | UN1426 | I | 4.3 | N40 | None | 211 | 242 | Forbidden | 15 kg | E | 52 |
| | Sodium borohydride and sodium hydroxide solution, *with not more than 12 percent sodium borohydride and not more than 40 percent sodium hydroxide by mass* | 8 | UN3320 | II | 8 | B2, IB2, N34, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | A | 52 |
| | | | | III | 8 | B2, IB3, N34, T4, TP2 | 154 | 203 | 241 | 5 L | 60 L | A | 52 |
| | Sodium bromate | 5.1 | UN1494 | II | 5.1 | IB8, IP4, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 56, 58 |
| | Sodium cacodylate | 6.1 | UN1688 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 52 |
| | Sodium carbonate peroxyhydrate | 5.1 | UN3378 | II | 5.1 | IB8, IP2, IP4, T3, TP33 | 152 | 212 | 240 | 5 kg | 25 kg | A | 13, 48, 75 |
| | | | | III | 5.1 | IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | 13, 48, 75 |
| | Sodium chlorate | 5.1 | UN1495 | II | 5.1 | A9, IB8, IP4, N34, T3, TP33 | 152 | 212 | 240 | 5 kg | 25 kg | A | 56, 58 |
| | Sodium chlorate, aqueous solution | 5.1 | UN2428 | II | 5.1 | A2, IB2, T4, TP1 | 152 | 202 | 241 | 1 L | 5 L | B | 56, 58, 133 |
| | | | | III | 5.1 | A2, IB2, T4, TP1 | 152 | 203 | 241 | 2.5 L | 30 L | B | 56, 58, 69, 133 |
| | *Sodium chlorate mixed with dinitrotoluene, see* Explosive blasting, type C | | | | | | | | | | | | |
| | Sodium chlorite | 5.1 | UN1496 | II | 5.1 | A9, IB8, IP2, IP4, N34, T3, TP33 | None | 212 | 242 | 5 kg | 25 kg | A | 56, 58 |
| | Sodium chloroacetate | 6.1 | UN2659 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Sodium cuprocyanide, solid | 6.1 | UN2316 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | 52 |
| | Sodium cuprocyanide, solution | 6.1 | UN2317 | I | 6.1 | T14, TP2, TP13 | None | 201 | 243 | 1 L | 30 L | B | 40, 52 |
| | Sodium cyanide, solid | 6.1 | UN1689 | I | 6.1 | B69, B77, IB7, N74, N75, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | B | 52 |
| | Sodium cyanide solution | 6.1 | UN3414 | I | 6.1 | B69, B77, N74, N75, T14, TP2, TP13 | None | 201 | 243 | 1 L | 30 L | B | 52 |
| | | | | II | 6.1 | B69, B77, IB2, N74, N75, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 52 |
| | | | | III | 6.1 | B69, B77, IB3, N74, N75, T7, TP2, TP13, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | 52 |
| | *Sodium dichloroisocyanurate or Sodium dichloro-s-triazinetrione, see* Dichloroisocyanuric acid *etc* | | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Sodium dinitro-o-cresolate, *dry or wetted with less than 15 percent water, by mass* | 1.3C | UN0234 | II | 1.3C | | None | 62 | None | Forbidden | Forbidden | 10 | 5E |
| | Sodium dinitro-o-cresolate, wetted *with not less than 10% water, by mass* | 4.1 | UN3369 | I | 4.1 | 162, A8, A19, N41, N84 | None | 211 | None | 0.5 kg | 0.5 kg | E | 36 |
| | Sodium dinitro-o-cresolate, wetted *with not less than 15 percent water, by mass* | 4.1 | UN1348 | I | 4.1, 6.1 | 23, A8, A19, A20, N41 | None | 211 | None | 1 kg | 15 kg | E | 28, 36 |
| | Sodium dithionite *or* Sodium hydrosulfite | 4.2 | UN1384 | II | 4.2 | A19, A20, IB6, IP2, T3, TP33 | None | 212 | 241 | 15 kg | 50 kg | E | 13 |
| | Sodium fluoride, solid | 6.1 | UN1690 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 52 |
| | Sodium fluoride solution | 6.1 | UN3415 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | 52 |
| | Sodium fluoroacetate | 6.1 | UN2629 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | E | |
| | Sodium fluorosilicate | 6.1 | UN2674 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 52 |
| | *Sodium hydrate, see* Sodium hydroxide, solid | | | | | | | | | | | | |
| | Sodium hydride | 4.3 | UN1427 | I | 4.3 | A19, N40 | None | 211 | 242 | Forbidden | 15 kg | E | 52 |
| | Sodium hydrogendifluoride | 8 | UN2439 | II | 8 | IB8, IP2, IP4, N3, N34, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | 12, 25, 40, 52 |
| | Sodium hydrosulfide, *with less than 25 percent water of crystallization* | 4.2 | UN2318 | II | 4.2 | A7, A19, A20, IB6, IP2, T3, TP33 | None | 212 | 241 | 15 kg | 50 kg | A | 52. |
| | Sodium hydrosulfide *with not less than 25 percent water of crystallization* | 8 | UN2949 | II | 8 | A7, IB8, IP2, IP4, T7, TP2 | 154 | 212 | 240 | 15 kg | 50 kg | A | 52 |
| | Sodium hydrosulfite, *see* Sodium dithionite | | | | | | | | | | | | |
| | Sodium hydroxide, solid | 8 | UN1823 | II | 8 | IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | 52. |
| | Sodium hydroxide solution | 8 | UN1824 | II | 8 | B2, IB2, N34, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | A | 52. |
| | | | | III | 8 | IB3, N34, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | 52. |
| | *Sodium hypochlorite, solution, see* Hypochlorite solutions *etc* | | | | | | | | | | | | |
| | *Sodium metal, liquid alloy, see* Alkali metal alloys, liquid, n.o.s. | | | | | | | | | | | | |
| | Sodium methylate | 4.2 | UN1431 | II | 4.2, 8 | A7, A19, IB5, IP2, T3, TP33 | None | 212 | 242 | 15 kg | 50 kg | B | |
| | Sodium methylate solutions *in alcohol* | 3 | UN1289 | II | 3, 8 | IB2, T7, TP1, TP8 | 150 | 202 | 243 | 1 L | 5 L | B | |
| | | | | III | 3, 8 | B1, IB3, T4, TP1 | 150 | 203 | 242 | 5 L | 60 L | A | |
| | Sodium monoxide | 8 | UN1825 | II | 8 | IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | 52. |
| | Sodium nitrate | 5.1 | UN1498 | III | 5.1 | A1, A29, IB8, IP3, T1, | 152 | 213 | 240 | 25 kg | 100 kg | A | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | TP33 | | | | | | | |
| | Sodium nitrate and potassium nitrate mixtures | 5.1 | UN1499 | III | 5.1 | A1, A29, IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | |
| | Sodium nitrite | 5.1 | UN1500 | III | 5.1, 6.1 | A1, A29, IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | 56, 58 |
| | Sodium pentachlorophenate | 6.1 | UN2567 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Sodium perborate monohydrate | 5.1 | UN3377 | III | 5.1 | IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | 13, 48, 75 |
| | Sodium perchlorate | 5.1 | UN1502 | II | 5.1 | IB6, IP2, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 56, 58 |
| | Sodium permanganate | 5.1 | UN1503 | II | 5.1 | IB6, IP2, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | D | 56, 58, 138 |
| | Sodium peroxide | 5.1 | UN1504 | I | 5.1 | A20, IB5, IP1, N34 | None | 211 | None | Forbidden | 15 kg | B | 13, 52, 66, 75 |
| | Sodium peroxoborate, anhydrous | 5.1 | UN3247 | II | 5.1 | IB8, IP4, T3, TP33 | 152 | 212 | 240 | 5 kg | 25 kg | A | 13, 25 |
| | Sodium persulfate | 5.1 | UN1505 | III | 5.1 | A1, IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | 56, 58 |
| | Sodium phosphide | 4.3 | UN1432 | I | 4.3, 6.1 | A19, N40 | None | 211 | None | Forbidden | 15 kg | E | 40, 52, 85 |
| | Sodium picramate, *dry or wetted with less than 20 percent water, by mass* | 1.3C | UN0235 | II | 1.3C | | None | 62 | None | Forbidden | Forbidden | 10 | 5E |
| | Sodium picramate, wetted *with not less than 20 percent water, by mass* | 4.1 | UN1349 | I | 4.1 | 23, A8, A19, N41 | None | 211 | None | Forbidden | 15 kg | E | 28, 36 |
| | *Sodium picryl peroxide* | Forbidden | | | | | | | | | | | |
| | *Sodium potassium alloys, see* Potassium sodium alloys | | | | | | | | | | | | |
| | *Sodium selenate, see* Selenates *or* Selenites | | | | | | | | | | | | |
| | Sodium sulfide, anhydrous *or* Sodium sulfide *with less than 30 percent water of crystallization* | 4.2 | UN1385 | II | 4.2 | A19, A20, IB6, IP2, N34, T3, TP33 | None | 212 | 241 | 15 kg | 50 kg | A | 52 |
| | Sodium sulfide, hydrated *with not less than 30 percent water* | 8 | UN1849 | II | 8 | IB8, IP2, IP4, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | 52. |
| | Sodium superoxide | 5.1 | UN2547 | I | 5.1 | A20, IB6, IP1, N34 | None | 211 | None | Forbidden | 15 kg | E | 13, 52, 66, 75 |
| | *Sodium tetranitride* | Forbidden | | | | | | | | | | | |
| G | Solids containing corrosive liquid, n.o.s. | 8 | UN3244 | II | 8 | 49, IB5, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | B | 40 |
| G | Solids containing flammable liquid, n.o.s. | 4.1 | UN3175 | II | 4.1 | 47, IB6, IP2, T3, TP33 | 151 | 212 | 240 | 15 kg | 50 kg | B | |
| G | Solids containing toxic liquid, n.o.s. | 6.1 | UN3243 | II | 6.1 | 48, IB2, T2, TP33 | 153 | 212 | 240 | 25 kg | 100 kg | B | 40 |
| | Sounding devices, explosive | 1.2F | UN0204 | II | 1.2F | | None | 62 | None | Forbidden | Forbidden | 08 | |
| | Sounding devices, explosive | 1.1F | UN0296 | II | 1.1F | | None | 62 | None | Forbidden | Forbidden | 08 | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Sounding devices, explosive | 1.1D | UN0374 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Sounding devices, explosive | 1.2D | UN0375 | II | 1.2D | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | *Spirits of salt, see* Hydrochloric acid | | | | | | | | | | | | |
| | *Squibs, see* Igniters *etc* | | | | | | | | | | | | |
| | Stannic chloride, anhydrous | 8 | UN1827 | II | 8 | B2, IB2, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | C | |
| | Stannic chloride pentahydrate | 8 | UN2440 | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | |
| | Stannic phosphide | 4.3 | UN1433 | I | 4.3, 6.1 | A19, N40 | None | 211 | 242 | Forbidden | 15 kg | E | 40, 52, 85 |
| | *Steel swarf, see* Ferrous metal borings, *etc* | | | | | | | | | | | | |
| | Stibine | 2.3 | UN2676 | | 2.3, 2.1 | 1 | None | 304 | None | Forbidden | Forbidden | D | 40 |
| | *Storage batteries, wet, see* Batteries, *wet etc* | | | | | | | | | | | | |
| | Strontium arsenite | 6.1 | UN1691 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Strontium chlorate | 5.1 | UN1506 | II | 5.1 | A1, A9, IB8, IP2, IP4, N34, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 56, 58 |
| | Strontium nitrate | 5.1 | UN1507 | III | 5.1 | A1, A29, IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | |
| | Strontium perchlorate | 5.1 | UN1508 | II | 5.1 | IB6, IP2, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 56, 58 |
| | Strontium peroxide | 5.1 | UN1509 | II | 5.1 | IB6, IP2, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 13, 52, 66, 75 |
| | Strontium phosphide | 4.3 | UN2013 | I | 4.3, 6.1 | A19, N40 | None | 211 | None | Forbidden | 15 kg | E | 40, 52, 85 |
| | Strychnine *or* Strychnine salts | 6.1 | UN1692 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | 40 |
| | Styphnic acid, *see* Trinitroresorcinol, *etc* | | | | | | | | | | | | |
| | Styrene monomer, stabilized | 3 | UN2055 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| G | Substances, explosive, n.o.s | 1.1L | UN0357 | II | 1.1L | | None | 62 | None | Forbidden | Forbidden | | 8E, 14E, 15E, 17E. |
| G | Substances, explosive, n.o.s | 1.2L | UN0358 | II | 1.2L | | None | 62 | None | Forbidden | Forbidden | | 8E, 14E, 15E, 17E. |
| G | Substances, explosive, n.o.s | 1.3L | UN0359 | II | 1.3L | | None | 62 | None | Forbidden | Forbidden | | 8E, 14E, 15E, 17E. |
| G | Substances, explosive, n.o.s | 1.1A | UN0473 | II | 1.1A | 111 | None | 62 | None | Forbidden | Forbidden | 12 | |
| G | Substances, explosive, n.o.s | 1.1C | UN0474 | II | 1.1C | | None | 62 | None | Forbidden | Forbidden | 10 | |
| G | Substances, explosive, n.o.s | 1.1D | UN0475 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G | Substances, explosive, n.o.s | 1.1G | UN0476 | II | 1.1G | | None | 62 | None | Forbidden | Forbidden | 08 | |
| G | Substances, explosive, n.o.s | 1.3C | UN0477 | II | 1.3C | | None | 62 | None | Forbidden | Forbidden | 10 | |
| G | Substances, explosive, n.o.s | 1.3G | UN0478 | II | 1.3G | | None | 62 | None | Forbidden | Forbidden | 08 | |
| G | Substances, explosive, n.o.s | 1.4C | UN0479 | II | 1.4C | | None | 62 | None | Forbidden | 75 kg | 09 | |
| G | Substances, explosive, n.o.s | 1.4D | UN0480 | II | 1.4D | | None | 62 | None | Forbidden | 75 kg | 09 | |
| G | Substances, explosive, n.o.s | 1.4S | UN0481 | II | 1.4S | | None | 62 | None | 25 kg | 75 kg | 05 | |
| G | Substances, explosive, n.o.s | 1.4G | UN0485 | II | 1.4G | | None | 62 | None | Forbidden | 75 kg | 08 | |
| G | Substances, explosive, very insensitive, n.o.s. *or* Substances,EVI, n.o.s. | 1.5D | UN0482 | II | 1.5D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Substituted nitrophenol pesticides, liquid, flammable, toxic, *flash point less than 23 degrees C* | 3 | UN2780 | I | 3, 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | Forbidden | 30 L | B | 40 |
| | | | | II | 3, 6.1 | IB2, T11, TP2, TP13, TP27 | 150 | 202 | 243 | 1 L | 60 L | B | 40 |
| | Substituted nitrophenol pesticides, liquid, toxic | 6.1 | UN3014 | I | 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1 | IB3, T7, TP2, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | 40 |
| | Substituted nitrophenol pesticides, liquid, toxic, flammable, *flash point not less than 23 degrees C* | 6.1 | UN3013 | I | 6.1, 3 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1, 3 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1, 3 | B1, IB3, T7, TP2, TP28 | 153 | 203 | 242 | 60 L | 220 L | A | 40 |
| | Substituted nitrophenol pesticides, solid, toxic | 6.1 | UN2779 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | 40 |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 40 |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 40 |
| | *Sucrose octanitrate (dry)* | Forbidden | | | | | | | | | | | |
| | Sulfamic acid | 8 | UN2967 | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | |
| D | Sulfur | 9 | NA1350 | III | 9 | 30, IB8, IP2 | None | None | 240 | No Limit | No Limit | A | 19, 74 |
| I | Sulfur | 4.1 | UN1350 | III | 4.1 | 30, IB8, IP3, T1, TP33 | None | None | 240 | 25 kg | 100 kg | A | 19, 74. |
| | *Sulfur and chlorate, loose mixtures of* | Forbidden | | | | | | | | | | | |
| | Sulfur chlorides | 8 | UN1828 | I | 8 | 5, A3, A7, A10, B10, B77, N34, T20, TP2, | None | 201 | 243 | Forbidden | 2.5 L | C | 40 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | TP12 | | | | | | | |
| | *Sulfur dichloride, see* Sulfur chlorides | | | | | | | | | | | | |
| | Sulfur dioxide | 2.3 | UN1079 | | 2.3, 8 | 3, B14, T50, TP19 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40 |
| | *Sulfur dioxide solution, see* Sulfurous acid | | | | | | | | | | | | |
| | Sulfur hexafluoride | 2.2 | UN1080 | | 2.2 | | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| D | Sulfur, molten | 9 | NA2448 | III | 9 | 30, IB3, T1, TP3 | None | 213 | 247 | Forbidden | Forbidden | C | 61 |
| I | Sulfur, molten | 4.1 | UN2448 | III | 4.1 | 30, IB1, T1, TP3 | None | 213 | 247 | Forbidden | Forbidden | C | 74 |
| | Sulfur tetrafluoride | 2.3 | UN2418 | | 2.3, 8 | 1 | None | 302 | 245 | Forbidden | Forbidden | D | 40, 52 |
| + | Sulfur trioxide, stabilized | 8 | UN1829 | I | 8, 6.1 | 2, B9, B14, B32, B49, B74, B77, N34, T20, TP4, TP12, TP13, TP25, TP26, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | A | 40 |
| | *Sulfuretted hydrogen, see* Hydrogen sulfide | | | | | | | | | | | | |
| | Sulfuric acid, fuming *with less than 30 percent free sulfur trioxide* | 8 | UN1831 | I | 8 | A3, A7, B84, N34, T20, TP2, TP12, TP13 | None | 201 | 243 | Forbidden | 2.5 L | C | 14, 40 |
| | Sulfuric acid, fuming *with 30 percent or more free sulfur trioxide* | 8 | UN1831 | I | 8, 6.1 | 2, B9, B14, B32, B74, B77, B84, N34, T20, TP2, TP12, TP13 | None | 227 | 244 | Forbidden | Forbidden | C | 14, 40 |
| | Sulfuric acid, spent | 8 | UN1832 | II | 8 | A3, A7, B2, B83, B84, IB2, N34, T8, TP2, TP12 | None | 202 | 242 | Forbidden | 30 L | C | 14 |
| | Sulfuric acid *with more than 51 percent acid* | 8 | UN1830 | II | 8 | A3, A7, B3, B83, B84, IB2, N34, T8, TP2, TP12 | 154 | 202 | 242 | 1 L | 30 L | C | 14 |
| | Sulfuric acid *with not more than 51% acid* | 8 | UN2796 | II | 8 | A3, A7, B2, B15, IB2, N6, N34, T8, TP2, TP12 | 154 | 202 | 242 | 1 L | 30 L | B | |
| | Sulfuric and hydrofluoric acid mixtures, *see* Hydrofluoric and sulfuric acid mixtures | | | | | | | | | | | | |
| | *Sulfuric anhydride, see* Sulfur trioxide, stabilized | | | | | | | | | | | | |
| | Sulfurous acid | 8 | UN1833 | II | 8 | B3, IB2, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | B | 40 |
| + | Sulfuryl chloride | 8 | UN1834 | I | 8, 6.1 | 1, B6, B9, B10, B14, | None | 226 | 244 | Forbidden | Forbidden | C | 40 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | B30, B74, B77, N34, T22, TP2, TP12, TP38, TP44 | | | | | | | |
| | Sulfuryl fluoride | 2.3 | UN2191 | | 2.3 | 4 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40 |
| | Tars, liquid *including road asphalt and oils, bitumen and cut backs* | 3 | UN1999 | II | 3 | 149, B13, IB2, T3, TP3, TP29 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, B13, IB3, T1, TP3 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Tear gas candles | 6.1 | UN1700 | II | 6.1, 4.1 | | None | 340 | None | Forbidden | 50 kg | D | 40 |
| | *Tear gas cartridges, see* Ammunition, tear-producing, *etc* | | | | | | | | | | | | |
| D | Tear gas devices *with more than 2 percent tear gas substances, by mass* | 6.1 | NA1693 | I | 6.1 | | None | 340 | None | Forbidden | Forbidden | D | 40 |
| | | | | II | 6.1 | | None | 340 | None | Forbidden | Forbidden | D | 40 |
| | *Tear gas devices, with not more than 2 percent tear gas substances, by mass, see* Aerosols, *etc* | | | | | | | | | | | | |
| | *Tear gas grenades, see* Tear gas candles | | | | | | | | | | | | |
| G | Tear gas substances, liquid, n.o.s. | 6.1 | UN1693 | I | 6.1 | | None | 201 | None | Forbidden | Forbidden | D | 40 |
| | | | | II | 6.1 | IB2 | None | 202 | None | Forbidden | 5 L | D | 40 |
| G | Tear gas substance, solid, n.o.s. | 6.1 | UN3448 | I | 6.1 | T6, TP33 | None | 211 | 242 | Forbidden | Forbidden | D | 40 |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | None | 212 | 242 | Forbidden | 25 kg | D | 40 |
| | Tellurium compound, n.o.s. | 6.1 | UN3284 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | B | |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | B | |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Tellurium hexafluoride | 2.3 | UN2195 | | 2.3, 8 | 1 | None | 302 | None | Forbidden | Forbidden | D | 40 |
| | Terpene hydrocarbons, n.o.s. | 3 | UN2319 | III | 3 | B1, IB3, T4, TP1, TP29 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Terpinolene | 3 | UN2541 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *Tetraazido benzene quinone* | Forbidden | | | | | | | | | | | |
| | Tetrabromoethane | 6.1 | UN2504 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | 1,1,2,2-Tetrachloroethane | 6.1 | UN1702 | II | 6.1 | IB2, N36, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | 40 |
| | Tetrachloroethylene | 6.1 | UN1897 | III | 6.1 | IB3, N36, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | 40 |
| | Tetraethyl dithiopyrophosphate | 6.1 | UN1704 | II | 6.1 | IB2, T7, TP2 | 153 | 212 | 242 | 25 kg | 100 kg | D | 40 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Tetraethyl silicate | 3 | UN1292 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *Tetraethylammonium perchlorate (dry)* | Forbidden | | | | | | | | | | | |
| | Tetraethylenepentamine | 8 | UN2320 | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | 52. |
| | 1,1,1,2-Tetrafluoroethane *or* Refrigerant gas R 134a | 2.2 | UN3159 | | 2.2 | T50 | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | Tetrafluoroethylene, stabilized | 2.1 | UN1081 | | 2.1 | | 306 | 304 | None | Forbidden | 150 kg | E | 40 |
| | Tetrafluoromethane *or* Refrigerant gas R 14 | 2.2 | UN1982 | | 2.2 | | None | 302 | None | 75 kg | 150 kg | A | |
| | 1,2,3,6-Tetrahydrobenzaldehyde | 3 | UN2498 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Tetrahydrofuran | 3 | UN2056 | II | 3 | IB2, T4, TP1 | None | 202 | 242 | 5 L | 60 L | B | |
| | Tetrahydrofurfurylamine | 3 | UN2943 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Tetrahydrophthalic anhydrides *with more than 0.05 percent of maleic anhydride* | 8 | UN2698 | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | |
| | 1,2,3,6-Tetrahydropyridine | 3 | UN2410 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Tetrahydrothiophene | 3 | UN2412 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Tetramethylammonium hydroxide, solid | 8 | UN3423 | II | 8 | B2, IB8, IP2, IP4, T3, TP33 | 154 | 213 | 240 | 15 kg | 50 kg | A | 52 |
| | Tetramethylammonium hydroxide solution | 8 | UN1835 | II | 8 | B2, IB2, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | A | 52 |
| | | | | III | 8 | B2, IB3, T7, TP2 | 154 | 203 | 241 | 5 L | 60 L | A | 52 |
| | *Tetramethylene diperoxide dicarbamide* | Forbidden | | | | | | | | | | | |
| | Tetramethylsilane | 3 | UN2749 | I | 3 | A7, T14, TP2 | None | 201 | 243 | Forbidden | 30 L | D | |
| | *Tetranitro diglycerin* | Forbidden | | | | | | | | | | | |
| | Tetranitroaniline | 1.1D | UN0207 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| + | Tetranitromethane | 5.1 | UN1510 | I | 5.1, 6.1 | 2, B9, B14, B32, B74, T20, TP2, TP13, TP38, TP44 | None | 227 | None | Forbidden | Forbidden | D | 40, 66 |
| | *2,3,4,6-Tetranitrophenol* | Forbidden | | | | | | | | | | | |
| | *2,3,4,6-Tetranitrophenyl methyl nitramine* | Forbidden | | | | | | | | | | | |
| | *2,3,4,6-Tetranitrophenylnitramine* | Forbidden | | | | | | | | | | | |
| | *Tetranitroresorcinol (dry)* | Forbidden | | | | | | | | | | | |
| | *2,3,5,6-Tetranitroso-1,4-dinitrobenzene* | Forbidden | | | | | | | | | | | |
| | *2,3,5,6-Tetranitroso nitrobenzene (dry)* | Forbidden | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Tetrapropylorthotitanate | 3 | UN2413 | III | 3 | B1, IB3, T4, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Tetrazene, *see* Guanyl nitrosaminoguanyltetrazene | | | | | | | | | | | | |
| | *Tetrazine (dry)* | Forbidden | | | | | | | | | | | |
| | Tetrazol-1-acetic acid | 1.4C | UN0407 | II | 1.4C | | None | 62 | None | Forbidden | 75 kg | 09 | |
| | 1H-Tetrazole | 1.1D | UN0504 | | 1.1D | | None | 62 | None | Forbidden | Forbidden | B | 1E, 5E |
| | *Tetrazolyl azide (dry)* | Forbidden | | | | | | | | | | | |
| | Tetryl, *see* Trinitrophenylmethylnitramine | | | | | | | | | | | | |
| A I W | Textile waste, wet | 4.2 | UN1857 | III | 4.2 | | 151 | 213 | 240 | Forbidden | Forbidden | A | |
| | Thallium chlorate | 5.1 | UN2573 | II | 5.1, 6.1 | IB6, IP2, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 56, 58 |
| | Thallium compounds, n.o.s. | 6.1 | UN1707 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Thallium nitrate | 6.1 | UN2727 | II | 6.1, 5.1 | IB6, IP2, T3, TP33 | 153 | 212 | 242 | 5 kg | 25 kg | A | |
| | 4-Thiapentanal | 6.1 | UN2785 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | D | 25, 49 |
| | Thioacetic acid | 3 | UN2436 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Thiocarbamate pesticide, liquid, flammable, toxic, *flash point less than 23 degrees C* | 3 | UN2772 | I | 3, 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | Forbidden | 30 L | B | 40 |
| | | | | II | 3, 6.1 | IB2, T11, TP13, TP27 | 150 | 202 | 243 | 1 L | 60 L | B | 40 |
| | Thiocarbamate pesticide, liquid, toxic, flammable, *flash point not less than 23 degrees C* | 6.1 | UN3005 | I | 6.1, 3 | T14, TP2, TP13 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1, 3 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1, 3 | IB3, T7, TP2, TP28 | 153 | 203 | 242 | 60 L | 220 L | A | 40 |
| | Thiocarbamate pesticide, liquid, toxic | 6.1 | UN3006 | I | 6.1 | T14, TP2, TP13 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1 | IB3, T7, TP2, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | 40 |
| | Thiocarbamate pesticides, solid, toxic | 6.1 | UN2771 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | 40 |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 40 |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 40 |
| | *Thiocarbonylchloride, see* Thiophosgene | | | | | | | | | | | | |
| | Thioglycol | 6.1 | UN2966 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | |
| | Thioglycolic acid | 8 | UN1940 | II | 8 | A7, B2, IB2, N34, T7, | 154 | 202 | 242 | 1 L | 30 L | A | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | TP2 | | | | | | | |
| | Thiolactic acid | 6.1 | UN2936 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | |
| | Thionyl chloride | 8 | UN1836 | I | 8 | B6, B10, N34, T10, TP2, TP12, TP13 | None | 201 | 243 | Forbidden | Forbidden | C | 40 |
| | Thiophene | 3 | UN2414 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | 40 |
| + | Thiophosgene | 6.1 | UN2474 | II | 6.1 | 2, B9, B14, B32, B74, N33, N34, T20, TP2, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | B | 40, 52 |
| | Thiophosphoryl chloride | 8 | UN1837 | II | 8 | A3, A7, B2, B8, B25, IB2, N34, T7, TP2 | None | 202 | 242 | Forbidden | 30 L | C | 40 |
| | Thiourea dioxide | 4.2 | UN3341 | II | 4.2 | IB6, IP2, T3, TP33 | None | 212 | 241 | 15 kg | 50 kg | D | |
| | | | | III | 4.2 | IB8, IP3, T1, TP33 | None | 213 | 241 | 25 kg | 100 kg | D | |
| | *Tin chloride, fuming, see* Stannic chloride, anhydrous | | | | | | | | | | | | |
| | *Tin perchloride or Tin tetrachloride, see* Stannic chloride, anhydrous | | | | | | | | | | | | |
| | Tinctures, medicinal | 3 | UN1293 | II | 3 | IB2, T4, TP1, TP8 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *Tinning flux, see* Zinc chloride | | | | | | | | | | | | |
| | Tires and tire assemblies, *see* Air, compressed *or* Nitrogen, compressed | | | | | | | | | | | | |
| | Titanium disulphide | 4.2 | UN3174 | III | 4.2 | IB8, IP3, T1, TP33 | None | 213 | 241 | 25 kg | 100 kg | A | |
| | Titanium hydride | 4.1 | UN1871 | II | 4.1 | A19, A20, IB4, N34, T3, TP33 | None | 212 | 241 | 15 kg | 50 kg | E | |
| | Titanium powder, dry | 4.2 | UN2546 | I | 4.2 | | None | 211 | 242 | Forbidden | Forbidden | D | |
| | | | | II | 4.2 | A19, A20, IB6, IP2, N5, N34, T3, TP33 | None | 212 | 241 | 15 kg | 50 kg | D | |
| | | | | III | 4.2 | IB8, IP3, T1, TP33 | None | 213 | 241 | 25 kg | 100 kg | D | |
| | Titanium powder, wetted *with not less than 25 percent water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns* | 4.1 | UN1352 | II | 4.1 | A19, A20, IB6, IP2, N34, T3, TP33 | None | 212 | 240 | 15 kg | 50 kg | E | 74 |
| | Titanium sponge granules *or* Titanium sponge powders | 4.1 | UN2878 | III | 4.1 | A1, IB8, IP3, T1, TP33 | None | 213 | 240 | 25 kg | 100 kg | D | 74 |
| + | Titanium tetrachloride | 8 | UN1838 | II | 8, 6.1 | 2, B7, B9, B14, B32, B74, B77, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | C | 40 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Titanium trichloride mixtures | 8 | UN2869 | II | 8 | A7, IB8, IP2, IP4, N34, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | 40 |
| | | | | III | 8 | A7, IB8, IP3, N34, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | 40 |
| | Titanium trichloride, pyrophoric *or* Titanium trichloride mixtures, pyrophoric | 4.2 | UN2441 | I | 4.2, 8 | N34 | None | 181 | 244 | Forbidden | Forbidden | D | 40 |
| | *TNT mixed with aluminum, see* Tritonal | | | | | | | | | | | | |
| | TNT, *see* Trinitrotoluene, *etc* | | | | | | | | | | | | |
| | Toluene | 3 | UN1294 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| + | Toluene diisocyanate | 6.1 | UN2078 | II | 6.1 | IB2, T7, TP2, TP13 | 153 | 202 | 243 | 5 L | 60 L | D | 25, 40 |
| | *Toluene sulfonic acid, see* Alkyl, *or* Aryl sulfonic acid *etc* | | | | | | | | | | | | |
| + | Toluidines, liquid | 6.1 | UN1708 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | |
| | Toluidines, solid | 6.1 | UN3451 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | 2,4-Toluylenediamine, solid *or* 2,4-Toluenediamine, solid | 6.1 | UN1709 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | 2,4-Toluylenediamine solution *or* 2,4-Toluenediamine solution | 6.1 | UN3418 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | Torpedoes, liquid fueled, *with inert head* | 1.3J | UN0450 | II | 1.3J | | | 62 | None | Forbidden | Forbidden | 04 | 23E |
| | Torpedoes, liquid fueled, *with or without bursting charge* | 1.1J | UN0449 | II | 1.1J | | | 62 | None | Forbidden | Forbidden | 04 | 23E |
| | Torpedoes *with bursting charge* | 1.1E | UN0329 | II | 1.1E | | | 62 | None | Forbidden | Forbidden | 03 | |
| | Torpedoes *with bursting charge* | 1.1F | UN0330 | II | 1.1F | | | 62 | None | Forbidden | Forbidden | 08 | |
| | Torpedoes *with bursting charge* | 1.1D | UN0451 | II | 1.1D | | | 62 | None | Forbidden | Forbidden | 03 | |
| G | Toxic by inhalation liquid, n.o.s. *with an inhalation toxicity lower than or equal to 200 ml/m3 and saturated vapor concentration greater than or equal to 500 LC50* | 6.1 | UN3381 | I | 6.1 | 1, B9, B14, B30, B72, T22, TP2, TP13, TP27, TP38, TP44 | None | 226 | 244 | Forbidden | Forbidden | D | 40 |
| G | Toxic by inhalation liquid, n.o.s. *with an inhalation toxicity lower than or equal to 1000ml/m3 and saturated vapor concentration greater than or equal to 10 LC50* | 6.1 | UN3382 | I | 6.1 | 2, B9, B14, B32, B74, T20, TP2, TP13, TP27, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 40 |
| G | Toxic by inhalation liquid, flammable, n.o.s. *with an inhalation toxicity lower than or equal to 200 ml/m3 and saturated vapor concentration greater than or equal to 500 LC50* | 6.1 | UN3383 | I | 6.1, 3 | 1, B9, B14, B30, B72, T22, TP2, TP13, TP27, TP38, TP44 | None | 226 | 244 | Forbidden | Forbidden | D | 40 |
| G | Toxic by inhalation liquid, flammable, n.o.s. *with an inhalation toxicity lower than or equal to 1000 ml/m3 and saturated vapor concentration greater than or equal to 10 LC50* | 6.1 | UN3384 | I | 6.1, 3 | 2, B9, B14, B32, B74, T20, TP2, TP13, TP27, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 40 |
| G | Toxic by inhalation liquid, water-reactive, n.o.s. *with an inhalation* | 6.1 | UN3385 | I | 6.1, 4.3 | 1, B9, B14, B30, B72, | None | 226 | 244 | Forbidden | Forbidden | D | 40 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *toxicity lower than or equal to 200 ml/m3 and saturated vapor concentration greater than or equal to 500 LC50* | | | | | T22, TP2, TP13, TP38, TP44 | | | | | | | |
| G | Toxic by inhalation liquid, water-reactive, n.o.s. *with an inhalation toxicity lower than or equal to 1000 ml/m3 and saturated vapor concentration greater than or equal to 10 LC50* | 6.1 | UN3386 | I | 6.1, 4.3 | 2, B9, B14, B32, B74, T20, TP2, TP13, TP38, TP44 | None | 227 | 244 | Forbidden | Forbidden | D | 40 |
| G | Toxic by inhalation liquid, oxidizing, n.o.s. *with an inhalation toxicity lower than or equal to 200 ml/m3 and saturated vapor concentration greater than or equal to 500 LC50* | 6.1 | UN3387 | I | 6.1, 5.1 | 1, B9, B14, B30, B72, T22, TP2, TP13, TP38, TP44 | None | 226 | 244 | Forbidden | Forbidden | D | 40 |
| G | Toxic by inhalation liquid, oxidizing, n.o.s. *with an inhalation toxicity lower than or equal to 1000 ml/m3 and saturated vapor concentration greater than or equal to 10 LC50* | 6.1 | UN3388 | I | 6.1, 5.1 | 2, B9, B14, B32, T20, TP2, TP13, TP38, TP44 | None | 227 | 244 | Forbidden | Forbidden | D | 40 |
| G | Toxic by inhalation liquid, corrosive, n.o.s. *with an inhalation toxicity lower than or equal to 200 ml/m3 and saturated vapor concentration greater than or equal to 500 LC50* | 6.1 | UN3389 | I | 6.1, 8 | 1, B9, B14, B30, B72, T22, TP2, TP13, TP27, TP38, TP44 | None | 226 | 244 | Forbidden | Forbidden | D | 40 |
| G | Toxic by inhalation liquid, corrosive, n.o.s. *with an inhalation toxicity lower than or equal to 1000 ml/m3 and saturated vapor concentration greater than or equal to 10 LC50* | 6.1 | UN3390 | I | 6.1, 8 | 2, B9, B14, B32, B74, T20, TP2, TP13, TP27, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 40 |
| G | Toxic liquid, corrosive, inorganic, n.o.s. | 6.1 | UN3289 | I | 6.1, 8 | T14, TP2, TP13, TP27 | None | 201 | 243 | 0.5 L | 2.5 L | A | |
| | | | | II | 6.1, 8 | IB2, T11, TP2, TP27 | 153 | 202 | 243 | 1 L | 30 L | A | |
| G | Toxic liquid, inorganic, n.o.s. | 6.1 | UN3287 | I | 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | A | |
| | | | | II | 6.1 | IB2, T11, TP2, TP27 | 153 | 202 | 243 | 5 L | 60 L | A | |
| | | | | III | 6.1 | IB3, T7, TP1, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | |
| G | Toxic liquids, corrosive, organic, n.o.s. | 6.1 | UN2927 | I | 6.1, 8 | T14, TP2, TP13, TP27 | None | 201 | 243 | 0.5 L | 2.5 L | B | 40 |
| | | | | II | 6.1, 8 | IB2, T11, TP2, TP27 | 153 | 202 | 243 | 1 L | 30 L | B | 40 |
| G | Toxic liquids, flammable, organic, n.o.s. | 6.1 | UN2929 | I | 6.1, 3 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1, 3 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| G | Toxic, liquids, organic, n.o.s. | 6.1 | UN2810 | I | 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1 | IB3, T7, TP1, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | 40 |
| G | Toxic liquids, oxidizing, n.o.s. | 6.1 | UN3122 | I | 6.1, 5.1 | A4 | None | 201 | 243 | Forbidden | 2.5 L | C | |
| | | | | II | 6.1, 5.1 | IB2 | 153 | 202 | 243 | 1 L | 5 L | C | |
| G | Toxic liquids, water-reactive, n.o.s. | 6.1 | UN3123 | I | 6.1, 4.3 | A4 | None | 201 | 243 | Forbidden | 1 L | E | 40 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | II | 6.1, 4.3 | IB2 | None | 202 | 243 | 1 L | 5 L | E | 40 |
| G | Toxic solid, corrosive, inorganic, n.o.s. | 6.1 | UN3290 | I | 6.1, 8 | IB7, T6, TP33 | None | 211 | 242 | 1 kg | 25 kg | A | |
| | | | | II | 6.1, 8 | IB6, IP2, T3, TP33 | 153 | 212 | 242 | 15 kg | 50 kg | A | |
| G | Toxic solid, inorganic, n.o.s. | 6.1 | UN3288 | I | 6.1 | IB7, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| G | Toxic solids, corrosive, organic, n.o.s. | 6.1 | UN2928 | I | 6.1, 8 | IB7, T6, TP33 | None | 211 | 242 | 1 kg | 25 kg | B | 40 |
| | | | | II | 6.1, 8 | IB6, IP2, T3, TP33 | 153 | 212 | 242 | 15 kg | 50 kg | B | 40 |
| G | Toxic solids, flammable, organic, n.o.s. | 6.1 | UN2930 | I | 6.1, 4.1 | IB6, T6, TP33 | None | 211 | 242 | 1 kg | 15 kg | B | |
| | | | | II | 6.1, 4.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 15 kg | 50 kg | B | |
| G | Toxic solids, organic, n.o.s. | 6.1 | UN2811 | I | 6.1 | IB7, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | B | |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | B | |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| G | Toxic solids, oxidizing, n.o.s. | 6.1 | UN3086 | I | 6.1, 5.1 | T6, TP33 | None | 211 | 242 | 1 kg | 15 kg | C | |
| | | | | II | 6.1, 5.1 | IB6, IP2, T3, TP33 | 153 | 212 | 242 | 15 kg | 50 kg | C | |
| G | Toxic solids, self-heating, n.o.s. | 6.1 | UN3124 | I | 6.1, 4.2 | A5, T6, TP33 | None | 211 | 242 | 5 kg | 15 kg | D | 40 |
| | | | | II | 6.1, 4.2 | IB6, IP2, T3, TP33 | None | 212 | 242 | 15 kg | 50 kg | D | 40 |
| G | Toxic solids, water-reactive, n.o.s. | 6.1 | UN3125 | I | 6.1, 4.3 | A5, T6, TP33 | None | 211 | 242 | 5 kg | 15 kg | D | 40 |
| | | | | II | 6.1, 4.3 | IB6, IP2, T3, TP33 | 153 | 212 | 242 | 15 kg | 50 kg | D | 40 |
| G | Toxins, extracted from living sources, liquid, n.o.s. | 6.1 | UN3172 | I | 6.1 | 141 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1 | 141, IB2 | None | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1 | 141, IB3 | 153 | 203 | 241 | 60 L | 220 L | B | 40 |
| G | Toxins, extracted from living sources, solid, n.o.s. | 6.1 | UN3462 | I | 6.1 | 141, IB7, IP1, T6, TP33 | None | 211 | 243 | 5 kg | 50 kg | B | |
| | | | | II | 6.1 | 141, IB8, IP2, IP4, T3 TP33 | None | 212 | 243 | 25 kg | 100 kg | B | |
| | | | | III | 6.1 | 141, IB8, IP3, T1 TP33 | 153 | 213 | 241 | 100 kg | 200 kg | A | |
| D | Toy Caps | 1.4S | NA0337 | II | 1.4S | | None | 62 | None | 25 kg | 100 kg | 05 | |
| | Tracers for ammunition | 1.3G | UN0212 | II | 1.3G | | None | 62 | None | Forbidden | Forbidden | 07 | |
| | Tracers for ammunition | 1.4G | UN0306 | II | 1.4G | | None | 62 | None | Forbidden | 75 kg | 06 | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Tractors, see* Vehicle, *etc* | | | | | | | | | | | | |
| | *Tri-(b-nitroxyethyl) ammonium nitrate* | Forbidden | | | | | | | | | | | |
| | Triallyl borate | 6.1 | UN2609 | III | 6.1 | IB3 | 153 | 203 | 241 | 60 L | 220 L | A | 13 |
| | Triallylamine | 3 | UN2610 | III | 3, 8 | B1, IB3, T4, TP1 | None | 203 | 242 | 5 L | 60 L | A | 40 |
| | Triazine pesticides, liquid, flammable, toxic, *flash point less than 23 degrees C* | 3 | UN2764 | I | 3, 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | Forbidden | 30 L | B | 40 |
| | | | | II | 3, 6.1 | IB2, T11, TP2, TP13, TP27 | 150 | 202 | 243 | 1 L | 60 L | B | 40 |
| | Triazine pesticides, liquid, toxic | 6.1 | UN2998 | I | 6.1 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1 | IB3, T7, TP2, TP28 | 153 | 203 | 241 | 60 L | 220 L | A | 40 |
| | Triazine pesticides, liquid, toxic, flammable, *flash point not less than 23 degrees C* | 6.1 | UN2997 | I | 6.1, 3 | T14, TP2, TP13, TP27 | None | 201 | 243 | 1 L | 30 L | B | 40 |
| | | | | II | 6.1, 3 | IB2, T11, TP2, TP13, TP27 | 153 | 202 | 243 | 5 L | 60 L | B | 40 |
| | | | | III | 6.1, 3 | IB3, T7, TP2, TP28 | 153 | 203 | 242 | 60 L | 220 L | A | 40 |
| | Triazine pesticides, solid, toxic | 6.1 | UN2763 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | 40 |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | 40 |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 40 |
| | Tributylamine | 6.1 | UN2542 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | |
| | Tributylphosphane | 4.2 | UN3254 | I | 4.2 | T21, TP7, TP33 | None | 211 | 242 | Forbidden | Forbidden | D | 136 |
| | *Trichloro-s-triazinetrione dry, with more than 39 percent available chlorine, see* Trichloroisocyanuric acid, dry | | | | | | | | | | | | |
| | Trichloroacetic acid | 8 | UN1839 | II | 8 | A7, IB8, IP2, IP4, N34, T3, TP33 | 154 | 212 | 240 | 15 kg | 50 kg | A | |
| | Trichloroacetic acid, solution | 8 | UN2564 | II | 8 | A3, A6, A7, B2, IB2, N34, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | B | |
| | | | | III | 8 | A3, A6, A7, IB3, N34, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | B | 8 |
| + | Trichloroacetyl chloride | 8 | UN2442 | II | 8, 6.1 | 2, B9, B14, B32, B74, N34, T20, TP2, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 40 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Trichlorobenzenes, liquid | 6.1 | UN2321 | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | Trichlorobutene | 6.1 | UN2322 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | 25, 40 |
| | 1,1,1-Trichloroethane | 6.1 | UN2831 | III | 6.1 | IB3, N36, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | 40 |
| | Trichloroethylene | 6.1 | UN1710 | III | 6.1 | IB3, N36, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | 40 |
| | Trichloroisocyanuric acid, dry | 5.1 | UN2468 | II | 5.1 | IB8, IP4, T3, TP33 | 152 | 212 | 240 | 5 kg | 25 kg | A | 13 |
| | *Trichloromethyl perchlorate* | Forbidden | | | | | | | | | | | |
| | Trichlorosilane | 4.3 | UN1295 | I | 4.3, 3, 8 | N34, T14, TP2, TP7, TP13 | None | 201 | 244 | Forbidden | Forbidden | D | 21, 28, 40, 49, 100 |
| | Tricresyl phosphate *with more than 3 percent ortho isomer* | 6.1 | UN2574 | II | 6.1 | A3, IB2, N33, N34, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | |
| | Triethyl phosphite | 3 | UN2323 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Triethylamine | 3 | UN1296 | II | 3, 8 | IB2, T7, TP1 | 150 | 202 | 243 | 1 L | 5 L | B | 40 |
| | Triethylenetetramine | 8 | UN2259 | II | 8 | B2, IB2, T7, TP2 | 154 | 202 | 242 | 1 L | 30 L | B | 40, 52 |
| | Trifluoroacetic acid | 8 | UN2699 | I | 8 | A3, A6, A7, B4, N3, N34, N36, T10, TP2, TP12 | None | 201 | 243 | 0.5 L | 2.5 L | B | 12, 40 |
| | Trifluoroacetyl chloride | 2.3 | UN3057 | | 2.3, 8 | 2, B7, B9, B14, T50, TP21 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40 |
| | Trifluorochloroethylene, stabilized | 2.3 | UN1082 | | 2.3, 2.1 | 3, B14, T50 | None | 304 | 314, 315 | Forbidden | Forbidden | D | 40 |
| | Trifluoromethane *or* Refrigerant gas R 23 | 2.2 | UN1984 | | 2.2 | | 306 | 304 | 314, 315 | 75 kg | 150 kg | A | |
| | Trifluoromethane, refrigerated liquid | 2.2 | UN3136 | | 2.2 | T75, TP5 | 306 | None | 314, 315 | 50 kg | 500 kg | D | |
| | 1,1,1-Trifluoroethane *or* Refrigerant gas, R 143a | 2.1 | UN2035 | | 2.1 | T50 | 306 | 304 | 314, 315 | Forbidden | 150 kg | B | 40 |
| | 2-Trifluoromethylaniline | 6.1 | UN2942 | III | 6.1 | IB3 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | 3-Trifluoromethylaniline | 6.1 | UN2948 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | 40 |
| | *Triformoxime trinitrate* | Forbidden | | | | | | | | | | | |
| | Triisobutylene | 3 | UN2324 | III | 3 | B1, IB3, T4, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Triisopropyl borate | 3 | UN2616 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | A | |
| | | | | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D | Trimethoxysilane | 6.1 | NA9269 | I | 6.1, 3 | 2, B9, B14, B32, B74, T20, TP4, TP12, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | E | 40 |
| | Trimethyl borate | 3 | UN2416 | II | 3 | IB2, T7, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Trimethyl phosphite | 3 | UN2329 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | *1,3,5-Trimethyl-2,4,6-trinitrobenzene* | Forbidden | | | | | | | | | | | |
| | Trimethylacetyl chloride | 6.1 | UN2438 | I | 6.1, 8, 3 | 2, B3, B9, B14, B32, B74, N34, T20, TP2, TP13, TP38, TP45 | None | 227 | 244 | Forbidden | Forbidden | D | 25, 40 |
| | Trimethylamine, anhydrous | 2.1 | UN1083 | | 2.1 | N87, T50 | 306 | 304 | 314, 315 | Forbidden | 150 kg | B | 40 |
| | Trimethylamine, aqueous solutions *with not more than 50 percent trimethylamine by mass* | 3 | UN1297 | I | 3, 8 | T11, TP1 | None | 201 | 243 | 0.5 L | 2.5 L | D | 40, 135 |
| | | | | II | 3, 8 | B1, IB2, T7, TP1 | 150 | 202 | 243 | 1 L | 5 L | B | 40, 41 |
| | | | | III | 3, 8 | B1, IB3, T7, TP1 | 150 | 203 | 242 | 5 L | 60 L | A | 40, 41 |
| | 1,3,5-Trimethylbenzene | 3 | UN2325 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Trimethylchloro-silane | 3 | UN1298 | II | 3, 8 | A3, A7, B77, IB2, N34, T7, TP2, TP13 | None | 202 | 243 | 1 L | 5 L | E | 40. |
| | Trimethylcyclohexylamine | 8 | UN2326 | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | |
| | *Trimethylene glycol diperchlorate* | Forbidden | | | | | | | | | | | |
| | Trimethylhexamethylene diisocyanate | 6.1 | UN2328 | III | 6.1 | IB3, T4, TP2, TP13 | 153 | 203 | 241 | 60 L | 220 L | B | |
| | Trimethylhexamethylenediamines | 8 | UN2327 | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | |
| | *Trimethylol nitromethane trinitrate* | Forbidden | | | | | | | | | | | |
| | Trinitro-meta-cresol | 1.1D | UN0216 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | 5E |
| | *2,4,6-Trinitro-1,3-diazobenzene* | Forbidden | | | | | | | | | | | |
| | *2,4,6-Trinitro-1,3,5-triazido benzene (dry)* | Forbidden | | | | | | | | | | | |
| | *Trinitroacetic acid* | Forbidden | | | | | | | | | | | |
| | *Trinitroacetonitrile* | Forbidden | | | | | | | | | | | |
| | *Trinitroamine cobalt* | Forbidden | | | | | | | | | | | |
| | Trinitroaniline *or* Picramide | 1.1D | UN0153 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Trinitroanisole | 1.1D | UN0213 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Trinitrobenzene, wetted, *with not less than 10% water, by mass* | 4.1 | UN3367 | I | 4.1 | 162, A8, A19, N41, | None | 211 | None | 0.5 kg | 0.5 kg | E | 36 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | N84 | | | | | | | |
| | Trinitrobenzene, *dry or wetted with less than 30 percent water, by mass* | 1.1D | UN0214 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Trinitrobenzene, wetted *with not less than 30 percent water, by mass* | 4.1 | UN1354 | I | 4.1 | 23, A2, A8, A19, N41 | None | 211 | None | 0.5 kg | 0.5 kg | E | 28 |
| | Trinitrobenzenesulfonic acid | 1.1D | UN0386 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | 5E |
| | Trinitrobenzoic acid, *dry or wetted with less than 30 percent water, by mass* | 1.1D | UN0215 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Trinitrobenzoic acid, wetted *with not less than 10% water by mass* | 4.1 | UN3368 | I | 4.1 | 162, A8, A19, N41, N84 | None | 211 | None | 0.5 kg | 0.5 kg | E | 36 |
| | Trinitrobenzoic acid, wetted *with not less than 30 percent water, by mass* | 4.1 | UN1355 | I | 4.1 | 23, A2, A8, A19, N41 | None | 211 | None | 0.5 kg | 0.5 kg | E | 28 |
| | Trinitrochlorobenzene *or* Picryl chloride | 1.1D | UN0155 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Trinitrochlorobenzene (picryl chloride), wetted, *with not less than 10% water by mass* | 4.1 | UN3365 | I | 4.1 | 162, A8, A19, N41, N84 | None | 211 | None | 0.5 kg | 0.5 kg | E | 36 |
| | *Trinitroethanol* | Forbidden | | | | | | | | | | | |
| | *Trinitroethylnitrate* | Forbidden | | | | | | | | | | | |
| | Trinitrofluorenone | 1.1D | UN0387 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | *Trinitromethane* | Forbidden | | | | | | | | | | | |
| | *1,3,5-Trinitronaphthalene* | Forbidden | | | | | | | | | | | |
| | Trinitronaphthalene | 1.1D | UN0217 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Trinitrophenetole | 1.1D | UN0218 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Trinitrophenol (picric acid), wetted, *with not less than 10 percent water by mass* | 4.1 | UN3364 | I | 4.1 | 162, A8, A19, N41, N84 | None | 211 | None | 0.5 kg | 0.5 kg | E | 36 |
| | Trinitrophenol *or* Picric acid, *dry or wetted with less than 30 percent water, by mass* | 1.1D | UN0154 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | 5E |
| | Trinitrophenol, wetted *with not less than 30 percent water, by mass* | 4.1 | UN1344 | I | 4.1 | 23, A8, A19, N41 | None | 211 | None | 1 kg | 15 kg | E | 28, 36 |
| | *2,4,6-Trinitrophenyl guanidine (dry)* | Forbidden | | | | | | | | | | | |
| | *2,4,6-Trinitrophenyl nitramine* | Forbidden | | | | | | | | | | | |
| | *2,4,6-Trinitrophenyl trimethylol methyl nitramine trinitrate (dry)* | Forbidden | | | | | | | | | | | |
| | Trinitrophenylmethylnitramine *or* Tetryl | 1.1D | UN0208 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Trinitroresorcinol *or* Styphnic acid, *dry or wetted with less than 20 percent water, or mixture of alcohol and water, by mass* | 1.1D | UN0219 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | 5E |
| | Trinitroresorcinol, wetted *or* Styphnic acid, wetted *with not less than 20 percent water, or mixture of alcohol and water by mass* | 1.1D | UN0394 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | 5E |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *2,4,6-Trinitroso-3-methyl nitraminoanisole* | Forbidden | | | | | | | | | | | |
| | *Trinitrotetramine cobalt nitrate* | Forbidden | | | | | | | | | | | |
| | Trinitrotoluene and Trinitrobenzene mixtures *or* TNT and trinitrobenzene mixtures *or* TNT and hexanitrostilbene mixtures *or* Trinitrotoluene and hexanitrostilnene mixtures | 1.1D | UN0388 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Trinitrotoluene mixtures containing Trinitrobenzene and Hexanitrostilbene *or* TNT mixtures containing trinitrobenzene and hexanitrostilbene | 1.1D | UN0389 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Trinitrotoluene *or* TNT, *dry or wetted with less than 30 percent water, by mass* | 1.1D | UN0209 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Trinitrotoluene (TNT), wetted, *with not less than 10 percent water by mass* | 4.1 | UN3366 | I | 4.1 | 162, A8, A19, N41, N84 | None | 211 | None | 0.5 kg | 0.5 kg | E | 36 |
| | Trinitrotoluene, wetted *with not less than 30 percent water, by mass* | 4.1 | UN1356 | I | 4.1 | 23, A2, A8, A19, N41 | None | 211 | None | 0.5 kg | 0.5 kg | E | 28 |
| | Tripropylamine | 3 | UN2260 | III | 3, 8 | B1, IB3, T4, TP1 | 150 | 203 | 242 | 5 L | 60 L | A | 40 |
| | Tripropylene | 3 | UN2057 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Tris-(1-aziridinyl)phosphine oxide, solution | 6.1 | UN2501 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | |
| | | | | III | 6.1 | IB3, T4, TP1 | 153 | 203 | 241 | 60 L | 220 L | A | |
| | *Tris, bis-bifluoroamino diethoxy propane (TVOPA)* | Forbidden | | | | | | | | | | | |
| | Tritonal | 1.1D | UN0390 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Tungsten hexafluoride | 2.3 | UN2196 | | 2.3, 8 | 2, N86 | None | 338 | None | Forbidden | Forbidden | D | 40 |
| | Turpentine | 3 | UN1299 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Turpentine substitute | 3 | UN1300 | I | 3 | T11, TP1, TP8, TP27 | None | 201 | 243 | 1 L | 30 L | B | |
| | | | | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Undecane | 3 | UN2330 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Urea hydrogen peroxide | 5.1 | UN1511 | III | 5.1, 8 | A1, A7, A29, IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | 13 |
| | Urea nitrate, *dry or wetted with less than 20 percent water, by mass* | 1.1D | UN0220 | II | 1.1D | 119 | None | 62 | None | Forbidden | Forbidden | 10 | |
| | Urea nitrate, wetted, *with not less than 10 percent water by mass* | 4.1 | UN3370 | I | 4.1 | 162, A8, A19, N41, N84 | None | 211 | None | 0.5 kg | 0.5 kg | E | 36 |
| | Urea nitrate, wetted *with not less than 20 percent water, by mass* | 4.1 | UN1357 | I | 4.1 | 23, 39, A8, A19, N41 | None | 211 | None | 1 kg | 15 kg | E | 28, 36 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Urea peroxide, see* Urea hydrogen peroxide | | | | | | | | | | | | |
| | Valeraldehyde | 3 | UN2058 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | *Valeric acid, see* Corrosive liquids, n.o.s. | | | | | | | | | | | | |
| | Valeryl chloride | 8 | UN2502 | II | 8, 3 | A3, A6, A7, B2, IB2, N34, T7, TP2 | 154 | 202 | 243 | 1 L | 30 L | C | 40 |
| | Vanadium compound, n.o.s. | 6.1 | UN3285 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | B | |
| | | | | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | B | |
| | | | | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | |
| | Vanadium oxytrichloride | 8 | UN2443 | II | 8 | A3, A6, A7, B2, B16, IB2, N34, T7, TP2 | 154 | 202 | 242 | Forbidden | 30 L | C | 40 |
| | Vanadium pentoxide, *non-fused form* | 6.1 | UN2862 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 40 |
| | Vanadium tetrachloride | 8 | UN2444 | I | 8 | A3, A6, A7, B4, N34, T10, TP2 | None | 201 | 243 | Forbidden | 2.5 L | C | 40 |
| | Vanadium trichloride | 8 | UN2475 | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | 40 |
| | Vanadyl sulfate | 6.1 | UN2931 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Vehicle, flammable gas powered | 9 | UN3166 | | 9 | 135, 157 | 220 | 220 | 220 | Forbidden | No limit | A | |
| | Vehicle, flammable liquid powered | 9 | UN3166 | | 9 | 135, 157 | 220 | 220 | 220 | No limit | No limit | A | |
| | *Very signal cartridge, see* Cartridges, signal | | | | | | | | | | | | |
| | Vinyl acetate, stabilized | 3 | UN1301 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Vinyl bromide, stabilized | 2.1 | UN1085 | | 2.1 | N86, T50 | 306 | 304 | 314, 315 | Forbidden | 150 kg | B | 40 |
| | Vinyl butyrate, stabilized | 3 | UN2838 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Vinyl chloride, stabilized | 2.1 | UN1086 | | 2.1 | 21, B44, N86, T50 | 306 | 304 | 314, 315 | Forbidden | 150 kg | B | 40 |
| | Vinyl chloroacetate | 6.1 | UN2589 | II | 6.1, 3 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | |
| | Vinyl ethyl ether, stabilized | 3 | UN1302 | I | 3 | A3, T11, TP2 | None | 201 | 243 | 1 L | 30 L | D | |
| | Vinyl fluoride, stabilized | 2.1 | UN1860 | | 2.1 | N86 | 306 | 304 | 314, 315 | Forbidden | 150 kg | E | 40 |
| | Vinyl isobutyl ether, stabilized | 3 | UN1304 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | Vinyl methyl ether, stabilized | 2.1 | UN1087 | | 2.1 | B44, T50 | 306 | 304 | 314, 315 | Forbidden | 150 kg | B | 40 |
| | *Vinyl nitrate polymer* | Forbidden | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Vinylidene chloride, stabilized | 3 | UN1303 | I | 3 | T12, TP2, TP7 | 150 | 201 | 243 | 1 L | 30 L | E | 40 |
| | Vinylpyridines, stabilized | 6.1 | UN3073 | II | 6.1, 3, 8 | IB1, T7, TP2, TP13 | 153 | 202 | 243 | 1 L | 30 L | B | 21, 40, 52. |
| | Vinyltoluenes, stabilized | 3 | UN2618 | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Vinyltrichlorosilane, stabilized | 3 | UN1305 | I | 3, 8 | A3, A7, B6, N34, T11, TP2, TP13 | None | 201 | 243 | Forbidden | 2.5 L | B | 40 |
| | Warheads, rocket *with burster or expelling charge* | 1.4D | UN0370 | II | 1.4D | | None | 62 | None | Forbidden | 75 kg | 02 | |
| | Warheads, rocket *with burster or expelling charge* | 1.4F | UN0371 | II | 1.4F | | None | 62 | None | Forbidden | Forbidden | 08 | |
| | Warheads, rocket *with bursting charge* | 1.1D | UN0286 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 03 | |
| | Warheads, rocket *with bursting charge* | 1.2D | UN0287 | II | 1.2D | | None | 62 | None | Forbidden | Forbidden | 03 | |
| | Warheads, rocket *with bursting charge* | 1.1F | UN0369 | II | 1.1F | | None | 62 | None | Forbidden | Forbidden | 08 | |
| | Warheads, torpedo *with bursting charge* | 1.1D | UN0221 | II | 1.1D | | None | 62 | None | Forbidden | Forbidden | 03 | |
| G | Water-reactive liquid, corrosive, n.o.s. | 4.3 | UN3129 | I | 4.3, 8 | | None | 201 | 243 | Forbidden | 1 L | D | |
| | | | | II | 4.3, 8 | IB1 | None | 202 | 243 | 1 L | 5 L | E | 85 |
| | | | | III | 4.3, 8 | IB2 | None | 203 | 242 | 5 L | 60 L | E | |
| G | Water-reactive liquid, n.o.s. | 4.3 | UN3148 | I | 4.3 | | None | 201 | 244 | Forbidden | 1 L | E | 40 |
| | | | | II | 4.3 | IB1 | None | 202 | 243 | 1 L | 5 L | E | 40 |
| | | | | III | 4.3 | IB2 | None | 203 | 242 | 5 L | 60 L | E | 40 |
| G | Water-reactive liquid, toxic, n.o.s. | 4.3 | UN3130 | I | 4.3, 6.1 | A4 | None | 201 | 243 | Forbidden | 1 L | D | |
| | | | | II | 4.3, 6.1 | IB1 | None | 202 | 243 | 1 L | 5 L | E | 85 |
| | | | | III | 4.3, 6.1 | IB2 | None | 203 | 242 | 5 L | 60 L | E | 85 |
| G | Water-reactive solid, corrosive, n.o.s. | 4.3 | UN3131 | I | 4.3, 8 | IB4, IP1, N40 | None | 211 | 242 | Forbidden | 15 kg | D | |
| | | | | II | 4.3, 8 | IB6, IP2, T3, TP33 | 151 | 212 | 242 | 15 kg | 50 kg | E | 85 |
| | | | | III | 4.3, 8 | IB8, IP4, T1, TP33 | 151 | 213 | 241 | 25 kg | 100 kg | E | 85 |
| G | Water-reactive solid, flammable, n.o.s. | 4.3 | UN3132 | I | 4.3, 4.1 | IB4, N40 | None | 211 | 242 | Forbidden | 15 kg | D | |
| | | | | II | 4.3, 4.1 | IB4, T3, TP33 | 151 | 212 | 242 | 15 kg | 50 kg | E | |
| | | | | III | 4.3, 4.1 | IB6, T1, TP33 | 151 | 213 | 241 | 25 kg | 100 kg | E | |
| G | Water-reactive solid, n.o.s. | 4.3 | UN2813 | I | 4.3 | IB4, N40 | None | 211 | 242 | Forbidden | 15 kg | E | 40 |
| | | | | II | 4.3 | IB7, IP2, T3, TP33 | 151 | 212 | 242 | 15 kg | 50 kg | E | 40 |
| | | | | III | 4.3 | IB8, IP4, T1, TP33 | 151 | 213 | 241 | 25 kg | 100 kg | E | 40 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G | Water-reactive, solid, oxidizing, n.o.s. | 4.3 | UN3133 | II | 4.3, 5.1 | | None | 214 | 214 | Forbidden | Forbidden | E | 40 |
| | | | | III | 4.3, 5.1 | | None | 214 | 214 | Forbidden | Forbidden | E | 40 |
| G | Water-reactive solid, self-heating, n.o.s. | 4.3 | UN3135 | I | 4.3, 4.2 | N40 | None | 211 | 242 | Forbidden | 15 kg | E | |
| | | | | II | 4.3, 4.2 | IB5, IP2, T3, TP33 | None | 212 | 242 | 15 kg | 50 kg | E | |
| | | | | III | 4.3, 4.2 | IB8, IP4, T1, TP33 | None | 213 | 241 | 25 kg | 100 kg | E | |
| G | Water-reactive solid, toxic, n.o.s. | 4.3 | UN3134 | I | 4.3, 6.1 | A8, IB4, IP1, N40 | None | 211 | 242 | Forbidden | 15 kg | D | |
| | | | | II | 4.3, 6.1 | IB5, IP2, T3, TP33 | 151 | 212 | 242 | 15 kg | 50 kg | E | 85 |
| | | | | III | 4.3, 6.1 | IB8, IP4, T1, TP33 | 151 | 213 | 241 | 25 kg | 100 kg | E | 85 |
| | *Wheel chair, electric, see* Battery powered vehicle *or* Battery powered equipment | | | | | | | | | | | | |
| | *White acid, see* Hydrofluoric acid | | | | | | | | | | | | |
| I | White asbestos *(chrysotile, actinolite, anthophyllite, tremolite)* | 9 | UN2590 | III | 9 | 156, IB8, IP2, IP3, T1, TP33 | 155 | 216 | 240 | 200 kg | 200 kg | A | 34, 40 |
| | Wood preservatives, liquid | 3 | UN1306 | II | 3 | 149, IB2, T4, TP1, TP8 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | 40 |
| A I W | Wool waste, wet | 4.2 | UN1387 | III | 4.2 | | 151 | 213 | 240 | Forbidden | Forbidden | A | |
| | Xanthates | 4.2 | UN3342 | II | 4.2 | IB6, IP2, T3, TP33 | None | 212 | 241 | 15 kg | 50 kg | D | 40 |
| | | | | III | 4.2 | IB8, IP3, T1, TP33 | None | 213 | 241 | 25 kg | 100 kg | D | 40 |
| | Xenon | 2.2 | UN2036 | | 2.2 | | 306 | 302 | None | 75 kg | 150 kg | A | |
| | Xenon, refrigerated liquid *(cryogenic liquids)* | 2.2 | UN2591 | | 2.2 | T75, TP5 | 320 | None | None | 50 kg | 500 kg | B | |
| | Xylenes | 3 | UN1307 | II | 3 | IB2, T4, TP1 | 150 | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, IB3, T2, TP1 | 150 | 203 | 242 | 60 L | 220 L | A | |
| | Xylenols, solid | 6.1 | UN2261 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Xylenols, liquid | 6.1 | UN3430 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | |
| | Xylidines, liquid | 6.1 | UN1711 | II | 6.1 | IB2, T7, TP2 | 153 | 202 | 243 | 5 L | 60 L | A | |
| | Xylidines, solid | 6.1 | UN3452 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Xylyl bromide, liquid | 6.1 | UN1701 | II | 6.1 | A3, A6, A7, IB2, N33, T7, TP2, TP13 | None | 340 | None | Forbidden | 60 L | D | 40 |
| | Xylyl bromide, solid | 6.1 | UN3417 | II | 6.1 | A3, A6, A7, IB8, IP2, IP4, N33, T3, TP33 | None | 340 | None | 25 kg | 100 kg | B | 40 |
| | *p-Xylyl diazide* | Forbidden | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Zinc ammonium nitrite | 5.1 | UN1512 | II | 5.1 | IB8, IP4, T3, TP33 | None | 212 | 242 | 5 kg | 25 kg | E | |
| | Zinc arsenate *or* Zinc arsenite *or* Zinc arsenate and zinc arsenite mixtures | 6.1 | UN1712 | II | 6.1 | IB8, IP2, IP4, T3, TP33 | 153 | 212 | 242 | 25 kg | 100 kg | A | |
| | Zinc ashes | 4.3 | UN1435 | III | 4.3 | A1, A19, IB8, IP4, T1, TP33 | 151 | 213 | 241 | 25 kg | 100 kg | A | |
| | *Zinc bisulfite solution, see* Bisulfites, aqueous solutions, n.o.s. | | | | | | | | | | | | |
| | Zinc bromate | 5.1 | UN2469 | III | 5.1 | A1, A29, IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | 56, 58 |
| | Zinc chlorate | 5.1 | UN1513 | II | 5.1 | A9, IB8, IP2, IP4, N34, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 56, 58 |
| | Zinc chloride, anhydrous | 8 | UN2331 | III | 8 | IB8, IP3, T1, TP33 | None | 213 | 240 | 25 kg | 100 kg | A | |
| | Zinc chloride, solution | 8 | UN1840 | III | 8 | IB3, T4, TP1 | 154 | 203 | 241 | 5 L | 60 L | A | |
| | Zinc cyanide | 6.1 | UN1713 | I | 6.1 | IB7, IP1, T6, TP33 | None | 211 | 242 | 5 kg | 50 kg | A | 52 |
| | Zinc dithionite *or* Zinc hydrosulfite | 9 | UN1931 | III | None | IB8, IP3, T1, TP33 | 155 | 204 | 240 | 100 kg | 200 kg | A | 49 |
| | *Zinc ethyl, see* Diethylzinc | | | | | | | | | | | | |
| | Zinc fluorosilicate | 6.1 | UN2855 | III | 6.1 | IB8, IP3, T1, TP33 | 153 | 213 | 240 | 100 kg | 200 kg | A | 52 |
| | Zinc hydrosulfite, *see* Zinc dithionite | | | | | | | | | | | | |
| | *Zinc muriate solution, see* Zinc chloride, solution | | | | | | | | | | | | |
| | Zinc nitrate | 5.1 | UN1514 | II | 5.1 | IB8, IP4, T3, TP33 | 152 | 212 | 240 | 5 kg | 25 kg | A | |
| | Zinc permanganate | 5.1 | UN1515 | II | 5.1 | IB6, IP2, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | D | 56, 58, 138 |
| | Zinc peroxide | 5.1 | UN1516 | II | 5.1 | IB6, IP2, T3, TP33 | 152 | 212 | 242 | 5 kg | 25 kg | A | 13, 52, 66, 75 |
| | Zinc phosphide | 4.3 | UN1714 | I | 4.3, 6.1 | A19, N40 | None | 211 | None | Forbidden | 15 kg | E | 40, 52, 85 |
| | Zinc powder *or* Zinc dust | 4.3 | UN1436 | I | 4.3, 4.2 | A19, IB4, IP1, N40 | None | 211 | 242 | Forbidden | 15 kg | A | 52, 53 |
| | | | | II | 4.3, 4.2 | A19, IB7, IP2, T3, TP33 | None | 212 | 242 | 15 kg | 50 kg | A | 52, 53 |
| | | | | III | 4.3, 4.2 | IB8, IP4, T1, TP33 | None | 213 | 242 | 25 kg | 100 kg | A | 52, 53 |
| | Zinc resinate | 4.1 | UN2714 | III | 4.1 | A1, IB6, T1, TP33 | 151 | 213 | 240 | 25 kg | 100 kg | A | |
| | *Zinc selenate, see* Selenates *or* Selenites | | | | | | | | | | | | |
| | *Zinc selenite, see* Selenates *or* Selenites | | | | | | | | | | | | |
| | *Zinc silicofluoride, see* Zinc fluorosilicate | | | | | | | | | | | | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Zirconium, dry, *coiled wire, finished metal sheets, strip (thinner than 254 microns but not thinner than 18 microns)* | 4.1 | UN2858 | III | 4.1 | A1 | 151 | 213 | 240 | 25 kg | 100 kg | A | |
| | Zirconium, dry, *finished sheets, strip or coiled wire* | 4.2 | UN2009 | III | 4.2 | A1, A19 | None | 213 | 240 | 25 kg | 100 kg | D | |
| | Zirconium hydride | 4.1 | UN1437 | II | 4.1 | A19, A20, IB4, N34, T3, TP33 | None | 212 | 240 | 15 kg | 50 kg | E | |
| | Zirconium nitrate | 5.1 | UN2728 | III | 5.1 | A1, A29, IB8, IP3, T1, TP33 | 152 | 213 | 240 | 25 kg | 100 kg | A | |
| | Zirconium picramate, *dry or wetted with less than 20 percent water, by mass* | 1.3C | UN0236 | II | 1.3C | | None | 62 | None | Forbidden | Forbidden | 10 | 5E |
| | Zirconium picramate, wetted *with not less than 20 percent water, by mass* | 4.1 | UN1517 | I | 4.1 | 23, N41 | None | 211 | None | 1 kg | 15 kg | D | 28, 36 |
| | Zirconium powder, dry | 4.2 | UN2008 | I | 4.2 | T21, TP7, TP33 | None | 211 | 242 | Forbidden | Forbidden | D | |
| | | | | II | 4.2 | A19, A20, IB6, IP2, N5, N34, T3, TP33 | None | 212 | 241 | 15 kg | 50 kg | D | |
| | | | | III | 4.2 | IB8, IP3, T1, TP33 | None | 213 | 241 | 25 kg | 100 kg | D | |
| | Zirconium powder, wetted *with not less than 25 percent water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns* | 4.1 | UN1358 | II | 4.1 | A19, A20, IB6, IP2, N34, T3, TP33 | None | 212 | 241 | 15 kg | 50 kg | E | 74 |
| | Zirconium scrap | 4.2 | UN1932 | III | 4.2 | IB8, IP3, N34, T1, TP33 | None | 213 | 240 | Forbidden | Forbidden | D | |
| | Zirconium suspended in a liquid | 3 | UN1308 | I | 3 | | None | 201 | 243 | Forbidden | Forbidden | B | |
| | | | | II | 3 | IB2 | None | 202 | 242 | 5 L | 60 L | B | |
| | | | | III | 3 | B1, IB2 | 150 | 203 | 242 | 60 L | 220 L | B | |
| | Zirconium tetrachloride | 8 | UN2503 | III | 8 | IB8, IP3, T1, TP33 | 154 | 213 | 240 | 25 kg | 100 kg | A | |

Appendix A to §172.101—List of Hazardous Substances and Reportable Quantities

1. This appendix lists materials and their corresponding reportable quantities (RQ's) that are listed or designated as “hazardous substances” under section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. 9601(14) (CERCLA; 42 U.S.C. 9601 *et seq* ). This listing fulfills the requirement of CERCLA, 42 U.S.C. 9656(a), that all “hazardous substances,” as defined in 42 U.S.C. 9601(14), be listed and regulated as hazardous materials under 49 U.S.C. 5101–5127. That definition includes substances listed under sections 311(b)(2)(A) and 307(a) of the Federal Water Pollution Control Act, 33 U.S.C. 1321(b)(2)(A) and 1317(a), section 3001 of the Solid Waste Disposal Act, 42 U.S.C. 6921, and section 112 of the Clean Air Act, 42 U.S.C. 7412. In addition, this list contains materials that the Administrator of the Environmental Protection Agency has determined to be hazardous substances in accordance with section 102 of CERCLA, 42 U.S.C. 9602. It should be noted that 42 U.S.C. 9656(b) provides that common and contract carriers may be held liable under laws other than CERCLA for the release of a hazardous substance as defined in that Act, during transportation that commenced before the effective date of the listing and regulating of that substance as a hazardous material under 49 U.S.C. 5101–5127.

2. This appendix is divided into two TABLES which are entitled “TABLE 1—HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES” and “TABLE 2—RADIONUCLIDES.” A material listed in this appendix is regulated as a hazardous material and a hazardous substance under this subchapter if it meets the definition of a hazardous substance in §171.8 of this subchapter.

3. The procedure for selecting a proper shipping name for a hazardous substance is set forth in §172.101(c).

4. Column 1 of TABLE 1, entitled *"Hazardous substance",* contains the names of those elements and compounds that are hazardous substances. Following the listing of elements and compounds is a listing of waste streams. These waste streams appear on the list in numerical sequence and are referenced by the appropriate "D", "F", or "K" numbers. Column 2 of TABLE 1, entitled *"Reportable quantity (RQ)",* contains the reportable quantity (RQ), in pounds and kilograms, for each hazardous substance listed in Column 1 of TABLE 1.

5. A series of notes is used throughout TABLE 1 and TABLE 2 to provide additional information concerning certain hazardous substances. These notes are explained at the end of each TABLE.

6. TABLE 2 lists radionuclides that are hazardous substances and their corresponding RQ's. The RQ's in table 2 for radionuclides are expressed in units of curies and terabecquerels, whereas those in table 1 are expressed in units of pounds and kilograms. If a material is listed in both table 1 and table 2, the lower RQ shall apply. Radionuclides are listed in alphabetical order. The RQ's for radionuclides are given in the radiological unit of measure of curie, abbreviated "Ci", followed, in parentheses, by an equivalent unit measured in terabecquerels, abbreviated "TBq".

7. For mixtures of radionuclides, the following requirements shall be used in determining if a package contains an RQ of a hazardous substance: (i) if the identity and quantity (in curies or terabecquerels) of each radionuclide in a mixture or solution is known, the ratio between the quantity per package (in curies or terabecquerels) and the RQ for the radionuclide must be determined for each radionuclide. A package contains an RQ of a hazardous substance when the sum of the ratios for the radionuclides in the mixture or solution is equal to or greater than one; (ii) if the identity of each radionuclide in a mixture or solution is known but the quantity per package (in curies or terabecquerels) of one or more of the radionuclides is unknown, an RQ of a hazardous substance is present in a package when the total quantity (in curies or terabecquerels) of the mixture or solution is equal to or greater than the lowest RQ of any individual radionuclide in the mixture or solution; and (iii) if the identity of one or more radionuclides in a mixture or solution is unknown (or if the identity of a radionuclide by itself is unknown), an RQ of a hazardous substance is present when the total quantity (in curies or terabecquerels) in a package is equal to or greater than either one curie or the lowest RQ of any known individual radionuclide in the mixture or solution, whichever is lower.

## Table 1 to Appendix A—Hazardous Substances Other Than Radionuclides

| Hazardous substance | Reportable quantity (RQ) pounds (kilograms) |
|---|---|
| Acenaphthene | 100 (45.4) |
| Acenaphthylene | 5000 (2270) |
| Acetaldehyde | 1000 (454) |
| Acetaldehyde, chloro- | 1000 (454) |
| Acetaldehyde, trichloro- | 5000 (2270) |
| Acetamide | 100 (45.4) |
| Acetamide, N-(aminothioxomethyl)- | 1000 (454) |
| Acetamide, N-(4-ethoxyphenyl)- | 100 (45.4) |
| Acetamide, N-fluoren-2-yl- | 1 (0.454) |
| Acetamide, 2-fluoro- | 100 (45.4) |
| Acetic acid | 5000 (2270) |
| Acetic acid (2,4-dichlorophenoxy)- | 100 (45.4) |
| Acetic acid, ethyl ester | 5000 (2270) |
| Acetic acid, fluoro-, sodium salt | 10 (4.54) |
| Acetic acid, lead (2+) salt | 10 (4.54) |

| | |
|---|---|
| Acetic acid, thallium(I+) salt | 1000 (454) |
| Acetic anhydride | 5000 (2270) |
| Acetone | 5000 (2270) |
| Acetone cyanohydrin | 10 (4.54) |
| Acetonitrile | 5000 (2270) |
| Acetophenone | 5000 (2270) |
| 2-Acetylaminofluorene | 1 (0.454) |
| Acetyl bromide | 5000 (2270) |
| Acetyl chloride | 5000 (2270) |
| 1-Acetyl-2-thiourea | 1 (0.454) |
| Acrolein | 1(0.454) |
| Acrylamide | 5000 (2270) |
| Acrylic acid | 5000 (2270) |
| Acrylonitrile | 100 (45.4) |
| Adipic acid | 5000 (2270) |
| AldicarbD1 (0.454) | |
| Aldrin | 1 (0.454) |
| Allyl alcohol | 100 (45.4) |
| Allyl chloride | 1000 (454) |
| Aluminum phosphide | 100 (45.4) |
| Aluminum sulfate | 5000 (2270) |
| 4–Aminobiphenyl | 1 (0.454) |
| 5-(Aminomethyl)-3-isoxazolol | 1000 (454) |
| 4-Aminopyridine | 1000 (454) |
| Amitrole | 10 (4.54) |
| Ammonia | 100 (45.4) |
| Ammonium acetate | 5000 (2270) |

| | |
|---|---:|
| Ammonium benzoate | 5000 (2270) |
| Ammonium bicarbonate | 5000 (2270) |
| Ammonium bichromate | 10 (4.54) |
| Ammonium bifluoride | 100 (45.4) |
| Ammonium bisulfite | 5000 (2270) |
| Ammonium carbamate | 5000 (2270) |
| Ammonium carbonate | 5000 (2270) |
| Ammonium chloride | 5000 (2270) |
| Ammonium chromate | 10 (4.54) |
| Ammonium citrate, dibasic | 5000 (2270) |
| Ammonium dichromate @ | 10 (4.54) |
| Ammonium fluoborate | 5000 (2270) |
| Ammonium fluoride | 100 (45.4) |
| Ammonium hydroxide | 1000 (454) |
| Ammonium oxalate | 5000 (2270) |
| Ammonium picrate | 10 (4.54) |
| Ammonium silicofluoride | 1000 (454) |
| Ammonium sulfamate | 5000 (2270) |
| Ammonium sulfide | 100 (45.4) |
| Ammonium sulfite | 5000 (2270) |
| Ammonium tartrate | 5000 (2270) |
| Ammonium thiocyanate | 5000 (2270) |
| Ammonium vanadate | 1000 (454) |
| Amyl acetate | 5000 (2270) |
| iso-Amyl acetate | |
| sec-Amyl acetate | |
| tert-Amyl acetate | |

| | |
|---|---|
| Aniline | 5000 (2270) |
| o-Anisidine | 100 (45.4) |
| Anthracene | 5000 (2270) |
| Antimony ¢ | 5000 (2270) |
| Antimony pentachloride | 1000 (454) |
| Antimony potassium tartrate | 100 (45.4) |
| Antimony tribromide | 1000 (454) |
| Antimony trichloride | 1000 (454) |
| Antimony trifluoride | 1000 (454) |
| Antimony trioxide | 1000 (454) |
| Argentate(1-), bis(cyano-C)-, potassium | 1 (0.454) |
| Aroclor 1016 | 1 (0.454) |
| Aroclor 1221 | 1 (0.454) |
| Aroclor 1232 | 1 (0.454) |
| Aroclor 1242 | 1 (0.454) |
| Aroclor 1248 | 1 (0.454) |
| Aroclor 1254 | 1 (0.454) |
| Aroclor 1260 | 1 (0.454) |
| Arsenic ¢ | 1 (0.454) |
| Arsenic acid | 1 (0.454) |
| Arsenic acid H3AsO4 | 1 (0.454) |
| Arsenic disulfide | 1 (0.454) |
| Arsenic oxide As203 | 1 (0.454) |
| Arsenic oxide As205 | 1 (0.454) |
| Arsenic pentoxide | 1 (0.454) |
| Arsenic trichloride | 1 (0.454) |
| Arsenic trioxide | 1 (0.454) |

| | |
|---|---|
| Arsenic trisulfide | 1 (0.454) |
| Arsine, diethyl- | 1 (0.454) |
| Arsinic acid, dimethyl- | 1 (0.454) |
| Arsonous dichloride, phenyl- | 1 (0.454) |
| Asbestos ¢¢ | 1 (0.454) |
| Auramine100 (45.4) | |
| Azaserine | 1 (0.454) |
| Aziridine | 1 (0.454) |
| Aziridine, 2-methyl- | 1 (0.454) |
| Azirino[2′,3′:3,4]pyrrolo(1,2-a)indole-4,7-dione,6- amino-8-[[(aminocarbonyl)oxy] methyl]-1,1a,2,8,8a, 8b-hexahydro-8a-methoxy-5-methyl-, [1aS-[aalpha,8beta,8aalpha,8balpha)]- | 10 (4.54) |
| Barium cyanide | 10 (4.54) |
| Benz[j]aceanthrylene, 1,2-dihydro-3-methyl- | 10 (4.54) |
| Benz[c]acridine | 100 (45.4) |
| 3,4-Benzacridine | 100 (45.4) |
| Benzal chloride | 5000 (2270) |
| Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl) | 5000 (2270) |
| Benz[a]anthracene | 10 (4.54) |
| 1,2-Benzanthracene | 10 (4.54) |
| Benz[a]anthracene, 7,12-dimethyl- | 1 (0.454) |
| Benzenamine | 5000 (2270) |
| Benzenamine, 4,4′-carbonimidoylbis (N,N-dimethyl- | 100 (45.4) |
| Benzenamine, 4-chloro- | 1000 (454) |
| Benzenamine, 4-chloro-2-methyl-, hydrochloride | 100 (45.4) |
| Benzenamine, N,N-dimethyl-4-(phenylazo)- | 10 (4.54) |
| Benzenamine, 2-methyl- | 100 (45.4) |
| Benzenamine, 4-methyl- | 100 (45.4) |
| Benzenamine, 4,4′-methylenebis(2-chloro- | 10 (4.54) |

| | |
|---|---|
| Benzenamine, 2-methyl-, hydrochloride | 100 (45.4) |
| Benzenamine, 2-methyl-5-nitro- | 100 (45.4) |
| Benzenamine, 4-nitro- | 5000 (2270) |
| Benzene | 10 (4.54) |
| Benzene, 1-bromo-4-phenoxy- | 100 (45.4) |
| Benzene, chloro- | 100 (45.4) |
| Benzene, chloromethyl- | 100 (45.4) |
| Benzene, 1,2-dichloro- | 100 (45.4) |
| Benzene, 1,3-dichloro- | 100 (45.4) |
| Benzene, 1,4-dichloro- | 100 (45.4) |
| Benzene, 1,1′-(2,2-dichloroethylidene)bis[4-chloro | 1 (0.454) |
| Benzene, dichloromethyl- | 5000 (2270) |
| Benzene, 1,3-diisocyanatomethyl | 100 (45.4) |
| Benzene, dimethyl- | 100 (45.4) |
| Benzene, m-dimethyl- | 1000 (454) |
| Benzene, o-dimethyl- | 1000 (454) |
| Benzene, p-dimethyl- | 100 (45.4) |
| Benzene, hexachloro- | 10 (4.54) |
| Benzene, hexahydro- | 1000 (454) |
| Benzene, hydroxy- | 1000 (454) |
| Benzene, methyl- | 1000 (454) |
| Benzene, 1-methyl-2,4-dinitro- | 10 (4.54) |
| Benzene, 2-methyl-1,3-dinitro- | 100 (45.4) |
| Benzene, 1-methylethyl- | 5000 (2270) |
| Benzene, nitro- | 1000 (454) |
| Benzene, pentachloro- | 10 (4.54) |
| Benzene, pentachloronitro- | 100 (45.4) |

| | |
|---|---|
| Benzene, 1,2,4,5-tetrachloro- | 5000 (2270) |
| Benzene, 1,1′-(2,2,2-trichloroethylidene)bis[4-chloro- | 1 (0.454) |
| Benzene, 1,1′-(2,2,2-trichloroethylidene)bis[4-methoxy)- | 1 (0.454) |
| Benzene, (trichloromethyl) | 10 (4.54) |
| Benzene, 1,3,5-trinitro- | 10 (4.54) |
| Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester | 10 (4.54) |
| Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]- | 10 (4.54) |
| Benzenediamine, ar-methyl- | 10 (4.54) |
| 1,2-Benzenedicarboxylic acid, [bis(2-ethylhexyl)] ester | 100 (45.4) |
| 1,2-Benzenedicarboxylic acid, dibutyl ester | 10 (4.54) |
| 1,2-Benzenedicarboxylic acid, diethyl ester | 1000 (454) |
| 1,2-Benzenedicarboxylic acid, dimethyl ester | 5000 (2270) |
| 1,2-Benzenedicarboxylic acid, dioctyl ester | 5000 (2270) |
| 1,3-Benzenediol | 5000 (2270) |
| 1,2-Benzenediol,4-[1-hydroxy-2-(methylamino)ethyl]- | 1000 (454) |
| Benzeneethanamine, alpha,alpha-dimethyl- | 5000 (2270) |
| Benzenesulfonic acid chloride | 100 (45.4) |
| Benzenesulfonyl chloride | 100 (45.4) |
| Benzenethiol | 100 (45.4) |
| Benzidine | 1 (0.454) |
| 1,2-Benzisothiazol-3(2H)-one,1,1-dioxide | 100 (45.4) |
| Benzo[a]anthracene | 10 (4.54) |
| 1,3-Benzodioxole, 5-(2-propenyl)- | 100 (45.4) |
| 1,3-Benzodioxole, 5-(1-propenyl)- | 100 (45.4) |
| 1,3-Benzodioxole, 5-propyl- | 10 (4.54) |
| Benzo[b]fluoranthene | 1 (0.454) |
| Benzo[k]fluoranthene | 5000 (2270) |

| | |
|---|---|
| Benzo[j,k]fluorene | 100 (45.4) |
| Benzoic acid | 5000 (2270) |
| Benzonitrile | 5000 (2270) |
| Benzo[g,h,i]perylene | 5000 (2270) |
| 2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations greater than 0.3% | 100 (45.4) |
| Benzo[a]pyrene | 1 (0.454) |
| 3,4-Benzopyrene | 1 (0.454) |
| p-Benzoquinone | 10 (4.54) |
| Benzo [rst]pentaphene | 10 (4.54) |
| Benzotrichloride | 10 (4.54) |
| Benzoyl chloride | 1000 (454) |
| 1,2-Benzphenanthrene | 100 (45.4) |
| Benzyl chloride | 100 (45.4) |
| Beryllium ¢ | 10 (4.54) |
| Beryllium chloride | 1 (0.454) |
| Beryllium dust ¢ | 10 (4.54) |
| Beryllium fluoride | 1 (0.454) |
| Beryllium nitrate | 1 (0.454) |
| alpha - BHC | 10 (4.54) |
| beta - BHC | 1 (0.454) |
| delta - BHC | 1 (0.454) |
| gamma - BHC | 1 (0.454) |
| 2,2′Bioxirane | 10 (4.54) |
| Biphenyl | 100 (45.4) |
| (1,1′-Biphenyl)-4,4′-diamine | 1 (0.454) |
| (1,1′-Biphenyl)-4,4′-diamine,3,3′-dichloro- | 1 (0.454) |
| (1,1′-Biphenyl)-4,4′-diamine,3,3′-dimethoxy- | 10 (4.54) |

| | |
|---|---|
| (1,1′-Biphenyl)-4,4′-diamine,3,3′-dimethyl- | 10 (4.54) |
| Bis(2-chloroethoxy) methane | 1000 (454) |
| Bis(2-chloroethyl) ether | 10 (4.54) |
| Bis(2-ethylhexyl)phthalate | 100 (45.4) |
| Bromoacetone | 1000 (454) |
| Bromoform | 100 (45.4) |
| 4-Bromophenyl phenyl ether | 100 (45.4) |
| Brucine | 100 (45.4) |
| 1,3–Butadiene | 10 (4.54) |
| 1,3-Butadiene, 1,1,2,3,4,4-hexachloro- | 1 (0.454) |
| 1-Butanamine, N-butyl-N-nitroso- | 10 (4.54) |
| 1-Butanol | 5000 (2270) |
| 2-Butanone | 5000 (2270) |
| 2-Butanone, 3,3-dimethyl-1-(methylthio)-,O-[(methylamino)carbonyl] oxime | 100 (45.4) |
| 2-Butanone peroxide | 10 (4.54) |
| 2-Butenal | 100 (45.4) |
| 2-Butene, 1,4-dichloro- | 1 (0.454) |
| 2-Butenoic acid, 2-methyl-,7[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z),7(2S*, 3R*), 7alpha]]- | 10 (4.54) |
| Butyl acetate | 5000 (2270) |
| iso-Butyl acetate | |
| sec-Butyl acetate | |
| tert-Butyl acetate | |
| n-Butyl alcohol | 5000 (2270) |
| Butylamine | 1000 (454) |
| iso-Butylamine | |
| sec-Butylamine | |
| tert-Butylamine | |

| | |
|---|---|
| Butyl benzyl phthalate | 100 (45.4) |
| n-Butyl phthalate | 10 (4.54) |
| Butyric acid | 5000 (2270) |
| iso-Butyric acid | |
| Cacodylic acid | 1 (0.454) |
| Cadmium ¢ | 10 (4.54) |
| Cadmium acetate | 10 (4.54) |
| Cadmium bromide | 10 (4.54) |
| Cadmium chloride | 10 (4.54) |
| Calcium arsenate | 1 (0.454) |
| Calcium arsenite | 1 (0.454) |
| Calcium carbide | 10 (4.54) |
| Calcium chromate | 10 (4.54) |
| Calcium cyanamide | 1000 (454) |
| Calcium cyanide | 10 (4.54) |
| Calcium cyanide $Ca(CN)_2$ | 10 (4.54) |
| Calcium dodecylbenzene sulfonate | 1000 (454) |
| Calcium hypochlorite | 10 (4.54) |
| Camphene, octachloro- | 1 (0.454) |
| Captan | 10 (4.54) |
| Carbamic acid, ethyl ester | 100 (45.4) |
| Carbamic acid, methylnitroso-, ethyl ester | 1 (0.454) |
| Carbamic chloride, dimethyl- | 1 (0.454) |
| Carbamide, thio- | 10 (4.54) |
| Carbamimidoselenoic acid | 1000 (454) |
| Carbamothioic acid, bis (1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester | 100 (45.4) |
| Carbaryl | 100 (45.4) |

| | |
|---|---|
| Carbofuran | 10 (4.54) |
| Carbon bisulfide | 100 (45.4) |
| Carbon disulfide | 100 (45.4) |
| Carbonic acid, dithallium (I+) | 100 (45.4) |
| Carbonic dichloride | 10 (4.54) |
| Carbonic difluoride | 1000 (454) |
| Carbonochloridic acid, methyl ester | 1000 (454) |
| Carbon oxyfluoride | 1000 (454) |
| Carbon tetrachloride | 10 (4.54) |
| Carbonyl sulfide | 100 (45.4) |
| Catechol | 100 (45.4) |
| Chloral | 5000(2270) |
| Chloramben | 100 (45.4) |
| Chlorambucil | 10 (4.54) |
| Chlordane | 1 (0.454) |
| Chlordane, alpha & gamma isomers | 1 (0.454) |
| Chlordane, technical | 1 (0.454) |
| Chlorine | 10 (4.54) |
| Chlornaphazine | 100 (45.4) |
| Chloroacetaldehyde | 1000 (454) |
| Chloroacetic acid | 100 (45.4) |
| 2–Chloroacetophenone | 100 (45.4) |
| p-Chloroaniline | 1000 (454) |
| Chlorobenzene | 100 (45.4) |
| Chlorobenzilate | 10 (4.54) |
| 4-Chloro-m-cresol | 5000 (2270) |
| p-Chloro-m-cresol | 5000 (2270) |

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|---|---|
| Chlorodibromomethane | 100 (45.4) |
| Chloroethane | 100 (45.4) |
| 2-Chloroethyl vinyl ether | 1000 (454) |
| Chloroform | 10 (4.54) |
| Chloromethane | 100 (45.4) |
| Chloromethyl methyl ether | 10 (4.54) |
| beta-Chloronaphthalene | 5000 (2270) |
| 2-Chloronaphthalene | 5000 (2270) |
| 2-Chlorophenol | 100 (45.4) |
| o-Chlorophenol | 100 (45.4) |
| 4-Chlorophenyl phenyl ether | 5000 (2270) |
| 1-(o-Chlorophenyl)thiourea | 100 (45.4) |
| Chloroprene | 100 (45.4) |
| 3-Chloropropionitrile | 1000 (454) |
| Chlorosulfonic acid | 1000 (454) |
| 4-Chloro-o-toluidine, hydrochloride | 100 (45.4) |
| Chlorpyrifos | 1 (0.454) |
| Chromic acetate | 1000 (454) |
| Chromic acid | 10 (4.54) |
| Chromic acid H2CrO4, calcium salt | 10 (4.54) |
| Chromic sulfate | 1000 (454) |
| Chromium ¢ | 5000 (2270) |
| Chromous chloride | 1000 (454) |
| Chrysene | 100 (45.4) |
| Cobaltous bromide | 1000 (454) |
| Cobaltous formate | 1000 (454) |
| Cobaltous sulfamate | 1000 (454) |

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|---|---|
| Coke Oven Emissions | 1 (0.454) |
| Copper ¢ | 5000 (2270) |
| Copper chloride @ | 10 (4.54) |
| Copper cyanide | 10 (4.54) |
| Copper cyanide CuCN | 10 (4.54) |
| Coumaphos | 10 (4.54) |
| Creosote | 1 (0.454) |
| Cresols (isomers and mixture) | 100 (45.4) |
| m-Cresol | 100 (45.4) |
| o-Cresolo | 100 (45.4) |
| p-Cresol | 100 (45.4) |
| Cresylic acid (isomers and mixture) | 100 (45.4) |
| m-Cresylic acid | 100 (45.4) |
| o-Cresylic acid | 100 (45.4) |
| p-Cresylic acid | 100 (45.4) |
| Crotonaldehyde | 100 (45.4) |
| Cumene | 5000 (2270) |
| Cupric acetate | 100 (45.4) |
| Cupric acetoarsenite | 1 (0.454) |
| Cupric chloride | 10 (4.54) |
| Cupric nitrate | 100 (45.4) |
| Cupric oxalate | 100 (45.4) |
| Cupric sulfate | 10 (4.54) |
| Cupric sulfate ammoniated | 100 (45.4) |
| Cupric tartrate | 100 (45.4) |
| Cyanides (soluble salts and complexes) not otherwise specified | 10 (4.54) |
| Cyanogen | 100 (45.4) |

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|---|---|
| Cyanogen bromide | 1000 (454) |
| Cyanogen bromide (CN)Br | 1000 (454) |
| Cyanogen chloride | 10 (4.54) |
| Cyanogen chloride (CN)Cl | 10 (4.54) |
| 2,5-Cyclohexadiene-1,4-dione | 10 (4.54) |
| Cyclohexane | 1000 (454) |
| Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- | 1 (0.454) |
| Cyclohexanone | 5000 (2270) |
| 2-Cyclohexyl-4,6-dinitrophenol | 100 (45.4) |
| 1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro- | 10 (4.54) |
| Cyclophosphamide | 10 (4.54) |
| 2,4-D Acid | 100 (45.4) |
| 2,4-D Ester | 100 (45.4) |
| Daunomycin | 10 (4.54) |
| DDD | 1 (0.454) |
| 4,4′-DDD | 1 (0.454) |
| DDE | 1 (0.454) |
| 4,4′-DDE | 1 (0.454) |
| DDT | 1 (0.454) |
| 4,4′-DDT | 1 (0.454) |
| Diallate | 100 (45.4) |
| Diamine | 1 (0.454) |
| Diazinon | 1 (0.454) |
| Diazomethane | 100 (45.4) |
| Dibenz[a,h]anthracene | 1 (0.454) |
| 1,2:5,6-Dibenzanthracene | 1 (0.454) |
| Dibenzo[a,h]anthracene | 1 (0.454) |

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|---|---|
| Dibenzofuran | 100 (45.4) |
| Dibenz[a,i]pyrene | 10 (4.54) |
| 1,2-Dibromo-3-chloropropane | 1 (0.454) |
| Dibutyl phthalate | 10 (4.54) |
| Di-n-butyl phthalate | 10 (4.54) |
| Dicamba | 1000 (454) |
| Dichlobenil | 100 (45.4) |
| Dichlone | 1 (0.454) |
| Dichlorobenzene | 100 (45.4) |
| 1,2-Dichlorobenzene | 100 (45.4) |
| 1,3-Dichlorobenzene | 100 (45.4) |
| 1,4-Dichlorobenzene | 100 (45.4) |
| m-Dichlorobenzene | 100 (45.4) |
| o-Dichlorobenzene | 100 (45.4) |
| p-Dichlorobenzene | 100 (45.4) |
| 3,3′-Dichlorobenzidine | 1 (0.454) |
| Dichlorobromomethane | 5000 (2270) |
| 1,4-Dichloro-2-butene | 1 (0.454) |
| Dichlorodifluoromethane | 5000 (2270) |
| 1,1-Dichloroethane | 1000 (454) |
| 1,2-Dichloroethane | 100 (45.4) |
| 1,1-Dichloroethylene | 100 (45.4) |
| 1,2-Dichloroethylene | 1000 (454) |
| Dichloroethyl ether | 10 (4.54) |
| Dichloroisopropyl—ether | 1000 (454) |
| Dichloromethane @ | 1000 (454) |
| Dichloromethoxy ethane | 1000 (454) |

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| Dicholormethyl ether | 10 (4.54) |
| 2,4-Dichlorophenol | 100 (45.4) |
| 2,6-Dichlorophenol | 100 (45.4) |
| Dichlorophenylarsine | 1 (0.454) |
| Dichloropropane | 1000 (454) |
| 1,1-Dichloropropane | |
| 1,3-Dichloropropane | |
| 1,2-Dichloropropane | 1000 (454) |
| Dichloropropane - Dichloropropene (mixture) | 100 (45.4) |
| Dichloropropene | 100 (45.4) |
| 2,3-Dichloropropene | |
| 1,3-Dichloropropene | 100 (45.4) |
| 2,2-Dichloropropionic acid | 5000 (2270) |
| Dichlorvos | 10 (4.54) |
| Dicofol | 10 (4.54) |
| Dieldrin | 1 (0.454) |
| 1,2:3,4-Diepoxybutane | 10 (4.54) |
| Diethanolamine | 100 (45.4) |
| Diethylamine | 1000 (454) |
| N,N-diethylaniline | 1000 (454) |
| Diethylarsine | 1 (0.454) |
| 1,4-Diethylenedioxide | 100 (45.4) |
| Diethylhexyl phthalate | 100 (45.4) |
| N,N′-Diethylhydrazine | 10 (4.54) |
| O,O-Diethyl S-methyl dithiophosphate | 5000 (2270) |
| Diethyl-p-nitrophenyl phosphate | 100 (45.4) |
| Diethyl phthalate | 1000(454) |

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| O,O-Diethyl O-pyrazinyl phosphorothioate | 100 (45.4) |
| Diethylstilbestrol | 1 (0.454) |
| Diethyl sulfate | 10 (4.54) |
| Dihydrosafrole | 10 (4.54) |
| Diisopropyl fluorophosphate | 100 (45.4) |
| 1,4,5,8-Dimethanonaphthalene<br>1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro, (1alpha,4alpha,4abeta,5abeta,8beta,8abeta)- | 1 (0.454) |
| 1,4,5,8-Dimethanonaphthalene,1,2,3,4,10,10-10-hexachloro-1,4,4a,5,8,8a-hexahydro-,(1alpha,4alpha,4abeta,5alpha,8alpha,8abeta)- | 1 (0.454) |
| 2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-<br>octahydro-,(1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,<br>7beta,7aalpha)- | 1 (0.454) |
| 2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-<br>octahydro-,(1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,<br>7beta,7aalpha)- | 1 (0.454) |
| Dimethoate | 10 (4.54) |
| 3,3′-Dimethoxybenzidine | 10 (4.54) |
| Dimethylamine | 1000 (454) |
| p-Dimethylaminoazobenzene | 10 (4.54) |
| N,N-dimethylaniline | 100 (45.4) |
| 7,12-Dimethylbenz[a]anthracene | 1 (0.454) |
| 3,3′-Dimethylbenzidine | 10 (4.54) |
| alpha,alpha-Dimethylbenzylhydroperoxide | 10 (4.54) |
| Dimethylcarbamoyl chloride | 1 (0.454) |
| Dimethylformamide | 100 (45.4) |
| 1,1-Dimethylhydrazine | 10 (4.54) |
| 1,2-Dimethylhydrazine | 1 (0.454) |
| Dimethylhydrazine, unsymmetrical @ | 10 (4.54) |
| alpha,alpha-Dimethylphenethylamine | 5000 (2270) |
| 12,4-Dimethylphenol | 100 (45.4) |

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| Dimethyl phthalate | 5000 (2270) |
| Dimethyl sulfate | 100 (45.4) |
| Dinitrobenzene (mixed) | 100 (45.4) |
| m-Dinitrobenzene | |
| o-Dinitrobenzene | |
| p-Dinitrobenzene | |
| 4,6-Dinitro-o-cresol and salts | 10 (4.54) |
| Dinitrogen tetroxide @ | 10 (4.54) |
| Dinitrophenol | 10 (4.54) |
| 2,5-Dinitrophenol | |
| 2,4-Dinitrophenol | 10 (4.54) |
| Dinitrotoluene | 10 (4.54) |
| 3,4-Dinitrotoluene | |
| 2,4-Dinitrotoluene | 10 (4.54) |
| 2,6-Dinitrotoluene | 100 (45.4) |
| Dinoseb | 1000 (454) |
| Di-n-octyl phthalate | 5000 (2270) |
| 1,4-Dioxane | 100 (45.4) |
| 1,2-Diphenylhydrazine | 10 (4.54) |
| Diphosphoramide, octamethyl- | 100 (45.4) |
| Diphosphoric acid, tetraethyl ester | 10 (4.54) |
| Dipropylamine | 5000 (2270) |
| Di-n-propylnitrosamine | 10 (4.54) |
| Diquat | 1000 (454) |
| Disulfoton | 1 (0.454) |
| Dithiobiuret | 100 (45.4) |
| Diuron | 100 (45.4) |

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|---|---|
| Dodecylbenzenesulfonic acid | 1000 (454) |
| 2,4-D, salts and esters | 100 (45.4) |
| Endosulfan | 1 (0.454) |
| alpha-Endosulfan | 1 (0.454) |
| beta-Endosulfan | 1 (0.454) |
| Endosulfan sulfate | 1 (0.454) |
| Endothall | 1000 (454) |
| Endrin | 1 (0.454) |
| Endrin, & metabolites | 1 (0.454) |
| Endrin aldehyde | 1 (0.454) |
| Epichlorohydrin | 100 (45.4) |
| Epinephrine | 1000 (454) |
| 1,2–Epoxybutane | 100 (45.4) |
| Ethanal | 1000 (454) |
| Ethanamine, N-ethyl-N-nitroso- | 1 (0.454) |
| Ethane, 1,2-dibromo- | 1 (0.454) |
| Ethane, 1,1-dichloro- | 1000 (454) |
| Ethane, 1,2-dichloro- | 100 (45.4) |
| Ethane, hexachloro- | 100 (45.4) |
| Ethane, 1,1′-[methylenebis(oxy)]bis(2-chloro- | 1000 (454) |
| Ethane, 1,1′-oxybis- | 100 (45.4) |
| Ethane, 1,1′-oxybis(2-chloro- | 10 (4.54) |
| Ethane, pentachloro- | 10 (4.54) |
| Ethane, 1,1,1,2-tetrachloro- | 100 (45.4) |
| Ethane, 1,1,2,2-tetrachloro- | 100 (45.4) |
| Ethane, 1,1,2-trichloro- | 100 (45.4) |
| Ethane, 1,1,1-trichloro- | 1000 (454) |

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| 1,2-Ethanediamine, N,N-dimethyl-N′-2-pyridinyl-N′-(2-thienyl-methyl)- | 5000 (2270) |
| Ethanedinitrile | 100 (45.4) |
| Ethanenitrile | 5000 (2270) |
| Ethanethioamide | 10 (4.54) |
| Ethanimidothioic acid, N-[[(methylamino)carbonyl] oxy]-, methyl ester | 100 (45.4) |
| Ethanol, 2-ethoxy- | 1000 (454) |
| Ethanol, 2,2′-(nitrosoimino)bis- | 1 (0.454) |
| Ethanone, 1-phenyl- | 5000 (2270) |
| Ethanoyl chloride | 5000 (2270) |
| Ethene, chloro- | 1 (0.454) |
| Ethene, 2-chloroethoxy- | 1000 (454) |
| Ethene, 1,1-dichloro- | 100 (45.4) |
| Ethene, 1,2-dichloro- (E) | 1000 (454) |
| Ethene, tetrachloro- | 100 (45.4) |
| Ethene, trichloro- | 100 (45.4) |
| Ethion | 10 (4.54) |
| Ethyl acetate | 5000 (2270) |
| Ethyl acrylate | 1000 (454) |
| Ethylbenzene | 1000 (454) |
| Ethyl carbamate (Urethan) | 100 (45.4) |
| Ethyl chloride @ | 100 (45.4) |
| Ethyl cyanide | 10 (4.54) |
| Ethylene dibromide | 1 (0.454) |
| Ethylene dichloride | 100 (45.4) |
| Ethylene glycol | 5000 (2270) |
| Ethylene glycol monoethyl ether | 1000 (454) |
| Ethylene oxide | 10 (4.54) |

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|---|---|
| Ethylenebisdithiocarbamic acid | 5000 (2270) |
| Ethylenebisdithiocarbamic acid, salts and esters | 5000 (2270) |
| Ethylenediamine | 5000 (2270) |
| Ethylenediamine tetraacetic acid (EDTA) | 5000 (2270) |
| Ethylenethiourea | 10 (4.54) |
| Ethylenimine | 1 (0.454) |
| Ethyl ether | 100 (45.4) |
| Ethylidene dichloride | 1000 (454) |
| Ethyl methacrylate | 1000 (454) |
| Ethyl methanesulfonate | 1 (0.454) |
| Ethyl methyl ketone @ | 5000 (2270) |
| Famphurdimethylester | 1000 (454) |
| Ferric ammonium citrate | 1000 (454) |
| Ferric ammonium oxalate | 1000 (454) |
| Ferric chloride | 1000 (454) |
| Ferric fluoride | 100 (45.4) |
| Ferric nitrate | 1000 (454) |
| Ferric sulfate | 1000 (454) |
| Ferrous ammonium sulfate | 1000 (454) |
| Ferrous chloride | 100 (45.4) |
| Ferrous sulfate | 1000 (454) |
| Fluoranthene | 100 (45.4) |
| Fluorene | 5000 (2270) |
| Fluorine | 10 (4.54) |
| Fluoroacetamide | 100 (45.4) |
| Fluoroacetic acid, sodium salt | 10 (4.54) |
| Formaldehyde | 100 (45.4) |

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|---|---|
| Formic acid | 5000 (2270) |
| Fulminic acid, mercury(2+)salt | 10 (4.54) |
| Fumaric acid | 5000 (2270) |
| Furan | 100 (45.4) |
| Furan, tetrahydro- | 1000 (454) |
| 2-Furancarboxaldehyde | 5000 (2270) |
| 2,5-Furandione | 5000 (2270) |
| Furfural | 5000 (2270) |
| Furfuran | 100 (45.4) |
| Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)- | 1 (0.454) |
| D-Glucose, 2-deoxy-2-[[methylnitrosoamino)-carbonyl]amino]- | 1 (0.454) |
| Glycidylaldehyde | 10 (4.54) |
| Guanidine, N-methyl-N′-nitro-N-nitroso- | 10 (4.54) |
| Guthion | 1 (0.454) |
| Heptachlor | 1 (0.454) |
| Heptachlor epoxide | 1 (0.454) |
| Hexachlorobenzene | 10 (4.54) |
| Hexachlorobutadiene | 1 (0.454) |
| Hexachlorocyclohexane (gamma isomer) | 1 (0.454) |
| Hexachlorocyclopentadiene | 10 (4.54) |
| Hexachloroethane | 100 (45.4) |
| 1,2,3,4,10-10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-endo,exo-dimethanonaphthalene | 1 (0.454) |
| Hexachlorophene | 100 (45.4) |
| Hexachloropropene | 1000 (454) |
| Hexaethyl tetraphosphate | 100 (45.4) |
| Hexamethylene-1,6-diisocyanate | 100 (45.4) |
| Hexamethylphosphoramide | 1 (0.454) |

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|---|---|
| Hexane | 5000 (2270) |
| Hydrazine | 1 (0.454) |
| Hydrazine, 1,2-diethyl- | 10 (4.54) |
| Hydrazine, 1,1-dimethyl- | 10 (4.54) |
| Hydrazine, 1,2-dimethyl- | 1 (0.454) |
| Hydrazine, 1,2-diphenyl- | 10 (4.54) |
| Hydrazine, methyl- | 10 (4.54) |
| Hydrazinecarbothioamide | 100 (45.4) |
| Hydrochloric acid | 5000 (2270) |
| Hydrocyanic acid | 10 (4.54) |
| Hydrofluoric acid | 100 (45.4) |
| Hydrogen chloride | 5000 (2270) |
| Hydrogen cyanide | 10 (4.54) |
| Hydrogen fluoride | 100 (45.4) |
| Hydrogen phosphide | 100 (45.4) |
| Hydrogen sulfide | 100 (45.4) |
| Hydrogen sulfide H2S | 100 (45.4) |
| Hydroperoxide, 1-methyl-1-phenylethyl- | 10 (4.54) |
| Hydroquinone | 100 (45.4) |
| 2-Imidazolidinethione | 10 (4.54) |
| Indeno(1,2,3-cd)pyrene | 100 (45.4) |
| 1,3-Isobenzofurandione | 5000 (2270) |
| Isobutyl alcohol | 5000 (2270) |
| Isodrin | 1 (0.454) |
| Isophorone | 5000 (2270) |
| Isoprene | 100 (45.4) |
| Isopropanolamine dodecylbenzene sulfonate | 1000 (454) |

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|---|---|
| Isosafrole | 100 (45.4) |
| 3(2H)-Isoxazolone, 5-(aminomethyl)- | 1000 (454) |
| Keponedecachloroc-tahydro- | 1 (0.454) |
| Lasiocarpine | 10 (4.54) |
| Lead ¢ | 10 (4.54) |
| Lead acetate | 10 (4.54) |
| Lead arsenate | 1 (0.454) |
| Lead, bis(acetato-O)tetrahydroxytri | 10 (4.54) |
| Lead chloride | 10 (4.54) |
| Lead fluoborate | 10 (4.54) |
| Lead fluoride | 10 (4.54) |
| Lead iodide | 10 (4.54) |
| Lead nitrate | 10 (4.54) |
| Lead phosphate | 10 (4.54) |
| Lead stearate | 10 (4.54) |
| Lead subacetate | 10 (4.54) |
| Lead sulfate | 10 (4.54) |
| Lead sulfide | 10 (4.54) |
| Lead thiocyanate | 10 (4.54) |
| Lindane | 1 (0.454) |
| Lithium chromate | 10 (4.54) |
| Malathion | 100 (45.4) |
| Maleic acid | 5000 (2270) |
| Maleic anhydride | 5000 (2270) |
| Maleic hydrazide | 5000 (2270) |
| Malononitrile | 1000 (454) |
| MDI | 5000 (2270) |

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|---|---|
| Melphalan | 1 (0.454) |
| Mercaptodimethur | 10 (4.54) |
| Mercuric cyanide | 1 (0.454) |
| Mercuric nitrate | 10 (4.54) |
| Mercuric sulfate | 10 (4.54) |
| Mercuric thiocyanate | 10 (4.54) |
| Mercurous nitrate | 10 (4.54) |
| Mercury | 1 (0.454) |
| Mercury, (acetato-O)phenyl- | 100 (45.4) |
| Mercury fulminate | 10 (4.54) |
| Methacrylonitrile | 1000 (454) |
| Methanamine, N-methyl- | 1000 (454) |
| Methanamine, N-methyl-N-nitroso | 10 (4.54) |
| Methane, bromo- | 1000 (454) |
| Methane, chloro- | 100 (45.4) |
| Methane, chloromethoxy- | 10 (4.54) |
| Methane, dibromo- | 1000 (454) |
| Methane, dichloro- | 1000 (454) |
| Methane, dichlorodifluoro- | 5000 (2270) |
| Methane, iodo- | 100 (45.4) |
| Methane, isocyanato- | 10 (4.54) |
| Methane, oxybis(chloro- | 10 (4.54) |
| Methane, tetrachloro- | 10 (4.54) |
| Methane, tetranitro- | 10 (4.54) |
| Methane, tribromo- | 100 (45.4) |
| Methane, trichloro- | 10 (4.54) |
| Methane, trichlorofluoro- | 5000 (2270) |

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| Methanesulfenyl chloride, trichloro- | 100 (45.4) |
| Methanesulfonic acid, ethyl ester | 1 (0.454) |
| Methanethiol | 100 (45.4) |
| 6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide | 1 (0.454) |
| Methanoic acid | 5000 (2270) |
| 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-a,4,7,7a-tetrahydro- | 1 (0.454) |
| 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro- | 1 (0.454) |
| Methanol | 5000 (2270) |
| Methapyrilene | 5000 (2270) |
| 1,3,4-Metheno-2H-cyclobutal[cd]-pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachloroctahydro- | 1 (0.454) |
| Methomyl | 100 (45.4) |
| Methoxychlor | 1 (0.454) |
| Methyl alcohol | 5000 (2270) |
| Methylamine @ | 100 (45.4) |
| Methyl bromide | 1000 (454) |
| 1-Methylbutadiene | 100 (45.4) |
| Methyl chloride | 100 (45.4) |
| Methyl chlorocarbonate | 1000 (454) |
| Methyl chloroform | 1000 (454) |
| Methyl chloroformate | 1000 (454) |
| Methylchloromethyl ether @ | 1 (0.454) |
| 3-Methylcholanthrene | 10 (4.54) |
| 4,4′-Methylenebis(2-chloroaniline) | 10 (4.54) |
| Methylene bromide | 1000 (454) |
| Methylene chloride | 1000 (454) |
| 4,4′-Methylenedianiline | 10 (4.54) |
| Methylene diphenyl diisocyanate | 5000 (2270) |

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|---|---|
| Methylene oxide | 100 (45.4) |
| Methyl ethyl ketone (MEK) | 5000 (2270) |
| Methyl ethyl ketone peroxide | 10 (4.54) |
| Methyl hydrazine | 10 (4.54) |
| Methyl iodide | 100 (45.4) |
| Methyl isobutyl ketone | 5000 (2270) |
| Methyl isocyanate | 10 (4.54) |
| 2-Methyllactonitrile | 10 (4.54) |
| Methyl mercaptan | 100 (45.4) |
| Methyl methacrylate | 1000 (454) |
| Methyl parathion | 100 (45.4) |
| 4-Methyl-2-pentanone | 5000 (2270) |
| Methyl tert-butyl ether | 1000 (454) |
| Methylthiouracil | 10 (4.54) |
| Mevinphos | 10 (4.54) |
| Mexacarbate | 1000 (454) |
| Mitomycin C | 10 (4.54) |
| MNNG | 10 (4.54) |
| Monoethylamine | 100 (45.4) |
| Monomethylamine | 100 (45.4) |
| Muscimol | 1000 (454) |
| Naled | 10 (4.54) |
| 5,12-Naphthacenedione, 8-acetyl-10-[3-amino-2,3,6-trideoxy-alpha-L-lyxo-hexopyranosyl) oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)- | 10 (4.54) |
| Naphthalenamine, N,N-bis(2-chloroethyl)- | 100 (45.4) |
| Naphthalene | 100 (45.4) |
| Naphthalene, 2-chloro- | 5000 (2270) |
| 1,4-Naphthalenedione | 5000 (2270) |

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| 2,7-Naphthalenedisulfonic acid, 3,3′-[(3,3′- dimethyl-(l,1′-biphenyl)-4,4′-diyl)-bis(azo)]bis(5-amino-4-hydroxy)-tetrasodium salt | 10 (4.54) |
| Naphthenic acid | 100 (45.4) |
| 1,4-Naphthoquinone | 5000 (2270) |
| alpha-Naphthylamine | 100 (45.4) |
| beta-Naphthylamine | 1 (0.454) |
| 1-Naphthylamine | 100 (45.4) |
| 2-Naphthylamine | 1 (0.454) |
| alpha-Naphthylthiourea | 100 (45.4) |
| Nickel ¢ | 100 (45.4) |
| Nickel ammonium sulfate | 100 (45.4) |
| Nickel carbonyl | 10 (4.54) |
| Nickel carbonyl Ni(CO)4,(T-4)- | 10 (4.54) |
| Nickel chloride | 100 (45.4) |
| Nickel cyanide | 10 (4.54) |
| Nickel cyanide Ni(CN)2 | 10 (4.54) |
| Nickel hydroxide | 10 (4.54) |
| Nickel nitrate | 100 (45.4) |
| Nickel sulfate | 100 (45.4) |
| Nicotine and salts | 100 (45.4) |
| Nitric acid | 1000 (454) |
| Nitric acid, thallium(1+) salt | 100 (45.4) |
| Nitric oxide | 10 (4.54) |
| p-Nitroaniline | 5000 (2270) |
| Nitrobenzene | 1000 (454) |
| 4-nitrobiphenyl | 10 (4.54) |
| Nitrogen dioxide | 10 (4.54) |
| Nitrogen oxide NO | 10 (4.54) |

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|---|---|
| Nitrogen oxide NO2 | 10 (4.54) |
| Nitroglycerine | 10 (4.54) |
| Nitrophenol (mixed) | 100 (45.4) |
| m- | |
| o- | |
| p- | |
| o-Nitrophenol | 100 (45.4) |
| p-Nitrophenol | 100 (45.4) |
| 2-Nitrophenol | 100 (45.4) |
| 4-Nitrophenol | 100 (45.4) |
| 2-Nitropropane | 10 (4.54) |
| N-Nitrosodi-n-butylamine | 10 (4.54) |
| N-Nitrosodiethanolamine | 1 (0.454) |
| N-Nitrosodiethylamine | 1 (0.454) |
| N-Nitrosodimethylamine | 10 (4.54) |
| N-Nitrosodiphenylamine | 100 (45.4) |
| N-Nitroso-N-ethylurea | 1 (0.454) |
| N-Nitroso-N-methylurea | 1 (0.454) |
| N-Nitroso-N-methylurethane | 1 (0.454) |
| N-Nitrosomethylvinylamine | 10 (4.54) |
| n-Nitrosomorpholine | 1 (0.454) |
| N-Nitrosopiperidine | 10 (4.54) |
| N-Nitrosopyrrolidine | 1 (0.454) |
| Nitrotoluene | 1000 (454) |
| m-Nitrotoluene | |
| o-Nitrotoluene | |
| p-Nitrotoluene | |

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|---|---|
| 5-Nitro-o-toluidine | 100 (45.4) |
| Octamethylpyrophosphoramide | 100 (45.4) |
| Osmium oxide OsO4 (T-4)- | 1000 (454) |
| Osmium tetroxide | 1000 (454) |
| 7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid | 1000 (454) |
| 1,2-Oxathiolane, 2,2-dioxide | 10 (4.54) |
| 2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide | 10 (4.54) |
| Oxirane | 10 (4.54) |
| Oxiranecarboxyaldehyde | 10 (4.54) |
| Oxirane, (chloromethyl)- | 100 (45.4) |
| Paraformaldehyde | 1000 (454) |
| Paraldehyde | 1000 (454) |
| Parathion | 10 (4.54) |
| Pentachlorobenzene | 10 (4.54) |
| Pentachloroethane | 10 (4.54) |
| Pentachloronitrobenzene (PCNB) | 100 (45.4) |
| Pentachlorophenol | 10 (4.54) |
| 1,3-Pentadiene | 100 (45.4) |
| Perchloroethylene | 100 (45.4) |
| Perchloromethyl mercaptan @ | 100 (45.4) |
| Phenacetin | 100 (45.4) |
| Phenanthrene | 5000 (2270) |
| Phenol | 1000 (454) |
| Phenol, 2-chloro- | 100 (45.4) |
| Phenol, 4-chloro-3-methyl- | 5000 (2270) |
| Phenol, 2-cyclohexyl-4,6-dinitro- | 100 (45.4) |
| Phenol, 2,4-dichloro- | 100 (45.4) |

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|---|---|
| Phenol, 2,6-dichloro- | 100 (45.4) |
| Phenol, 4,4′-(1,2-diethyl-1,2-ethenediyl)bis-, (E) | 1 (0.454) |
| Phenol, 2,4-dimethyl- | 100 (45.4) |
| Phenol, 2,4-dinitro- | 10 (4.54) |
| Phenol, methyl- | 100 (45.4) |
| Phenol, 2-methyl-4,6-dinitro- | 10 (4.54) |
| Phenol, 2,2′-methylenebis[3,4,6-trichloro- | 100 (45.4) |
| Phenol, 2-(1-methylpropyl)-4,6-dinitro | 1000 (454) |
| Phenol, 4-nitro- | 100 (45.4) |
| Phenol, pentachloro- | 10 (4.54) |
| Phenol, 2,3,4,6-tetrachloro- | 10 (4.54) |
| Phenol, 2,4,5-trichloro- | 10 (4.54) |
| Phenol, 2,4,6-trichloro- | 10 (4.54) |
| Phenol, 2,4,6-trinitro-, ammonium salt | 10 (4.54) |
| L-Phenylalanine, 4-[bis(2-chloroethyl)aminol] | 1 (0.454) |
| p-Phenylenediamine | 5000 (2270) |
| 1,10-(1,2-Phenylene)pyrene | 100 (45.4) |
| Phenyl mercaptan @ | 100 (45.4) |
| Phenylmercuric acetate | 100 (45.4) |
| Phenylthiourea | 100 (45.4) |
| Phorate | 10 (4.54) |
| Phosgene | 10 (4.54) |
| Phosphine | 100 (45.4) |
| Phosphoric acid | 5000 (2270) |
| Phosphoric acid, diethyl 4-nitrophenyl ester | 100 (45.4) |
| Phosphoric acid, lead(2+) salt (2:3) | 10 (4.54) |
| Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl]ester | 1 (0.454) |

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|---|---|
| Phosphorodithioic acid, O,O-diethyl S-(ethylthio), methyl ester | 10 (4.54) |
| Phosphorodithioic acid, O,O-diethyl S-methyl ester | 5000 (2270) |
| Phosphorodithioic acid, O,O-dimethyl S-[2 (methylamino)-2-oxoethyl] ester | 10 (4.54) |
| Phosphorofluoridic acid, bis(1-methylethyl) ester | 100 (45.4) |
| Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester | 10 (4.54) |
| Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester | 100 (45.4) |
| Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester | 100 (45.4) |
| Phosphorothioic acid, O,[4-[(dimethylamino)sulfonyl] phenyl] O,O-dimethyl ester | 1000 (454) |
| Phosphorus | 1 (0.454) |
| Phosphorus oxychloride | 1000 (454) |
| Phosphorus pentasulfide | 100 (45.4) |
| Phosphorus sulfide | 100 (45.4) |
| Phosphorus trichloride | 1000 (454) |
| Phthalic anhydride | 5000 (2270) |
| 2-Picoline | 5000 (2270) |
| Piperidine, 1-nitroso- | 10 (4.54) |
| Plumbane, tetraethyl- | 10 (4.54) |
| POLYCHLORINATED BIPHENYLS (PCBs) | 1 (0.454) |
| Potassium arsenate | 1 (0.454) |
| Potassium arsenite | 1 (0.454) |
| Potassium bichromate | 10 (4.54) |
| Potassium chromate | 10 (4.54) |
| Potassium cyanide | 10 (4.54) |
| Potassium cyanide K(CN) | 10 (4.54) |
| Potassium hydroxide | 1000 (454) |
| Potassium permanganate | 100 (45.4) |
| Potassium silver cyanide | 1 (0.454) |

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|---|---|
| Pronamide | 5000 (2270) |
| Propanal, 2-methyl-2-(methylthio)-,O-[(methylamino)carbonyl]oxime | 1 (0.454) |
| 1-Propanamine | 5000 (2270) |
| 1-Propanamine, N-nitroso-N-propyl- | 10 (4.54) |
| 1-Propanamine, N-propyl- | 5000 (2270) |
| Propane, 1,2-dibromo-3-chloro- | 1 (0.454) |
| Propane, 1,2-dichloro- | 1000 (454) |
| Propane, 2-nitro- | 10 (4.54) |
| Propane, 2,2′-oxybis [2-chloro- | 1000 (454) |
| 1,3-Propane sultone | 10 (4.54) |
| Propanedinitrile | 1000 (454) |
| Propanenitrile | 10 (4.54) |
| Propanenitrile, 3-chloro- | 1000 (454) |
| Propanenitrile, 2-hydroxy-2-methyl- | 10 (4.54) |
| 1,2,3-Propanetriol, trinitrate- | 10 (4.54) |
| 1-Propanol, 2,3-dibromo-, phosphate (3:1) | 10 (4.54) |
| 1-Propanol, 2-methyl- | 5000 (2270) |
| 2-Propanone | 5000 (2270) |
| 2-Propanone, 1-bromo- | 1000 (454) |
| Propargite | 10 (4.54) |
| Propargyl alcohol | 1000 (454) |
| 2-Propenal | 1 (0.454) |
| 2-Propenamide | 5000 (2270) |
| 1-Propene, 1,3-dichloro- | 100 (45.4) |
| 1-Propene, 1,1,2,3,3,3-hexachloro- | 1000 (454) |
| 2-Propenenitrile | 100 (45.4) |
| 2-Propenenitrile, 2-methyl- | 1000 (454) |

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|---|---|
| 2-Propenoic acid | 5000 (2270) |
| 2-Propenoic acid, ethyl ester | 1000 (454) |
| 2-Propenoic acid, 2-methyl-, ethyl ester | 1000 (454) |
| 2-Propenoic acid, 2-methyl-, methyl ester | 1000 (454) |
| 2-Propen-1-ol | 100 (45.4) |
| beta-Propioaldehyde | 1000 (454) |
| Propionic acid | 5000 (2270) |
| Propionic acid, 2-(2,4,5-trichlorophenoxy)- | 100 (45.4) |
| Propionic anhydride | 5000 (2270) |
| Propoxur (baygon) | 100 (45.4) |
| n-Propylamine | 5000 (2270) |
| Propylene dichloride | 1000 (454) |
| Propylene oxide | 100 (45.4) |
| 1,2-Propylenimine | 1 (0.454) |
| 2-Propyn-1-ol | 1000 (454) |
| Pyrene | 5000 (2270) |
| Pyrethrins | 1 (0.454) |
| 3,6-Pyridazinedione, 1,2-dihydro- | 5000 (2270) |
| 4-Pyridinamine | 1000 (454) |
| Pyridine | 1000 (454) |
| Pyridine, 2-methyl- | 5000 (2270) |
| Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S) | 100 (45.4) |
| 2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]- | 10 (4.54) |
| 4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo- | 10 (4.54) |
| Pyrrolidine, 1-nitroso- | 1 (0.454) |
| Quinoline | 5000 (2270) |
| RADIONUCLIDES | See table 2 |

| | |
|---|---|
| Reserpine | 5000 (2270) |
| Resorcinol | 5000 (2270) |
| Saccharin and salts | 100 (45.4) |
| Safrole | 100 (45.4) |
| Selenious acid | 10 (4.54) |
| Selenious acid, dithallium(1+) salt | 1000 (454) |
| Selenium ¢ | 100 (45.4) |
| Selenium dioxide | 10 (4.54) |
| Selenium oxide | 10 (4.54) |
| Selenium sulfide | 10 (4.54) |
| Selenium sulfide SeS2 | 10 (4.54) |
| Selenourea | 1000 (454) |
| L-Serine, diazoacetate (ester) | 1 (0.454) |
| Silver ¢ | 1000 (454) |
| Silver cyanide | 1 (0.454) |
| Silver cyanide Ag(CN) | 1 (0.454) |
| Silver nitrate | 1 (0.454) |
| Silvex(2,4,5-TP) | 100 (45.4) |
| Sodium | 10 (4.54) |
| Sodium arsenate | 1 (0.454) |
| Sodium arsenite | 1 (0.454) |
| Sodium azide | 1000 (454) |
| Sodium bichromate | 10 (4.54) |
| Sodium bifluoride | 100 (45.4) |
| Sodium bisulfite | 5000 (2270) |
| Sodium chromate | 10 (4.54) |
| Sodium cyanide | 10 (4.54) |

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|---|---|
| Sodium cyanide Na(CN) | 10 (4.54) |
| Sodium dodecylbenzene sulfonate | 1000 (454) |
| Sodium fluoride | 1000 (454) |
| Sodium hydrosulfide | 5000 (2270) |
| Sodium hydroxide | 1000 (454) |
| Sodium hypochlorite | 100 (45.4) |
| Sodium methylate | 1000 (454) |
| Sodium nitrite | 100 (45.4) |
| Sodium phosphate, dibasic | 5000 (2270) |
| Sodium phosphate, tribasic | 5000 (2270) |
| Sodium selenite | 100 (45.4) |
| Streptozotocin | 1 (0.454) |
| Strontium chromate | 10 (4.54) |
| Strychnidin-10-one | 10 (4.54) |
| Strychnidin-10-one, 2,3-dimethoxy- | 100 (45.4) |
| Strychnine and salts | 10 (4.54) |
| Styrene | 1000 (454) |
| Styrene oxide | 100 (45.4) |
| Sulfur chloride @ | 1000 (454) |
| Sulfur monochloride | 1000 (454) |
| Sulfur phosphide | 100 (45.4) |
| Sulfuric acid | 1000 (454) |
| Sulfuric acid, dimethyl ester | 100 (45.4) |
| Sulfuric acid, dithallium(I+) salt | 100 (45.4) |
| 2,4,5-T | 1000 (454) |
| 2,4,5-T acid | 1000 (454) |
| 2,4,5-T amines | 5000 (2270) |

| | |
|---|---|
| 2,4,5-T esters | 1000 (454) |
| 2,4,5-T salts | 1000 (454) |
| TDE | 1 (0.454) |
| 1,2,4,5-Tetrachlorobenzene | 5000 (2270) |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) | 1 (0.454) |
| 1,1,1,2-Tetrachloroethane | 100 (45.4) |
| 1,1,2,2-Tetrachloroethane | 100 (45.4) |
| Tetrachloroethane @ | 100 (45.4) |
| Tetrachloroethene | 100 (45.4) |
| Tetrachloroethylene | 100 (45.4) |
| 2,3,4,6-Tetrachlorophenol | 10 (4.54) |
| Tetraethyl lead | 10 (4.54) |
| Tetraethyl pyrophosphate | 10 (4.54) |
| Tetraethyldithiopyrophosphate | 100 (45.4) |
| Tetrahydrofuran | 1000 (454) |
| Tetranitromethane | 10 (4.54) |
| Tetraphosphoric acid, hexaethyl ester | 100 (45.4) |
| Thallic oxide | 100 (45.4) |
| Thallium ¢ | 1000 (454) |
| Thallium(I) acetate | 100 (45.4) |
| Thallium(I) carbonate | 100 (45.4) |
| Thallium(I) chloride | 100 (45.4) |
| Thallium chloride TlCl | 100 (45.4) |
| Thallium(I) nitrate | 100 (45.4) |
| Thallium oxide T1203 | 100 (45.4) |
| Thallium selenite | 1000 (454) |
| Thallium(I) sulfate | 100 (45.4) |

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|---|---|
| Thioacetamide | 10 (4.54) |
| Thiodiphosphoric acid, tetraethyl ester | 100 (45.4) |
| Thiofanox | 100 (45.4) |
| Thioimidodicarbonic diamide $[(H_2N)C(S)]_2NH$ | 100 (45.4) |
| Thiomethanol | 100 (45.4) |
| Thioperoxydicarbonic diamide $[(H_2N)C(S)]_2S_2$, tetramethyl- | 10 (4.54) |
| Thiophenol | 100 (45.4) |
| Thiosemicarbazide | 100 (45.4) |
| Thiourea | 10 (4.54) |
| Thiourea, (2-chlorophenyl)- | 100 (45.4) |
| Thiourea, 1-naphthalenyl- | 100 (45.4) |
| Thiourea, phenyl- | 100 (45.4) |
| Thiram | 10 (4.54) |
| Titanium tetrachloride | 1000 (454) |
| Toluene | 1000 (454) |
| Toluenediamine | 10 (4.54) |
| Toluene diisocyanate | 100 (45.4) |
| o-Toluidine | 100 (45.4) |
| p-Toluidine | 100 (45.4) |
| o-Toluidine hydrochloride | 100 (45.4) |
| Toxaphene | 1 (0.454) |
| 2,4,5-TP acid | 100 (45.4) |
| 2,4,5-TP acid esters | 100 (45.4) |
| 1H-1,2,4-Triazol-3-amine | 10 (4.54) |
| Trichlorfon | 100 (45.4) |
| 1,2,4-Trichlorobenzene | 100 (45.4) |
| 1,1,1-Trichloroethane | 1000 (454) |

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|---|---|
| 1,1,2-Trichloroethane | 100 (45.4) |
| Trichloroethene | 100 (45.4) |
| Trichloroethylene | 100 (45.4) |
| Trichloromethanesulfenyl chloride | 100 (45.4) |
| Trichloromonofluoromethane | 5000 (2270) |
| Trichlorophenol | 10 (4.54) |
| 2,3,4-Trichlorophenol | |
| 2,3,5-Trichlorophenol | |
| 2,3,6-Trichlorophenol | |
| 2,4,5-Trichlorophenol | |
| 2,4,6-Trichlorophenol | |
| 3,4,5-Trichlorophenol | |
| 2,4,5-Trichlorophenol | 10 (4.54) |
| 2,4,6-Trichlorophenol | 10 (4.54) |
| Triethanolamine dodecylbenzene sulfonate | 1000 (454) |
| Triethylamine | 5000 (2270) |
| Trifluralin | 10 (4.54) |
| Trimethylamine | 100 (45.4) |
| 2,2,4–Trimethylpentane | 1000 (454) |
| 1,3,5-Trinitrobenzene | 10 (4.54) |
| 1,3,5-Trioxane, 2,4,6-trimethyl- | 1000 (454) |
| Tris(2,3-dibromopropyl) phosphate | 10 (4.54) |
| Trypan blue | 10 (4.54) |
| Uracil mustard | 10 (4.54) |
| Uranyl acetate | 100 (45.4) |
| Uranyl nitrate | 100 (45.4) |
| Urea, N-ethyl-N-nitroso- | 1 (0.454) |

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|---|---|
| Urea, N-methyl-N-nitroso- | 1 (0.454) |
| Vanadic acid, ammonium salt | 1000 (454) |
| Vanadium oxide $V_20_5$ | 1000 (454) |
| Vanadium pentoxide | 1000 (454) |
| Vanadyl sulfate | 1000 (454) |
| Vinyl acetate | 5000 (2270) |
| Vinyl acetate monomer | 5000 (2270) |
| Vinylamine, N-methyl-N-nitroso- | 10 (4.54) |
| Vinyl bromide | 100 (45.4) |
| Vinyl chloride | 1 (0.454) |
| Vinylidene chloride | 100 (45.4) |
| Warfarin, & salts, when present at concentrations greater than 0.3% | 100 (45.4) |
| Xylene | 100 (45.4) |
| m-Xylene | 1000 (454) |
| o-Xylene | 1000 (454) |
| p-Xylene | 100 (45.4) |
| Xylene (mixed) | 100 (45.4) |
| Xylenes (isomers and mixture) | 100 (45.4) |
| Xylenol | 1000 (454) |
| Yohimban-16-carboxylic acid,11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester (3beta,16beta,17alpha,18beta,20alpha)- | 5000 (2270) |
| Zinc ¢ | 1000 (454) |
| Zinc acetate | 1000 (454) |
| Zinc ammonium chloride | 1000 (454) |
| Zinc borate | 1000 (454) |
| Zinc bromide | 1000 (454) |
| Zinc carbonate | 1000 (454) |

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|---|---|
| Zinc chloride | 1000 (454) |
| Zinc cyanide | 10 (4.54) |
| Zinc cyanide $Zn(CN)_2$ | 10 (4.54) |
| Zinc fluoride | 1000 (454) |
| Zinc formate | 1000 (454) |
| Zinc hydrosulfite | 1000 (454) |
| Zinc nitrate | 1000 (454) |
| Zinc phenolsulfonate | 5000 (2270) |
| Zinc phosphide | 100 (45.4) |
| Zinc phosphide $Zn_3P_2$, when present at concentrations greater than 10% | 100 (45.4) |
| Zinc silicofluoride | 5000 (2270) |
| Zinc sulfate | 1000 (454) |
| Zirconium nitrate | 5000 (2270) |
| Zirconium potassium fluoride | 1000 (454) |
| Zirconium sulfate | 5000 (2270) |
| Zirconium tetrachloride | 5000 (2270) |
| D001 Unlisted Hazardous Wastes Characteristic of Ignitability | 100 (45.4) |
| D002 Unlisted Hazardous Wastes Characteristic of Corrosivity | 100 (45.4) |
| D003 Unlisted Hazardous Wastes Characteristic of Reactivity | 100 (45.4) |
| D004-D043 Unlisted Hazardous Wastes Characteristic of Toxicity | |
| D004 Arsenic | 1 (0.454) |
| D005 Barium | 1000 (454) |
| D006 Cadmium | 10 (4.54) |
| D007 Chromium | 10 (4.54) |
| D008 Lead | 10 (4.54) |
| D009 Mercury | 1 (0.454) |
| D010 Selenium | 10 (4.54) |

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|---|---|
| D011 Silver | 1 (0.454) |
| D012 Endrin | 1 (0.454) |
| D013 Lindane | 1 (0.454) |
| D014 Methoxychlor | 1 (0.454) |
| D015 Toxaphene | 1 (0.454) |
| D016 2,4-D | 100 (45.4) |
| D017 2,4,5-TP | 100 (45.4) |
| D018 Benzene | 10 (4.54) |
| D019 Carbon tetrachloride | 10 (4.54) |
| D020 Chlordane | 1 (0.454) |
| D021 Chlorobenzene | 100 (45.4) |
| D022 Chloroform | 10 (4.54) |
| D023 o-Cresol | 100 (45.4) |
| D024 m-Cresol | 100 (45.4) |
| D025 p-Cresol | 100 (45.4) |
| D026 Cresol | 100 (45.4) |
| D027 1,4-Dichlorobenzene | 100 (45.4) |
| D028 1,2-Dichloroethane | 100 (45.4) |
| D029 1,1-Dichloroethylene | 100 (45.4) |
| D030 2,4-Dinitrotoluene | 10 (4.54) |
| D031 Heptachlor (and hydroxide) | 1 (0.454) |
| D032 Hexachlorobenzene | 10 (4.54) |
| D033 Hexachlorobutadiene | 1 (0.454) |
| D034 Hexachloroethane | 100 (45.4) |
| D035 Methyl ethyl ketone | 5000 (2270) |
| D036 Nitrobenzene | 1000 (454) |
| D037 Pentachlorophenol | 10 (4.54) |

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|---|---|
| D038 Pyridine | 1000 (454) |
| D039 Tetrachloroethylene | 100 (45.4) |
| D040 Tricholorethylene | 100 (45.4) |
| D041 2,4,5–Trichlorophenol | 10 (4.54) |
| D042 2,4,6–Trichlorophenol | 10 (4.54) |
| D043 Vinyl chloride | 1 (0.454) |
| F001<br>The following spent halogenated solvents used in degreasing; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the below listed halogenated solvents or those solvents listed in F002, F004 and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures | 10 (4.54) |
| (a) Tetrachloroethylene | 100 (45.4) |
| (b) Trichloroethylene | 100 (45.4) |
| (c) Methylene chloride | 1000 (454) |
| (d) 1,1,1–Trichloroethane | 1000 (454) |
| (e) Carbon tetrachloride | 10 (4.54) |
| (f) Chlorinated fluorocarbons | 5000 (2270) |
| F002<br>The following spent halogenated solvents; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the below listed halogenated solvents or those listed in F001, F004, F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. | 10 (4.54) |
| (a) Tetrachloroethylene | 100 (45.4) |
| (b) Methylene chloride | 1000 (454) |
| (c) Trichloroethylene | 100 (45.4) |
| (d) 1,1,1–Trichloroethane | 1000 (454) |
| (e) Chlorobenzene | 100 (45.4) |
| (f) 1,1,2–Trichloro-1,2,2-trifluoroethane | 5000 (2270) |
| (g) o-Dichlorobenzene | 100 (45.4) |
| (h) Trichlorofluoromethane | 5000 (2270) |
| (i) 1,1,2 Trichloroethane | 100 (45.4) |
| F003<br>The following spent non-halogenated solvents and solvents: | 100 (45.4) |

| | |
|---|---|
| (a) Xylene | 1000 (454) |
| (b) Acetone | 5000 (2270) |
| (c) Ethyl acetate | 5000 (2270) |
| (d) Ethylbenzene | 1000 (454) |
| (e) Ethyl ether | 100 (45.4) |
| (f) Methyl isobutyl ketone | 5000 (2270) |
| (g) n-Butyl alcohol | 5000 (2270) |
| (h) Cyclohexanone | 5000 (2270) |
| (i) Methanol | 5000 (2270) |
| F004 | 100 (45.4) |
| The following spent non-halogenated solvents and the still bottoms from the recovery of these solvents: | |
| (a) Cresols/Cresylic acid | 1000 (454) |
| (b) Nitrobenzene | 100 (45.4) |
| F005<br>The following spent non-halogenated solvents and the still bottoms from the recovery of these solvents: | 100 (45.4) |
| (a) Toluene | 1000 (454) |
| (b) Methyl ethyl ketone | 5000 (2270) |
| (c) Carbon disulfide | 100 (45.4) |
| (d) Isobutanol | 5000 (2270) |
| (e) Pyridine | 1000 (454) |
| F006<br>Wastewater treatment sludges from electroplating operations except from the following processes: (1) sulfuric acid anodizing of aluminum, (2) tin plating on carbon steel, (3) zinc plating (segregated basis) on carbonsteel, (4) aluminum or zinc-aluminum plating on carbon steel, (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel, and (6) chemical etching and milling of aluminum | 10 (4.54) |
| F007<br>Spent cyanide plating bath solutions from electroplating operations | 10 (4.54) |
| F008<br>Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process | 10 (4.54) |
| F009<br>Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process | 10 (4.54) |

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| F010<br>Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process | 10 (4.54) |
| F011<br>Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations (except for precious metals heat treating spent cyanide solutions from salt bath pot cleaning) | 10 (4.54) |
| F012<br>Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process | 10 (4.54) |
| F019<br>Wastewater treatment sludges from the chemical conversion coating of aluminum—except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process | 10 (4.54) |
| F020<br>Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of hexachlorophene from highly purified 2,4,5-trichlorophenol.) | 1 (0.454) |
| F021<br>Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives. | 1 (0.454) |
| F022<br>Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions. | 1 (0.454) |
| F023<br>Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of hexachlorophene from highly purified 2,4,5-trichlorophenol.) | 1 (0.454) |
| F024<br>Wastes, including but not limited to distillation residues, heavy ends, tars, and reactor cleanout wastes, from the production of chlorinated aliphatichydrocarbons, having carbon content from one to five, utilizing free radical catalyzed processes. (This listing does not include light ends, spent filters and filter aids, spent dessicants(sic), wastewater, wastewater treatment sludges, spent catalysts, and wastes listed in 40 CFR 261.32.) | 1 (0.454) |
| F025<br>Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution | 1 (0.454) |
| F026<br>Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions. | 1 (0.454) |
| F027<br>Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.) | 1 (0.454) |
| F028 | 1 (0.454) |

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|---|---|
| Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027. | |
| F032 | 1 (0.454) |
| F034 | 1 (0.454) |
| F035 | 1 (0.454) |
| F037 | 1 (0.454) |
| F038 | 1 (0.454) |
| F039<br>Multi source leachate | 1 (0.454) |
| K001<br>Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol | 1 (0.454) |
| K002<br>Wastewater treatment sludge from the production of chrome yellow and orange pigments | 10 (4.54) |
| K003<br>Wastewater treatment sludge from the production of molybdate orange pigments | 10 (4.54) |
| K004<br>Wastewater treatment sludge from the production of zinc yellow pigments | 10 (4.54) |
| K005<br>Wastewater treatment sludge from the production of chrome green pigments | 10 (4.54) |
| K006<br>Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated) | 10 (4.54) |
| K007<br>Wastewater treatment sludge from the production of iron blue pigments | 10 (4.54) |
| K008<br>Oven residue from the production of chrome oxide green pigments | 10 (4.54) |
| K009<br>Distillation bottoms from the production of acetaldehyde from ethylene | 10 (4.54) |
| K010<br>Distillation side cuts from the production of acetaldehyde from ethylene | 10 (4.54) |
| K011<br>Bottom stream from the wastewater stripper in the production of acrylonitrile | 10 (4.54) |
| K013<br>Bottom stream from the acetonitrile column in the production of acrylonitrile | 10 (4.54) |

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| K014<br>Bottoms from the acetonitrile purification column in the production of acrylonitrile | 5000 (2270) |
| K015<br>Still bottoms from the distillation of benzyl chloride | 10 (4.54) |
| K016<br>Heavy ends or distillation residues from the production of carbon tetrachloride | 1 (0.454) |
| K017<br>Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin | 10 (4.54) |
| K018<br>Heavy ends from the fractionation column in ethyl chloride production | 1 (0.454) |
| K019<br>Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production. | 1 (0.454) |
| K020<br>Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production | 1 (0.454) |
| K021<br>Aqueous spent antimony catalyst waste from fluoromethanes production | 10 (4.54) |
| K022<br>Distillation bottom tars from the production of phenol/acetone from cumene | 1 (0.454) |
| K023<br>Distillation light ends from the production of phthalic anhydride from naphthalene | 5000 (2270) |
| K024<br>Distillation bottoms from the production of phthalic anhydride from naphthalene | 5000 (2270) |
| K025<br>Distillation bottoms from the production of nitrobenzene by the nitration of benzene | 10 (4.54) |
| K026<br>Stripping still tails from the production of methyl ethyl pyridines | 1000 (454) |
| K027<br>Centrifuge and distillation residues from toluene diisocyanate production | 10 (4.54) |
| K028<br>Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane | 1 (0.454) |
| K029<br>Waste from the product steam stripper in the production of 1,1,1-trichloroethane | 1 (0.454) |
| K030<br>Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene | 1 (0.454) |

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| K031<br>By-product salts generated in the production of MSMA and cacodylic acid | 1 (0.454) |
| K032<br>Wastewater treatment sludge from the production of chlordane | 10 (4.54) |
| K033<br>Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane | 10 (4.54) |
| K034<br>Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane | 10 (4.54) |
| K035<br>Wastewater treatment sludges generated in the production of creosote | 1 (0.454) |
| K036<br>Still bottoms from toluene reclamation distillation in the production of disulfoton | 1 (0.454) |
| K037<br>Wastewater treatment sludges from the production of disulfoton | 1 (0.454) |
| K038<br>Wastewater from the washing and stripping of phorate production | 10 (4.54) |
| K039<br>Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate | 10 (4.54) |
| K040<br>Wastewater treatment sludge from the production of phorate | 10 (4.54) |
| K041<br>Wastewater treatment sludge from the production of toxaphene | 1 (0.454) |
| K042<br>Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5–T | 10 (4.54) |
| K043<br>2,6-dichlorophenol waste from the production of 2,4–D | 10 (4.54) |
| K044<br>Wastewater treatment sludges from the manufacturing and processing of explosives | 10 (4.54) |
| K045<br>Spent carbon from the treatment of wastewater containing explosives | 10 (4.54) |
| K046<br>Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds | 10 (4.54) |
| K047<br>Pink/red water from TNT operations | 10 (4.54) |

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| K048<br>Dissolved air flotation (DAF) float from the petroleum refining industry | 10 (4.54) |
| K049<br>Slop oil emulsion solids from the petroleum refining industry | 10 (4.54) |
| K050<br>Heat exchanger bundle cleaning sludge from the petroleum refining industry | 10 (4.54) |
| K051<br>API separator sludge from the petroleum refining industry | 10 (4.54) |
| K052<br>Tank bottoms (leaded) from the petroleum refining industry | 10 (4.54) |
| K060<br>Ammonia still lime sludge from coking operations | 1 (0.454) |
| K061<br>Emission control dust/sludge from the primary production of steel in electric furnaces | 10 (4.54) |
| K062<br>Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry | 10 (4.54) |
| K064<br>Acid plant blowdown slurry/sludge resulting from thickening of blowdown slurry from primary copper production. | 10 (4.54) |
| K065<br>Surface impoundment solids contained in and dredged from surface impoundments at primary lead smelting facilities. | 10 (4.54) |
| K066<br>Sludge from treatment of process wastewater and /or acid plant blowdown from primary zinc production. | 10 (4.54) |
| K069<br>Emission control dust/sludge from secondary lead smelting | 10 (4.54) |
| K071<br>Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used | 1 (0.454) |
| K073<br>Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production. | 10 (4.54) |
| K083<br>Distillation bottoms from aniline extraction | 100 (45.4) |
| K084<br>Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds | 1 (0.454) |
| K085<br>Distillation or fractionation column bottoms from the production of chlorobenzenes | 10 (4.54) |

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| K086<br>Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead | 10 (4.54) |
| K087<br>Decanter tank tar sludge from coking operations | 100 (45.4) |
| K088 | 10 (4.54) |
| Spent potliners from primary aluminum reduction. | |
| K090 | 10 (4.54) |
| Emission control dust or sludge from ferrochromiumsilicon production | |
| K091 | 10 (4.54) |
| Emission control dust or sludge from ferrochromium production | |
| K093<br>Distillation light ends from the production of phthalic anhydride from ortho-xylene | 5000 (2270) |
| K094<br>Distillation bottoms from the production of phthalic anhydride from ortho-xylene | 5000 (2270) |
| K095<br>Distillation bottoms from the production of 1,1,1-trichloroethane. | 100 (45.4) |
| K096<br>Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane. | 100 (45.4) |
| K097<br>Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane | 1 (0.454) |
| K098<br>Untreated process wastewater from the production of toxaphene | 1 (0.454) |
| K099<br>Untreated wastewater from the production of 2,4-D | 10 (4.54) |
| K100<br>Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting | 10 (4.54) |
| K101<br>Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds | 1 (0.454) |
| K102<br>Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds | 1 (0.454) |
| K103<br>Process residues from aniline extraction from the production of aniline | 100 (45.4) |

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|---|---|
| K104<br>Combined wastewater streams generated from nitrobenzene/aniline chlorobenzenes | 10 (4.54) |
| K105<br>Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes | 10 (4.54) |
| K106<br>Wastewater treatment sludge from the mercury cell process in chlorine production | 1 (0.454) |
| K107<br>Column bottoms from product seperation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazines | 10 (4.54) |
| K108<br>Condensed column overheads from product seperation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides | 10 (4.54) |
| K109<br>Spent filter cartidges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydazides | 10 (4.54) |
| K110<br>Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazines (UDMH) from carboxylic acid hydrazides | 10 (4.54) |
| K111<br>Product washwaters from the production of dinitrotoluene via nitration of toluene. | 10 (4.54) |
| K112<br>Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene. | 10 (4.54) |
| K113<br>Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene. | 10 (4.54) |
| K114<br>Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene. | 10 (4.54) |
| K115<br>Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene. | 10 (4.54) |
| K116<br>Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine. | 10 (4.54) |
| K117<br>Wastewater from the reaction vent gas scrubber in the production of ethylene bromide via bromination of ethene. | 1 (0.454) |
| K118<br>Spent absorbent solids from purification of ethylene dibromide in the production of ethylene dibromide. | 1 (0.454) |
| K123<br>Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salts. | 10 (4.54) |
| K124<br>Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts. | 10 (4.54) |

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| K125<br>Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts. | 10 (4.54) |
| K126<br>Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts. | 10 (4.54) |
| K131<br>Waste water from the reactor and spent sulfuric acid from the acid dryer in the production of methyl bromide | 100 (45.4) |
| K132<br>Spent absorbent and wastewater solids from the production of methyl bromide | 1000 (454) |
| K136<br>Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene. | 1 (0.454) |
| K141 | 1 (0.454) |
| K142 | 1 (0.454) |
| K143 | 1 (0.454) |
| K144 | 1 (0.454) |
| K145 | 1 (0.454) |
| K147 | 1 (0.454) |
| K148 | 1 (0.454) |
| K149 | 10 (4.54) |
| K150 | 10 (4.54) |
| K151 | 10 (4.54) |
| K156 | 1 (0.454) |
| K157 | 1 (0.454) |
| K158 | 1 (0.454) |
| K169 | 10 (4.54) |
| K170 | 1 (0.454) |
| K171 | 1 (0.454) |
| K172 | 1 (0.454) |
| K174 | 1 (0.454) |
| K175 | 1 (0.454) |

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|---|---|
| K176 | 1 (0.454) |
| K177 | 5000 (2270) |
| K178 | 1 (0.454) |

Footnotes:

¢The RQ for these hazardous substances is limited to those pieces of the metal having a diameter smaller than 100 micrometers (0.004 inches)

¢¢The RQ for asbestos is limited to friable forms only

@Indicates that the name was added by PHMSA because (1) the name is a synonym for a specific hazardous substance and (2) the name appears in the Hazardous Materials Table as a proper shipping name.

List of Hazardous Substances and Reportable Quantities

**Table 2 to Appendix A—Radionuclides**

| (1)—Radionuclide | (2)—Atomic Number | (3)—Reportable Quantity (RQ) Ci (TBq) |
|---|---|---|
| Actinium-224 | 89 | 100 (3.7) |
| Actinium-225 | 89 | 1 (.037) |
| Actinium-226 | 89 | 10 (.37) |
| Actinium-227 | 89 | 0.001 (.000037) |
| Actinium-228 | 89 | 10 (.37) |
| Aluminum-26 | 13 | 10 (.37) |
| Americium-237 | 95 | 1000 (37) |
| Americium-238 | 95 | 100 (3.7) |
| Americium-239 | 95 | 100 (3.7) |
| Americium-240 | 95 | 10 (.37) |
| Americium-241 | 95 | 0.01 (.00037) |
| Americium-242 | 95 | 100 (3.7) |
| Americium-242m | 95 | 0.01 (.00037) |
| Americium-243 | 95 | 0.01 (.00037) |
| Americium-244 | 95 | 10 (.37) |
| Americium-244m | 95 | 1000 (37) |

| | | |
|---|---|---|
| Americium-245 | 95 | 1000 (37) |
| Americium-246 | 95 | 1000 (37) |
| Americium-246m | 95 | 1000 (37) |
| Antimony-115 | 51 | 1000 (37) |
| Antimony-116 | 51 | 1000 (37) |
| Antimony-116m | 51 | 100 (3.7) |
| Antimony-117 | 51 | 1000 (37) |
| Antimony-118m | 51 | 10 (.37) |
| Antimony-119 | 51 | 1000 (37) |
| Antimony-120 (16 min) | 51 | 1000 (37) |
| Antimony-120 (5.76 day) | 51 | 10 (.37) |
| Antimony-122 | 51 | 10 (.37) |
| Antimony-124 | 51 | 10 (.37) |
| Antimony-124m | 51 | 1000 (37) |
| Antimony-125 | 51 | 10 (.37) |
| Antimony-126 | 51 | 10 (.37) |
| Antimony-126m | 51 | 1000 (37) |
| Antimony-127 | 51 | 10 (.37) |
| Antimony-128 (10.4 min) | 51 | 1000 (37) |
| Antimony-128 (9.01 hr) | 51 | 10 (.37) |
| Antimony-129 | 51 | 100 (3.7) |
| Antimony-130 | 51 | 100 (3.7) |
| Antimony-131 | 51 | 1000 (37) |
| Argon-39 | 18 | 1000 (37) |
| Argon-41 | 18 | 10 (.37) |
| Arsenic-69 | 33 | 1000 (37) |
| Arsenic-70 | 33 | 100 (3.7) |
| Arsenic-71 | 33 | 100 (3.7) |
| Arsenic-72 | 33 | 10 (.37) |

| | | |
|---|---|---|
| Arsenic-73 | 33 | 100 (3.7) |
| Arsenic-74 | 33 | 10 (.37) |
| Arsenic-76 | 33 | 100 (3.7) |
| Arsenic-77 | 33 | 1000 (37) |
| Arsenic-78 | 33 | 100 (3.7) |
| Astatine-207 | 85 | 100 (3.7) |
| Astatine-211 | 85 | 100 (3.7) |
| Barium-126 | 56 | 1000 (37) |
| Barium-128 | 56 | 10 (.37) |
| Barium-131 | 56 | 10 (.37) |
| Barium-131m | 56 | 1000 (37) |
| Barium-133 | 56 | 10 (.37) |
| Barium-133m | 56 | 100 (3.7) |
| Barium-135m | 56 | 1000 (37) |
| Barium-139 | 56 | 1000 (37) |
| Barium-140 | 56 | 10 (.37) |
| Barium-141 | 56 | 1000 (37) |
| Barium-142 | 56 | 1000 (37) |
| Berkelium-245 | 97 | 100 (3.7) |
| Berkelium-246 | 97 | 10 (.37) |
| Berkelium-247 | 97 | 0.01 (.00037) |
| Berkelium-249 | 97 | 1 (.037) |
| Berkelium-250 | 97 | 100 (3.7) |
| Beryllium-10 | 4 | 1 (.037) |
| Beryllium-7 | 4 | 100 (3.7) |
| Bismuth-200 | 83 | 100 (3.7) |
| Bismuth-201 | 83 | 100 (3.7) |
| Bismuth-202 | 83 | 1000 (37) |
| Bismuth-203 | 83 | 10 (.37) |

| | | |
|---|---|---|
| Bismuth-205 | 83 | 10 (.37) |
| Bismuth-206 | 83 | 10 (.37) |
| Bismuth-207 | 83 | 10 (.37) |
| Bismuth-210 | 83 | 10 (.37) |
| Bismuth-210m | 83 | 0.1 (.0037) |
| Bismuth-212 | 83 | 100 (3.7) |
| Bismuth-213 | 83 | 100 (3.7) |
| Bismuth-214 | 83 | 100 (3.7) |
| Bromine-74 | 35 | 100 (3.7) |
| Bromine-74m | 35 | 100 (3.7) |
| Bromine-75 | 35 | 100 (3.7) |
| Bromine-76 | 35 | 10 (.37) |
| Bromine-77 | 35 | 100 (3.7) |
| Bromine-80 | 35 | 1000 (37) |
| Bromine-80m | 35 | 1000 (37) |
| Bromine-82 | 35 | 10 (.37) |
| Bromine-83 | 35 | 1000 (37) |
| Bromine-84 | 35 | 100 (3.7) |
| Cadmium-104 | 48 | 1000 (37) |
| Cadmium-107 | 48 | 1000 (37) |
| Cadmium-109 | 48 | 1 (.037) |
| Cadmium-113 | 48 | 0.1 (.0037) |
| Cadmium-113m | 48 | 0.1 (.0037) |
| Cadmium-115 | 48 | 100 (3.7) |
| Cadmium-115m | 48 | 10 (.37) |
| Cadmium-117 | 48 | 100 (3.7) |
| Cadmium-117m | 48 | 10 (.37) |
| Calcium-41 | 20 | 10 (.37) |
| Calcium-45 | 20 | 10 (.37) |

| | | |
|---|---|---|
| Calcium-47 | 20 | 10 (.37) |
| Californium-244 | 98 | 1000 (37) |
| Californium-246 | 98 | 10 (.37) |
| Californium-248 | 98 | 0.1 (.0037) |
| Californium-249 | 98 | 0.01 (.00037) |
| Californium-250 | 98 | 0.01 (.00037) |
| Californium-251 | 98 | 0.01 (.00037) |
| Californium-252 | 98 | 0.1 (.0037) |
| Californium-253 | 98 | 10 (.37) |
| Californium-254 | 98 | 0.1 (.0037) |
| Carbon-11 | 6 | 1000 (37) |
| Carbon-14 | 6 | 10 (.37) |
| Cerium-134 | 58 | 10 (.37) |
| Cerium-135 | 58 | 10 (.37) |
| Cerium-137 | 58 | 1000 (37) |
| Cerium-137m | 58 | 100 (3.7) |
| Cerium-139 | 58 | 100 (3.7) |
| Cerium-141 | 58 | 10 (.37) |
| Cerium-143 | 58 | 100 (3.7) |
| Cerium-144 | 58 | 1 (.037) |
| Cesium-125 | 55 | 1000 (37) |
| Cesium-127 | 55 | 100 (3.7) |
| Cesium-129 | 55 | 100 (3.7) |
| Cesium-130 | 55 | 1000 (37) |
| Cesium-131 | 55 | 1000 (37) |
| Cesium-132 | 55 | 10 (.37) |
| Cesium-134 | 55 | 1 (.037) |
| Cesium-134m | 55 | 1000 (37) |
| Cesium-135 | 55 | 10 (.37) |

| | | |
|---|---|---|
| Cesium-135m | 55 | 100 (3.7) |
| Cesium-136 | 55 | 10 (.37) |
| Cesium-137 | 55 | 1 (.037) |
| Cesium-138 | 55 | 100 (3.7) |
| Chlorine-36 | 17 | 10 (.37) |
| Chlorine-38 | 17 | 100 (3.7) |
| Chlorine-39 | 17 | 100 (3.7) |
| Chromium-48 | 24 | 100 (3.7) |
| Chromium-49 | 24 | 1000 (37) |
| Chromium-51 | 24 | 1000 (37) |
| Cobalt-55 | 27 | 10 (.37) |
| Cobalt-56 | 27 | 10 (.37) |
| Cobalt-57 | 27 | 100 (3.7) |
| Cobalt-58 | 27 | 10 (.37) |
| Cobalt-58m | 27 | 1000 (37) |
| Cobalt-60 | 27 | 10 (.37) |
| Cobalt-60m | 27 | 1000 (37) |
| Cobalt-61 | 27 | 1000 (37) |
| Cobalt-62m | 27 | 1000 (37) |
| Copper-60 | 29 | 100 (3.7) |
| Copper-61 | 29 | 100 (3.7) |
| Copper-64 | 29 | 1000 (37) |
| Copper-67 | 29 | 100 (3.7) |
| Curium-238 | 96 | 1000 (37) |
| Curium-240 | 96 | 1 (.037) |
| Curium-241 | 96 | 10 (.37) |
| Curium-242 | 96 | 1 (.037) |
| Curium-243 | 96 | 0.01 (.00037) |
| Curium-244 | 96 | 0.01 (.00037) |

| | | |
|---|---|---|
| Curium-245 | 96 | 0.01 (.00037) |
| Curium-246 | 96 | 0.01 (.00037) |
| Curium-247 | 96 | 0.01 (.00037) |
| Curium-248 | 96 | 0.001 (.000037) |
| Curium-249 | 96 | 1000 (37) |
| Dysprosium-155 | 66 | 100 (3.7) |
| Dysprosium-157 | 66 | 100 (3.7) |
| Dysprosium-159 | 66 | 100 (3.7) |
| Dysprosium-165 | 66 | 1000 (37) |
| Dysprosium-166 | 66 | 10 (.37) |
| Einsteinium-250 | 99 | 10 (.37) |
| Einsteinium-251 | 99 | 1000 (37) |
| Einsteinium-253 | 99 | 10 (.37) |
| Einsteinium-254 | 99 | 0.1 (.0037) |
| Einsteinium-254m | 99 | 1 (.037) |
| Erbium-161 | 68 | 100 (3.7) |
| Erbium-165 | 68 | 1000 (37) |
| Erbium-169 | 68 | 100 (3.7) |
| Erbium-171 | 68 | 100 (3.7) |
| Erbium-172 | 68 | 10 (.37) |
| Europium-145 | 63 | 10 (.37) |
| Europium-146 | 63 | 10 (.37) |
| Europium-147 | 63 | 10 (.37) |
| Europium-148 | 63 | 10 (.37) |
| Europium-149 | 63 | 100 (3.7) |
| Europium-150 (12.6 hr) | 63 | 1000 (37) |
| Europium-150 (34.2 yr) | 63 | 10 (.37) |
| Europium-152 | 63 | 10 (.37) |
| Europium-152m | 63 | 100 (3.7) |

| | | |
|---|---|---|
| Europium-154 | 63 | 10 (.37) |
| Europium-155 | 63 | 10 (.37) |
| Europium-156 | 63 | 10 (.37) |
| Europium-157 | 63 | 10 (.37) |
| Europium-158 | 63 | 1000 (37) |
| Fermium-252 | 100 | 10 (.37) |
| Fermium-253 | 100 | 10 (.37) |
| Fermium-254 | 100 | 100 (3.7) |
| Fermium-255 | 100 | 100 (3.7) |
| Fermium-257 | 100 | 1 (.037) |
| Fluorine-18 | 9 | 1000 (37) |
| Francium-222 | 87 | 100 (3.7) |
| Francium-223 | 87 | 100 (3.7) |
| Gadolinium-145 | 64 | 100 (3.7) |
| Gadolinium-146 | 64 | 10 (.37) |
| Gadolinium-147 | 64 | 10 (.37) |
| Gadolinium-148 | 64 | 0.001 (.000037) |
| Gadolinium-149 | 64 | 100 (3.7) |
| Gadolinium-151 | 64 | 100 (3.7) |
| Gadolinium-152 | 64 | 0.001 (.000037) |
| Gadolinium-153 | 64 | 10 (.37) |
| Gadolinium-159 | 64 | 1000 (37) |
| Gallium-65 | 31 | 1000 (37) |
| Gallium-66 | 31 | 10 (.37) |
| Gallium-67 | 31 | 100 (3.7) |
| Gallium-68 | 31 | 1000 (37) |
| Gallium-70 | 31 | 1000 (37) |
| Gallium-72 | 31 | 10 (.37) |
| Gallium-73 | 31 | 100 (3.7) |

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|---|---|---|
| Germanium-66 | 32 | 100 (3.7) |
| Germanium-67 | 32 | 1000 (37) |
| Germanium-68 | 32 | 10 (.37) |
| Germanium-69 | 32 | 10 (.37) |
| Germanium-71 | 32 | 1000 (37) |
| Germanium-75 | 32 | 1000 (37) |
| Germanium-77 | 32 | 10 (.37) |
| Germanium-78 | 32 | 1000 (37) |
| Gold-193 | 79 | 100 (3.7) |
| Gold-194 | 79 | 10 (.37) |
| Gold-195 | 79 | 100 (3.7) |
| Gold-198 | 79 | 100 (3.7) |
| Gold-198m | 79 | 10 (.37) |
| Gold-199 | 79 | 100 (3.7) |
| Gold-200 | 79 | 1000 (37) |
| Gold-200m | 79 | 10 (.37) |
| Gold-201 | 79 | 1000 (37) |
| Hafnium-170 | 72 | 100 (3.7) |
| Hafnium-172 | 72 | 1 (.037) |
| Hafnium-173 | 72 | 100 (3.7) |
| Hafnium-175 | 72 | 100 (3.7) |
| Hafnium-177m | 72 | 1000 (37) |
| Hafnium-178m | 72 | 0.1 (.0037) |
| Hafnium-179m | 72 | 100 (3.7) |
| Hafnium-180m | 72 | 100 (3.7) |
| Hafnium-181 | 72 | 10 (.37) |
| Hafnium-182 | 72 | 0.1 (.0037) |
| Hafnium-182m | 72 | 100 (3.7) |
| Hafnium-183 | 72 | 100 (3.7) |

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|---|---|---|
| Hafnium-184 | 72 | 100 (3.7) |
| Holmium-155 | 67 | 1000 (37) |
| Holmium-157 | 67 | 1000 (37) |
| Holmium-159 | 67 | 1000 (37) |
| Holmium-161 | 67 | 1000 (37) |
| Holmium-162 | 67 | 1000 (37) |
| Holmium-162m | 67 | 1000 (37) |
| Holmium-164 | 67 | 1000 (37) |
| Holmium-164m | 67 | 1000 (37) |
| Holmium-166 | 67 | 100 (3.7) |
| Holmium-166m | 67 | 1 (.037) |
| Holmium-167 | 67 | 100 (3.7) |
| Hydrogen-3 | 1 | 100 (3.7) |
| Indium-109 | 49 | 100 (3.7) |
| Indium-110 (4.9 hr) | 49 | 10 (.37) |
| Indium-110 (69.1 min) | 49 | 100 (3.7) |
| Indium-111 | 49 | 100 (3.7) |
| Indium-112 | 49 | 1000 (37) |
| Indium-113m | 49 | 1000 (37) |
| Indium-114m | 49 | 10 (.37) |
| Indium-115 | 49 | 0.1 (.0037) |
| Indium-115m | 49 | 100 (3.7) |
| Indium-116m | 49 | 100 (3.7) |
| Indium-117 | 49 | 1000 (37) |
| Indium-117m | 49 | 100 (3.7) |
| Indium-119m | 49 | 1000 (37) |
| Iodine-120 | 53 | 10 (.37) |
| Iodine-120m | 53 | 100 (3.7) |
| Iodine-121 | 53 | 100 (3.7) |

| | | |
|---|---|---|
| Iodine-123 | 53 | 10 (.37) |
| Iodine-124 | 53 | 0.1 (.0037) |
| Iodine-125 | 53 | 0.01 (.00037) |
| Iodine-126 | 53 | 0.01 (.00037) |
| Iodine-128 | 53 | 1000 (37) |
| Iodine-129 | 53 | 0.001 (.000037) |
| Iodine-130 | 53 | 1 (.037) |
| Iodine-131 | 53 | 0.01 (.00037) |
| Iodine-132 | 53 | 10 (.37) |
| Iodine-132m | 53 | 10 (.37) |
| Iodine-133 | 53 | 0.1 (.0037) |
| Iodine-134 | 53 | 100 (3.7) |
| Iodine-135 | 53 | 10 (.37) |
| Iridium-182 | 77 | 1000 (37) |
| Iridium-184 | 77 | 100 (3.7) |
| Iridium-185 | 77 | 100 (3.7) |
| Iridium-186 | 77 | 10 (.37) |
| Iridium-187 | 77 | 100 (3.7) |
| Iridium-188 | 77 | 10 (.37) |
| Iridium-189 | 77 | 100 (3.7) |
| Iridium-190 | 77 | 10 (.37) |
| Iridium-190m | 77 | 1000 (37) |
| Iridium-192 | 77 | 10 (.37) |
| Iridium-192m | 77 | 100 (3.7) |
| Iridium-194 | 77 | 100 (3.7) |
| Iridium-194m | 77 | 10 (.37) |
| Iridium-195 | 77 | 1000 (37) |
| Iridium-195m | 77 | 100 (3.7) |
| Iron-52 | 26 | 100 (3.7) |

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|---|---|---|
| Iron-55 | 26 | 100 (3.7) |
| Iron-59 | 26 | 10 (.37) |
| Iron-60 | 26 | 0.1 (.0037) |
| Krypton-74 | 36 | 10 (.37) |
| Krypton-76 | 36 | 10 (.37) |
| Krypton-77 | 36 | 10 (.37) |
| Krypton-79 | 36 | 100 (3.7) |
| Krypton-81 | 36 | 1000 (37) |
| Krypton-83m | 36 | 1000 (37) |
| Krypton-85 | 36 | 1000 (37) |
| Krypton-85m | 36 | 100 (3.7) |
| Krypton-87 | 36 | 10 (.37) |
| Krypton-88 | 36 | 10 (.37) |
| Lanthanum-131 | 57 | 1000 (37) |
| Lanthanum-132 | 57 | 100 (3.7) |
| Lanthanum-135 | 57 | 1000 (37) |
| Lanthanum-137 | 57 | 10 (.37) |
| Lanthanum-138 | 57 | 1 (.037) |
| Lanthanum-140 | 57 | 10 (.37) |
| Lanthanum-141 | 57 | 1000 (37) |
| Lanthanum-142 | 57 | 100 (3.7) |
| Lanthanum-143 | 57 | 1000 (37) |
| Lead-195m | 82 | 1000 (37) |
| Lead-198 | 82 | 100 (3.7) |
| Lead-199 | 82 | 100 (3.7) |
| Lead-200 | 82 | 100 (3.7) |
| Lead-201 | 82 | 100 (3.7) |
| Lead-202 | 82 | 1 (.037) |
| Lead-202m | 82 | 10 (.37) |

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|---|---|---|
| Lead-203 | 82 | 100 (3.7) |
| Lead-205 | 82 | 100 (3.7) |
| Lead-209 | 82 | 1000 (37) |
| Lead-210 | 82 | 0.01 (.00037) |
| Lead-211 | 82 | 100 (3.7) |
| Lead-212 | 82 | 10 (.37) |
| Lead-214 | 82 | 100 (3.7) |
| Lutetium-169 | 71 | 10 (.37) |
| Lutetium-170 | 71 | 10 (.37) |
| Lutetium-171 | 71 | 10 (.37) |
| Lutetium-172 | 71 | 10 (.37) |
| Lutetium-173 | 71 | 100 (3.7) |
| Lutetium-174 | 71 | 10 (.37) |
| Lutetium-174m | 71 | 10 (.37) |
| Lutetium-176 | 71 | 1 (.037) |
| Lutetium-176m | 71 | 1000 (37) |
| Lutetium-177 | 71 | 100 (3.7) |
| Lutetium-177m | 71 | 10 (.37) |
| Lutetium-178 | 71 | 1000 (37) |
| Lutetium-178m | 71 | 1000 (37) |
| Lutetium-179 | 71 | 1000 (37) |
| Magnesium-28 | 12 | 10 (.37) |
| Manganese-51 | 25 | 1000 (37) |
| Manganese-52 | 25 | 10 (.37) |
| Manganese-52m | 25 | 1000 (37) |
| Manganese-53 | 25 | 1000 (37) |
| Manganese-54 | 25 | 10 (.37) |
| Manganese-56 | 25 | 100 (3.7) |
| Mendelevium-257 | 101 | 100 (3.7) |

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|---|---|---|
| Mendelevium-258 | 101 | 1 (.037) |
| Mercury-193 | 80 | 100 (3.7) |
| Mercury-193m | 80 | 10 (.37) |
| Mercury-194 | 80 | 0.1 (.0037) |
| Mercury-195 | 80 | 100 (3.7) |
| Mercury-195m | 80 | 100 (3.7) |
| Mercury-197 | 80 | 1000 (37) |
| Mercury-197m | 80 | 1000 (37) |
| Mercury-199m | 80 | 1000 (37) |
| Mercury-203 | 80 | 10 (.37) |
| Molybdenum-101 | 42 | 1000 (37) |
| Molybdenum-90 | 42 | 100 (3.7) |
| Molybdenum-93 | 42 | 100 (3.7) |
| Molybdenum-93m | 42 | 10 (.37) |
| Molybdenum-99 | 42 | 100 (3.7) |
| Neodymium-136 | 60 | 1000 (37) |
| Neodymium-138 | 60 | 1000 (37) |
| Neodymium-139 | 60 | 1000 (37) |
| Neodymium-139m | 60 | 100 (3.7) |
| Neodymium-141 | 60 | 1000 (37) |
| Neodymium-147 | 60 | 10 (.37) |
| Neodymium-149 | 60 | 100 (3.7) |
| Neodymium-151 | 60 | 1000 (37) |
| Neptunium-232 | 93 | 1000 (37) |
| Neptunium-233 | 93 | 1000 (37) |
| Neptunium-234 | 93 | 10 (.37) |
| Neptunium-235 | 93 | 1000 (37) |
| Neptunium-236 (1.2 E 5 yr) | 93 | 0.1 (.0037) |
| Neptunium-236 (22.5 hr) | 93 | 100 (3.7) |

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|---|---|---|
| Neptunium-237 | 93 | 0.01 (.00037) |
| Neptunium-238 | 93 | 10 (.37) |
| Neptunium-239 | 93 | 100 (3.7) |
| Neptunium-240 | 93 | 100 (3.7) |
| Nickel-56 | 28 | 10 (.37) |
| Nickel-57 | 28 | 10 (.37) |
| Nickel-59 | 28 | 100 (3.7) |
| Nickel-63 | 28 | 100 (3.7) |
| Nickel-65 | 28 | 100 (3.7) |
| Nickel-66 | 28 | 10 (.37) |
| Niobium-88 | 41 | 100 (3.7) |
| Niobium-89 (122 min) | 41 | 100 (3.7) |
| Niobium-89 (66 min) | 41 | 100 (3.7) |
| Niobium-90 | 41 | 10 (.37) |
| Niobium-93m | 41 | 100 (3.7) |
| Niobium-94 | 41 | 10 (.37) |
| Niobium-95 | 41 | 10 (.37) |
| Niobium-95m | 41 | 100 (3.7) |
| Niobium-96 | 41 | 10 (.37) |
| Niobium-97 | 41 | 100 (3.7) |
| Niobium-98 | 41 | 1000 (37) |
| Osmium-180 | 76 | 1000 (37) |
| Osmium-181 | 76 | 100 (3.7) |
| Osmium-182 | 76 | 100 (3.7) |
| Osmium-185 | 76 | 10 (.37) |
| Osmium-189m | 76 | 1000 (37) |
| Osmium-191 | 76 | 100 (3.7) |
| Osmium-191m | 76 | 1000 (37) |
| Osmium-193 | 76 | 100 (3.7) |

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|---|---|---|
| Osmium-194 | 76 | 1 (.037) |
| Palladium-100 | 46 | 100 (3.7) |
| Palladium-101 | 46 | 100 (3.7) |
| Palladium-103 | 46 | 100 (3.7) |
| Palladium-107 | 46 | 100 (3.7) |
| Palladium-109 | 46 | 1000 (37) |
| Phosphorus-32 | 15 | 0.1 (.0037) |
| Phosphorus-33 | 15 | 1 (.037) |
| Platinum-186 | 78 | 100 (3.7) |
| Platinum-188 | 78 | 100 (3.7) |
| Platinum-189 | 78 | 100 (3.7) |
| Platinum-191 | 78 | 100 (3.7) |
| Platinum-193 | 78 | 1000 (37) |
| Platinum-193m | 78 | 100 (3.7) |
| Platinum-195m | 78 | 100 (3.7) |
| Platinum-197 | 78 | 1000 (37) |
| Platinum-197m | 78 | 1000 (37) |
| Platinum-199 | 78 | 1000 (37) |
| Platinum-200 | 78 | 100 (3.7) |
| Plutonium-234 | 94 | 1000 (37) |
| Plutonium-235 | 94 | 1000 (37) |
| Plutonium-236 | 94 | 0.1 (.0037) |
| Plutonium-237 | 94 | 1000 (37) |
| Plutonium-238 | 94 | 0.01 (.00037) |
| Plutonium-239 | 94 | 0.01 (.00037) |
| Plutonium-240 | 94 | 0.01 (.00037) |
| Plutonium-241 | 94 | 1 (.037) |
| Plutonium-242 | 94 | 0.01 (.00037) |
| Plutonium-243 | 94 | 1000 (37) |

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|---|---|---|
| Plutonium-244 | 94 | 0.01 (.00037) |
| Plutonium-245 | 94 | 100 (3.7) |
| Polonium-203 | 84 | 100 (3.7) |
| Polonium-205 | 84 | 100 (3.7) |
| Polonium-207 | 84 | 10 (.37) |
| Polonium-210 | 84 | 0.01 (.00037) |
| Potassium-40 | 19 | 1 (.037) |
| Potassium-42 | 19 | 100 (3.7) |
| Potassium-43 | 19 | 10 (.37) |
| Potassium-44 | 19 | 100 (3.7) |
| Potassium-45 | 19 | 1000 (37) |
| Praseodymium-136 | 59 | 1000 (37) |
| Praseodymium-137 | 59 | 1000 (37) |
| Praseodymium-138m | 59 | 100 (3.7) |
| Praseodymium-139 | 59 | 1000 (37) |
| Praseodymium-142 | 59 | 100 (3.7) |
| Praseodymium-142m | 59 | 1000 (37) |
| Praseodymium-143 | 59 | 10 (.37) |
| Praseodymium-144 | 59 | 1000 (37) |
| Praseodymium-145 | 59 | 1000 (37) |
| Praseodymium-147 | 59 | 1000 (37) |
| Promethium-141 | 61 | 1000 (37) |
| Promethium-143 | 61 | 100 (3.7) |
| Promethium-144 | 61 | 10 (.37) |
| Promethium-145 | 61 | 100 (3.7) |
| Promethium-146 | 61 | 10 (.37) |
| Promethium-147 | 61 | 10 (.37) |
| Promethium-148 | 61 | 10 (.37) |
| Promethium-148m | 61 | 10 (.37) |

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|---|---|---|
| Promethium-149 | 61 | 100 (3.7) |
| Promethium-150 | 61 | 100 (3.7) |
| Promethium-151 | 61 | 100 (3.7) |
| Protactinium-227 | 91 | 100 (3.7) |
| Protactinium-228 | 91 | 10 (.37) |
| Protactinium-230 | 91 | 10 (.37) |
| Protactinium-231 | 91 | 0.01 (.00037) |
| Protactinium-232 | 91 | 10 (.37) |
| Protactinium-233 | 91 | 100 (3.7) |
| Protactinium-234 | 91 | 10 (.37) |
| RADIONUCLIDES $† | | 1 (.037) |
| Radium-223 | 88 | 1 (.037) |
| Radium-224 | 88 | 10 (.37) |
| Radium-225 | 88 | 1 (.037) |
| Radium-226 ** | 88 | 0.1 (.0037) |
| Radium-227 | 88 | 1000 (37) |
| Radium-228 | 88 | 0.1 (.0037) |
| Radon-220 | 86 | 0.1 (.0037) |
| Radon-222 | 86 | 0.1 (.0037) |
| Rhenium-177 | 75 | 1000 (37) |
| Rhenium-178 | 75 | 1000 (37) |
| Rhenium-181 | 75 | 100 (3.7) |
| Rhenium-182 (12.7 hr) | 75 | 10 (.37) |
| Rhenium-182 (64.0 hr) | 75 | 10 (.37) |
| Rhenium-184 | 75 | 10 (.37) |
| Rhenium-184m | 75 | 10 (.37) |
| Rhenium-186 | 75 | 100 (3.7) |
| Rhenium-186m | 75 | 10 (.37) |
| Rhenium-187 | 75 | 1000 (37) |

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|---|---|---|
| Rhenium-188 | 75 | 1000 (37) |
| Rhenium-188m | 75 | 1000 (37) |
| Rhenium-189 | 75 | 1000 (37) |
| Rhodium-100 | 45 | 10 (.37) |
| Rhodium-101 | 45 | 10 (.37) |
| Rhodium-101m | 45 | 100 (3.7) |
| Rhodium-102 | 45 | 10 (.37) |
| Rhodium-102m | 45 | 10 (.37) |
| Rhodium-103m | 45 | 1000 (37) |
| Rhodium-105 | 45 | 100 (3.7) |
| Rhodium-106m | 45 | 10 (.37) |
| Rhodium-107 | 45 | 1000 (37) |
| Rhodium-99 | 45 | 10 (.37) |
| Rhodium-99m | 45 | 100 (3.7) |
| Rubidium-79 | 37 | 1000 (37) |
| Rubidium-81 | 37 | 100 (3.7) |
| Rubidium-81m | 37 | 1000 (37) |
| Rubidium-82m | 37 | 10 (.37) |
| Rubidium-83 | 37 | 10 (.37) |
| Rubidium-84 | 37 | 10 (.37) |
| Rubidium-86 | 37 | 10 (.37) |
| Rubidium-87 | 37 | 10 (.37) |
| Rubidium-88 | 37 | 1000 (37) |
| Rubidium-89 | 37 | 1000 (37) |
| Ruthenium-103 | 44 | 10 (.37) |
| Ruthenium-105 | 44 | 100 (3.7) |
| Ruthenium-106 | 44 | 1 (.037) |
| Ruthenium-94 | 44 | 1000 (37) |
| Ruthenium-97 | 44 | 100 (3.7) |

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|---|---|---|
| Samarium-141 | 62 | 1000 (37) |
| Samarium-141m | 62 | 1000 (37) |
| Samarium-142 | 62 | 1000 (37) |
| Samarium-145 | 62 | 100 (3.7) |
| Samarium-146 | 62 | 0.01 (.00037) |
| Samarium-147 | 62 | 0.01 (.00037) |
| Samarium-151 | 62 | 10 (.37) |
| Samarium-153 | 62 | 100 (3.7) |
| Samarium-155 | 62 | 1000 (37) |
| Samarium-156 | 62 | 100 (3.7) |
| Scandium-43 | 21 | 1000 (37) |
| Scandium-44 | 21 | 100 (3.7) |
| Scandium-44m | 21 | 10 (.37) |
| Scandium-46 | 21 | 10 (.37) |
| Scandium-47 | 21 | 100 (3.7) |
| Scandium-48 | 21 | 10 (.37) |
| Scandium-49 | 21 | 1000 (37) |
| Selenium-70 | 34 | 1000 (37) |
| Selenium-73 | 34 | 10 (.37) |
| Selenium-73m | 34 | 100 (3.7) |
| Selenium-75 | 34 | 10 (.37) |
| Selenium-79 | 34 | 10 (.37) |
| Selenium-81 | 34 | 1000 (37) |
| Selenium-81m | 34 | 1000 (37) |
| Selenium-83 | 34 | 1000 (37) |
| Silicon-31 | 14 | 1000 (37) |
| Silicon-32 | 14 | 1 (.037) |
| Silver-102 | 47 | 100 (3.7) |
| Silver-103 | 47 | 1000 (37) |

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|---|---|---|
| Silver-104 | 47 | 1000 (37) |
| Silver-104m | 47 | 1000 (37) |
| Silver-105 | 47 | 10 (.37) |
| Silver-106 | 47 | 1000 (37) |
| Silver-106m | 47 | 10 (.37) |
| Silver-108m | 47 | 10 (.37) |
| Silver-110m | 47 | 10 (.37) |
| Silver-111 | 47 | 10 (.37) |
| Silver-112 | 47 | 100 (3.7) |
| Silver-115 | 47 | 1000 (37) |
| Sodium-22 | 11 | 10 (.37) |
| Sodium-24 | 11 | 10 (.37) |
| Strontium-80 | 38 | 100 (3.7) |
| Strontium-81 | 38 | 1000 (37) |
| Strontium-83 | 38 | 100 (3.7) |
| Strontium-85 | 38 | 10 (.37) |
| Strontium-85m | 38 | 1000 (37) |
| Strontium-87m | 38 | 100 (3.7) |
| Strontium-89 | 38 | 10 (.37) |
| Strontium-90 | 38 | 0.1 (.0037) |
| Strontium-91 | 38 | 10 (.37) |
| Strontium-92 | 38 | 100 (3.7) |
| Sulfur-35 | 16 | 1 (.037) |
| Tantalum-172 | 73 | 100 (3.7) |
| Tantalum-173 | 73 | 100 (3.7) |
| Tantalum-174 | 73 | 100 (3.7) |
| Tantalum-175 | 73 | 100 (3.7) |
| Tantalum-176 | 73 | 10 (.37) |
| Tantalum-177 | 73 | 1000 (37) |

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|---|---|---|
| Tantalum-178 | 73 | 1000 (37) |
| Tantalum-179 | 73 | 1000 (37) |
| Tantalum-180 | 73 | 100 (3.7) |
| Tantalum-180m | 73 | 1000 (37) |
| Tantalum-182 | 73 | 10 (.37) |
| Tantalum-182m | 73 | 1000 (37) |
| Tantalum-183 | 73 | 100 (3.7) |
| Tantalum-184 | 73 | 10 (.37) |
| Tantalum-185 | 73 | 1000 (37) |
| Tantalum-186 | 73 | 1000 (37) |
| Technetium-101 | 43 | 1000 (37) |
| Technetium-104 | 43 | 1000 (37) |
| Technetium-93 | 43 | 100 (3.7) |
| Technetium-93m | 43 | 1000 (37) |
| Technetium-94 | 43 | 10 (.37) |
| Technetium-94m | 43 | 100 (3.7) |
| Technetium-96 | 43 | 10 (.37) |
| Technetium-96m | 43 | 1000 (37) |
| Technetium-97 | 43 | 100 (3.7) |
| Technetium-97m | 43 | 100 (3.7) |
| Technetium-98 | 43 | 10 (.37) |
| Technetium-99 | 43 | 10 (.37) |
| Technetium-99m | 43 | 100 (3.7) |
| Tellurium-116 | 52 | 1000 (37) |
| Tellurium-121 | 52 | 10 (.37) |
| Tellurium-121m | 52 | 10 (.37) |
| Tellurium-123 | 52 | 10 (.37) |
| Tellurium-123m | 52 | 10 (.37) |
| Tellurium-125m | 52 | 10 (.37) |

| | | |
|---|---|---|
| Tellurium-127 | 52 | 1000 (37) |
| Tellurium-127m | 52 | 10 (.37) |
| Tellurium-129 | 52 | 1000 (37) |
| Tellurium-129m | 52 | 10 (.37) |
| Tellurium-131 | 52 | 1000 (37) |
| Tellurium-131m | 52 | 10 (.37) |
| Tellurium-132 | 52 | 10 (.37) |
| Tellurium-133 | 52 | 1000 (37) |
| Tellurium-133m | 52 | 1000 (37) |
| Tellurium-134 | 52 | 1000 (37) |
| Terbium-147 | 65 | 100 (3.7) |
| Terbium-149 | 65 | 100 (3.7) |
| Terbium-150 | 65 | 100 (3.7) |
| Terbium-151 | 65 | 10 (.37) |
| Terbium-153 | 65 | 100 (3.7) |
| Terbium-154 | 65 | 10 (.37) |
| Terbium-155 | 65 | 100 (3.7) |
| Terbium-156 | 65 | 10 (.37) |
| Terbium-156m (24.4 hr) | 65 | 1000 (37) |
| Terbium-156m (5.0 hr) | 65 | 1000 (37) |
| Terbium-157 | 65 | 100 (3.7) |
| Terbium-158 | 65 | 10 (.37) |
| Terbium-160 | 65 | 10 (.37) |
| Terbium-161 | 65 | 100 (3.7) |
| Thallium-194 | 81 | 1000 (37) |
| Thallium-194m | 81 | 100 (3.7) |
| Thallium-195 | 81 | 100 (3.7) |
| Thallium-197 | 81 | 100 (3.7) |
| Thallium-198 | 81 | 10 (.37) |

| | | |
|---|---|---|
| Thallium-198m | 81 | 100 (3.7) |
| Thallium-199 | 81 | 100 (3.7) |
| Thallium-200 | 81 | 10 (.37) |
| Thallium-201 | 81 | 1000 (37) |
| Thallium-202 | 81 | 10 (.37) |
| Thallium-204 | 81 | 10 (.37) |
| Thorium (Irradiated) | 90 | *** |
| Thorium (Natural) | 90 | ** |
| Thorium-226 | 90 | 100 (3.7) |
| Thorium-227 | 90 | 1 (.037) |
| Thorium-228 | 90 | 0.01 (.00037) |
| Thorium-229 | 90 | 0.001 (.000037) |
| Thorium-230 | 90 | 0.01 (.00037) |
| Thorium-231 | 90 | 100 (3.7) |
| Thorium-232 ** | 90 | 0.001 (.000037) |
| Thorium-234 | 90 | 100 (3.7) |
| Thulium-162 | 69 | 1000 (37) |
| Thulium-166 | 69 | 10 (.37) |
| Thulium-167 | 69 | 100 (3.7) |
| Thulium-170 | 69 | 10 (.37) |
| Thulium-171 | 69 | 100 (3.7) |
| Thulium-172 | 69 | 100 (3.7) |
| Thulium-173 | 69 | 100 (3.7) |
| Thulium-175 | 69 | 1000 (37) |
| Tin-110 | 50 | 100 (3.7) |
| Tin-111 | 50 | 1000 (37) |
| Tin-113 | 50 | 10 (.37) |
| Tin-117m | 50 | 100 (3.7) |
| Tin-119m | 50 | 10 (.37) |

| | | |
|---|---|---|
| Tin-121 | 50 | 1000 (37) |
| Tin-121m | 50 | 10 (.37) |
| Tin-123 | 50 | 10 (.37) |
| Tin-123m | 50 | 1000 (37) |
| Tin-125 | 50 | 10 (.37) |
| Tin-126 | 50 | 1 (.037) |
| Tin-127 | 50 | 100 (3.7) |
| Tin-128 | 50 | 1000 (37) |
| Titanium-44 | 22 | 1 (.037) |
| Titanium-45 | 22 | 1000 (37) |
| Tungsten-176 | 74 | 1000 (37) |
| Tungsten-177 | 74 | 100 (3.7) |
| Tungsten-178 | 74 | 100 (3.7) |
| Tungsten-179 | 74 | 1000 (37) |
| Tungsten-181 | 74 | 100 (3.7) |
| Tungsten-185 | 74 | 10 (.37) |
| Tungsten-187 | 74 | 100 (3.7) |
| Tungsten-188 | 74 | 10 (.37) |
| Uranium (Depleted) | 92 | *** |
| Uranium (Irradiated) | 92 | *** |
| Uranium (Natural) | 92 | ** |
| Uranium Enriched 20% or greater | 92 | *** |
| Uranium Enriched less than 20% | 92 | *** |
| Uranium-230 | 92 | 1 (.037) |
| Uranium-231 | 92 | 1000 (37) |
| Uranium-232 | 92 | 0.01 (.00037) |
| Uranium-233 | 92 | 0.1 (.0037) |
| Uranium-234 ** | 92 | 0.1 (.0037) |
| Uranium-235 ** | 92 | 0.1 (.0037) |

| | | |
|---|---|---|
| Uranium-236 | 92 | 0.1 (.0037) |
| Uranium-237 | 92 | 100 (3.7) |
| Uranium-238 ** | 92 | 0.1 (.0037) |
| Uranium-239 | 92 | 1000 (37) |
| Uranium-240 | 92 | 1000 (37) |
| Vanadium-47 | 23 | 1000 (37) |
| Vanadium-48 | 23 | 10 (.37) |
| Vanadium-49 | 23 | 1000 (37) |
| Xenon-120 | 54 | 100 (3.7) |
| Xenon-121 | 54 | 10 (.37) |
| Xenon-122 | 54 | 100 (3.7) |
| Xenon-123 | 54 | 10 (.37) |
| Xenon-125 | 54 | 100 (3.7) |
| Xenon-127 | 54 | 100 (3.7) |
| Xenon-129m | 54 | 1000 (37) |
| Xenon-131m | 54 | 1000 (37) |
| Xenon-133 | 54 | 1000 (37) |
| Xenon-133m | 54 | 1000 (37) |
| Xenon-135 | 54 | 100 (3.7) |
| Xenon-135m | 54 | 10 (.37) |
| Xenon-138 | 54 | 10 (.37) |
| Ytterbium-162 | 70 | 1000 (37) |
| Ytterbium-166 | 70 | 10 (.37) |
| Ytterbium-167 | 70 | 1000 (37) |
| Ytterbium-169 | 70 | 10 (.37) |
| Ytterbium-175 | 70 | 100 (3.7) |
| Ytterbium-177 | 70 | 1000 (37) |
| Ytterbium-178 | 70 | 1000 (37) |
| Yttrium-86 | 39 | 10 (.37) |

| | | |
|---|---|---|
| Yttrium-86m | 39 | 1000 (37) |
| Yttrium-87 | 39 | 10 (.37) |
| Yttrium-88 | 39 | 10 (.37) |
| Yttrium-90 | 39 | 10 (.37) |
| Yttrium-90m | 39 | 100 (3.7) |
| Yttrium-91 | 39 | 10 (.37) |
| Yttrium-91m | 39 | 1000 (37) |
| Yttrium-92 | 39 | 100 (3.7) |
| Yttrium-93 | 39 | 100 (3.7) |
| Yttrium-94 | 39 | 1000 (37) |
| Yttrium-95 | 39 | 1000 (37) |
| Zinc-62 | 30 | 100 (3.7) |
| Zinc-63 | 30 | 1000 (37) |
| Zinc-65 | 30 | 10 (.37) |
| Zinc-69 | 30 | 1000 (37) |
| Zinc-69m | 30 | 100 (3.7) |
| Zinc-71m | 30 | 100 (3.7) |
| Zinc-72 | 30 | 100 (3.7) |
| Zirconium-86 | 40 | 100 (3.7) |
| Zirconium-88 | 40 | 10 (.37) |
| Zirconium-89 | 40 | 100 (3.7) |
| Zirconium-93 | 40 | 1 (.037) |
| Zirconium-95 | 40 | 10 (.37) |
| Zirconium-97 | 40 | 10 (.37) |

$The RQs for all radionuclides apply to chemical compounds containing the radionuclides and elemental forms regardless of the diameter of pieces of solid material.

†The RQ of one curie applies to all radionuclides not otherwise listed. Whenever the RQs in TABLE 1—HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES and this table conflict, the lowest RQ shall apply. For example, uranyl acetate and uranyl nitrate have RQs shown in TABLE 1 of 100 pounds, equivalent to about one-tenth the RQ level for uranium-238 in this table.

**The method to determine the RQs for mixtures or solutions of radionuclides can be found in paragraph 7 of the note preceding TABLE 1 of this appendix. RQs for the following four common radionuclide mixtures are provided: radium-226 in secular equilibrium with its daughters (0.053 curie); natural uranium (0.1 curie); natural uranium in secular equilibrium with its daughters (0.052 curie); and natural thorium in secular equilibrium with its daughters (0.011 curie).

***Indicates that the name was added by PHMSA because it appears in the list of radionuclides in 49 CFR 173.435. The reportable quantity (RQ), if not specifically listed elsewhere in this appendix, shall be determined in accordance with the procedures in paragraph 7 of this appendix.

Appendix B to §172.101—List of Marine Pollutants

1. See §171.4 of this subchapter for applicability to marine pollutants. This appendix lists potential marine pollutants as defined in §171.8 of this subchapter.

2. Marine pollutants listed in this appendix are not necessarily listed by name in the §172.101 Table. If a marine pollutant not listed by name or by synonym in the §172.101 Table meets the definition of any hazard Class 1 through 8, then you must determine the class and division of the material in accordance with §173.2a of this subchapter. You must also select the most appropriate hazardous material description and proper shipping name. If a marine pollutant not listed by name or by synonym in the §172.101 Table does not meet the definition of any Class 1 through 8, then you must offer it for transportation under the most appropriate of the following two Class 9 entries: “Environmentally hazardous substances, liquid, n.o.s.,” UN3082, or “Environmentally hazardous substances, solid, n.o.s.” UN3077.

3. This appendix contains two columns. The first column, entitled “S.M.P.” (for severe marine pollutants), identifies whether a material is a severe marine pollutant. If the letters “PP” appear in this column for a material, the material is a severe marine pollutant, otherwise it is not. The second column, entitled “Marine Pollutant” , lists the marine pollutants.

4. If a material is not listed in this appendix and meets the criteria for a marine pollutant as provided in Chapter 2.10 of the IMDG Code, “Guidelines for the Identification of Harmful Substances in Packaged Form” (incorporated by reference; see §171.7 of this subchapter), the material may be transported as a marine pollutant in accordance with the applicable requirements of this subchapter.

5. If a material listed in this appendix does not meet the criteria for a marine pollutant as provided in Chapter 2.10 of the IMDG Code, “Guidelines for the Identification of Harmful Substances in Packaged Form” (incorporated by reference; see §171.7 of this subchapter), it may be excepted from the requirements of this subchapter as a marine pollutant if that exception is approved by the Associate Administrator.

## List of Marine Pollutants

| S.M.P. (1) | Marine pollutant (2) |
|---|---|
| | Acetone cyanohydrin, stabilized |
| | Acetylene tetrabromide |
| | Acetylene tetrachloride |
| | Acraldehyde, inhibited |
| | Acrolein, inhibited |
| | Acrolein, stabilized |
| | Acrylic aldehyde, inhibited |
| | Alcohol C-12 - C-16 poly(1-6) ethoxylate |
| | Alcohol C-6 - C-17 (secondary)poly(3-6) ethoxylate |
| | Aldicarb |

| | |
|---|---|
| PP | Aldrin |
| | Alkyl (c12-c14) dimethylamine |
| | Alkyl (c7-c9) nitrates |
| | Alkybenzenesulphonates, branched and straight chain ( *excluding C11–C13 straight chain or branched chain homologues* ) |
| | Allyl bromide |
| | ortho-Aminoanisole |
| | Aminocarb |
| | Ammonium dinitro-o-cresolate |
| | n-Amylbenzene |
| PP | Azinphos-ethyl |
| PP | Azinphos-methyl |
| | Barium cyanide |
| | Bendiocarb |
| | Benomyl |
| | Benquinox |
| | Benzyl chlorocarbonate |
| | Benzyl chloroformate |
| PP | Binapacryl |
| | *N,N-Bis* (2-hydroxyethyl) oleamide (LOA) |
| PP | Brodifacoum |
| | Bromine cyanide |
| | Bromoacetone |
| | Bromoallylene |
| | Bromobenzene |
| | ortho-Bromobenzyl cyanide |
| | Bromocyane |
| | Bromoform |

| | |
|---|---|
| PP | Bromophos-ethyl |
| | 3-Bromopropene |
| | Bromoxynil |
| | Butanedione |
| | 2-Butenal, stabilized |
| | Butyl benzyl phthalate |
| | *N-tert* -butyl- *N* -cyclopropyl-6-methylthio-1,3,5-triazine-2,4-diamine |
| | 2,4-Di-tert-butylphenol |
| PP | 2, 6-Di-tert-Butylphenol |
| | para-tertiary-butyltoluene |
| PP | Cadmium compounds |
| | Cadmium sulphide |
| | Calcium arsenate |
| | Calcium arsenate and calcium arsenite, mixtures, solid |
| | Calcium cyanide |
| PP | Camphechlor |
| | Carbaryl |
| | Carbendazim |
| | Carbofuran |
| | Carbon tetrabromide |
| | Carbon tetrachloride |
| PP | Carbophenothion |
| | Cartap hydrochloride |
| PP | Chlordane |
| | Chlorfenvinphos |
| PP | Chlorinated paraffins (C-10 - C-13) |
| PP | Chlorinated paraffins (C14–C17), with more than 1% shorter chain length |

| | |
|---|---|
| | Chlorine |
| | Chlorine cyanide, inhibited |
| | Chlormephos |
| | Chloroacetone, stabilized |
| | 1-Chloro-2,3-Epoxypropane |
| | 2-Chloro-6-nitrotoluene |
| | 4-Chloro-2-nitrotoluene |
| | Chloro-ortho-nitrotoluene |
| | 2-Chloro-5-trifluoromethylnitrobenzene |
| | para-Chlorobenzyl chloride, liquid or solid |
| | Chlorodinitrobenzenes, liquid or solid |
| | 1-Chloroheptane |
| | 1-Chlorohexane |
| | Chloronitroanilines |
| | Chloronitrotoluenes, *liquid* |
| | Chloronitrotoluenes, *solid* |
| | 1-Chlorooctane |
| PP | Chlorophenolates, liquid |
| PP | Chlorophenolates, solid |
| | Chlorophenyltrichlorosilane |
| | Chloropicrin |
| | alpha-Chloropropylene |
| | Chlorotoluenes (meta-;para-) |
| PP | Chlorpyriphos |
| PP | Chlorthiophos |
| | Cocculus |
| | Coconitrile |

| | |
|---|---|
| | Copper acetoarsenite |
| | Copper arsenite |
| PP | Copper chloride |
| PP | Copper chloride solution |
| PP | Copper cyanide |
| PP | Copper metal powder |
| PP | Copper sulphate, anhydrous, hydrates |
| | Coumachlor |
| PP | Coumaphos |
| PP | Cresyl diphenyl phosphate |
| | Crotonaldehyde, stabilized |
| | Crotonic aldehyde, stabilized |
| | Crotoxyphos |
| | Cupric arsenite |
| PP | Cupric chloride |
| PP | Cupric cyanide |
| PP | Cupric sulfate |
| | Cupriethylenediamine solution |
| PP | Cuprous chloride |
| | Cyanide mixtures |
| | Cyanide solutions |
| | Cyanides, inorganic, n.o.s. |
| | Cyanogen bromide |
| | Cyanogen chloride, inhibited |
| | Cyanogen chloride, stabilized |
| | Cyanophos |
| PP | 1,5,9-Cyclododecatriene |

| | |
|---|---|
| PP | Cyhexatin |
| PP | Cymenes (o-;m-;p-) |
| PP | Cypermethrin |
| | Decyl acrylate |
| PP | DDT |
| | Decycloxytetrahydrothiophene dioxide |
| | DEF |
| | Desmedipham |
| | Di-allate |
| | Di-n-Butyl phthalate |
| PP | Dialifos |
| | 4,4′-Diaminodiphenylmethane |
| PP | Diazinon |
| | 1,3-Dibromobenzene |
| PP | Dichlofenthion |
| | Dichloroanilines |
| | 1,3-Dichlorobenzene |
| | 1,4-Dichlorobenzene |
| | Dichlorobenzene (meta-; para-) |
| | 2,2-Dichlorodiethyl ether |
| | Dichlorodimethyl ether, symmetrical |
| | Di-(2-chloroethyl) ether |
| | 1,1-Dichloroethylene, inhibited |
| | 1,6-Dichlorohexane |
| | Dichlorophenyltrichlorosilane |
| PP | Dichlorvos |
| PP | Diclofop-methyl |

| | |
|---|---|
| | Dicrotophos |
| PP | Dieldrin |
| | Diisopropylbenzenes |
| | Diisopropylnaphthalenes, mixed isomers |
| PP | Dimethoate |
| PP | N,N-Dimethyldodecylamine |
| | Dimethylhydrazine, symmetrical |
| | Dimethylhydrazine, unsymmetrical |
| | Dinitro-o-cresol, *solid* |
| | Dinitro-o-cresol, *solution* |
| | Dinitrochlorobenzenes, liquid or solid |
| | Dinitrophenol, *dry or wetted with less than 15 per cent water, by mass* |
| | Dinitrophenol solutions |
| | Dinitrophenol, wetted *with not less than 15 per cent water, by mass* |
| | Dinitrophenolates *alkali metals, dry or wetted with less than 15 per cent water, by mass* |
| | Dinitrophenolates, wetted *with not less than 15 per cent water, by mass* |
| | Dinobuton |
| | Dinoseb |
| | Dinoseb acetate |
| | Dioxacarb |
| | Dioxathion |
| | Dipentene |
| | Diphacinone |
| | Diphenyl |
| PP | Diphenylamine chloroarsine |
| PP | Diphenylchloroarsine, solid *or* liquid |
| | Disulfoton |

| | |
|---|---|
| | 1,4-Di-tert-butylbenzene |
| | DNOC |
| | DNOC (pesticide) |
| | Dodecyl diphenyl oxide disulphonate |
| PP | Dodecyl hydroxypropyl sulfide |
| | 1-Dodecylamine |
| PP | Dodecylphenol |
| | Drazoxolon |
| | Edifenphos |
| PP | Endosulfan |
| PP | Endrin |
| | Epibromohydrin |
| | Epichlorohydrin |
| PP | EPN |
| PP | Esfenvalerate |
| PP | Ethion |
| | Ethoprophos |
| | Ethyl fluid |
| | Ethyl mercaptan |
| | 2-Ethylhexyl nitrate |
| | 5-Ethyl-2-picoline |
| | Ethyl propenoate, inhibited |
| | 2-Ethyl-3-propylacrolein |
| | Ethyl tetraphosphate |
| | Ethyldichloroarsine |
| | Ethylene dibromide and methyl bromide mixtures, liquid |
| | 2-Ethylhexaldehyde |

| | |
|---|---|
| | Fenamiphos |
| PP | Fenbutatin oxide |
| PP | Fenchlorazole-ethyl |
| PP | Fenitrothion |
| PP | Fenoxapro-ethyl |
| PP | Fenoxaprop-P-ethyl |
| PP | Fenpropathrin |
| | Fensulfothion |
| PP | Fenthion |
| PP | Fentin acetate |
| PP | Fentin hydroxide |
| | Ferric arsenate |
| | Ferric arsenite |
| | Ferrous arsenate |
| PP | Fonofos |
| | Formetanate |
| PP | Furathiocarb (ISO) |
| PP | gamma-BHC |
| | Gasoline, leaded |
| PP | Heptachlor |
| | Heptenophos |
| | n-Heptaldehyde |
| | n-Heptylbenzene |
| | normal-Heptyl chloride |
| PP | Hexachlorobutadiene |
| PP | 1,3-Hexachlorobutadiene |
| | Hexaethyl tetraphosphate *liquid* |

| | |
|---|---|
| | Hexaethyl tetraphosphate, *solid* |
| | normal-Hexyl chloride |
| | n-Hexylbenzene |
| | Hydrocyanic acid, anhydrous, stabilized, containing less than 3% water |
| | Hydrocyanic acid, anhydrous, stabilized, containing less than 3% water and absorbed in a porous inert material |
| | Hydrocyanic acid, aqueous solutions *not more than 20% hydrocyanic acid* |
| | Hydrogen cyanide solution in alcohol, *with not more than* 45% hydrogen cyanide |
| | Hydrogen cyanide, stabilized *with less than 3% water* |
| | Hydrogen cyanide, stabilized *with less than 3% water and absorbed in a porous inert material* |
| | Hydroxydimethylbenzenes, liquid or solid |
| | Ioxynil |
| | Isobenzan |
| | Isobutyl butyrate |
| | Isobutylbenzene |
| | Isodecyl acrylate |
| | Isodecyl diphenyl phosphate |
| | Isofenphos |
| | Isooctyl nitrate |
| | Isoprocarb |
| | Isopropenylbenzene |
| | Isotetramethylbenzene |
| PP | Isoxathion |
| | Lead acetate |
| | Lead arsenates |
| | Lead arsenites |
| | Lead compounds, soluble, n.o.s. |
| | Lead cyanide |

| | |
|---|---|
| | Lead nitrate |
| | Lead perchlorate, solid or solution |
| | Lead tetraethyl |
| | Lead tetramethyl |
| PP | Lindane |
| | Linuron |
| | London Purple |
| | Magnesium arsenate |
| | Malathion |
| | Mancozeb (ISO) |
| | Maneb |
| | Maneb preparations *with not less than 60% maneb* |
| | Maneb preparation, stabilized against self-heating |
| | Maneb stabilized *or* Maneb preparations, stabilized *against self-heating* |
| | Manganese ethylene-1,2-bis dithiocarbamate |
| | Manganese ethylene-1,2-bis-dithiocarbamate, stabilized against self-heating |
| | Mecarbam |
| | Mephosfolan |
| | Mercaptodimethur |
| PP | Mercuric acetate |
| PP | Mercuric ammonium chloride |
| PP | Mercuric arsenate |
| PP | Mercuric benzoate |
| PP | Mercuric bisulphate |
| PP | Mercuric bromide |
| PP | Mercuric chloride |
| PP | Mercuric cyanide |

| | |
|---|---|
| PP | Mercuric gluconate |
| | Mercuric iodide |
| PP | Mercuric nitrate |
| PP | Mercuric oleate |
| PP | Mercuric oxide |
| PP | Mercuric oxycyanide, desensitized |
| PP | Mercuric potassium cyanide |
| PP | Mercuric Sulphate |
| PP | Mercuric thiocyanate |
| PP | Mercurol |
| PP | Mercurous acetate |
| PP | Mercurous bisulphate |
| PP | Mercurous bromide |
| PP | Mercurous chloride |
| PP | Mercurous nitrate |
| PP | Mercurous salicylate |
| PP | Mercurous sulphate |
| PP | Mercury acetates |
| PP | Mercury ammonium chloride |
| PP | Mercury based pesticide, liquid, flammable, toxic |
| PP | Mercury based pesticides, liquid, toxic, flammable |
| PP | Mercury based pesticides, liquid, toxic |
| PP | Mercury based pesticides, solid, toxic |
| PP | Mercury benzoate |
| PP | Mercury bichloride |
| PP | Mercury bisulphates |
| PP | Mercury bromides |

| | |
|---|---|
| PP | Mercury compounds, liquid, n.o.s. |
| PP | Mercury compounds, solid, n.o.s. |
| PP | Mercury cyanide |
| PP | Mercury gluconate |
| PP | Mercury (I) (mercurous) compounds (pesticides) |
| PP | Mercury (II) (mercuric) compounds (pesticides) |
| | Mercury iodide |
| PP | Mercury nucleate |
| PP | Mercury oleate |
| PP | Mercury oxide |
| PP | Mercury oxycyanide, desensitized |
| PP | Mercury potassium cyanide |
| PP | Mercury potassium iodide |
| PP | Mercury salicylate |
| PP | Mercury sulfates |
| PP | Mercury thiocyanate |
| | Metam-sodium |
| | Methamidophos |
| | Methanethiol |
| | Methidathion |
| | Methomyl |
| | ortho-Methoxyaniline |
| | Methyl bromide and ethylene dibromide mixtures, liquid |
| | Methyl mercaptan |
| | 3-Methylacroleine, stabilized |
| | Methylchlorobenzenes |
| | Methylnitrophenols |

| | |
|---|---|
| | 3-Methylpyradine |
| | Methyltrithion |
| | Methylvinylbenzenes, inhibited |
| PP | Mevinphos |
| | Mexacarbate |
| | Mirex |
| | Monocrotophos |
| | Motor fuel anti-knock mixtures |
| | Motor fuel anti-knock mixtures or compounds |
| | Nabam |
| | Naled |
| PP | Nickel carbonyl |
| PP | Nickel cyanide |
| PP | Nickel tetracarbonyl |
| | 3-Nitro-4-chlorobenzotrifluoride |
| | Nitrobenzene |
| | Nitrobenzotrifluorides, liquid or solid |
| | Nonylphenol |
| | *normal* -Octaldehyde |
| | Oleylamine |
| PP | Organotin compounds, liquid, n.o.s. |
| PP | Organotin compounds (pesticides) |
| PP | Organotin compounds, solid, n.o.s. |
| PP | Organotin pesticides, liquid, flammable, toxic, n.o.s. *, flash point less than 23deg C* |
| PP | Organotin pesticides, liquid, toxic, flammable, n.o.s. |
| PP | Organotin pesticides, liquid, toxic, n.o.s. |
| PP | Organotin pesticides, solid, toxic, n.o.s. |

| | |
|---|---|
| | Orthoarsenic acid |
| PP | Osmium tetroxide |
| | Oxamyl |
| | Oxydisulfoton |
| | Paraoxon |
| PP | Parathion |
| PP | Parathion-methyl |
| PP | PCBs. |
| | Pentachloroethane |
| PP | Pentachlorophenol |
| | Pentalin |
| | n-Pentylbenzene |
| | Perchloroethylene |
| | Perchloromethylmercaptan |
| | Petrol, leaded |
| PP | Phenarsazine chloride |
| | d-Phenothrin |
| PP | Phenthoate |
| | 1-Phenylbutane |
| | 2-Phenylbutane |
| | Phenylcyclohexane |
| PP | Phenylmercuric acetate |
| PP | Phenylmercuric compounds, n.o.s. |
| PP | Phenylmercuric hydroxide |
| PP | Phenylmercuric nitrate |
| | 2-Phenylpropene |
| PP | Phorate |

| | |
|---|---|
| PP | Phosalone |
| | Phosmet |
| PP | Phosphamidon |
| PP | Phosphorus, white, molten |
| PP | Phosphorus, white *or* yellow dry *or* under water *or* in solution |
| PP | Phosphorus white, or yellow, molten |
| PP | Phosphorus, yellow, molten |
| | Pindone (and salts of) |
| | Pirimicarb |
| PP | Pirimiphos-ethyl |
| PP | Polychlorinated biphenyls |
| PP | Polyhalogenated biphenyls, liquid *or* Terphenyls liquid |
| PP | Polyhalogenated biphenyls, solid *or* Terphenyls, solid |
| PP | Potassium cuprocyanide |
| | Potassium cyanide, solid |
| | Potassium cyanide, solution |
| PP | Potassium cyanocuprate (I) |
| PP | Potassium cyanomercurate |
| PP | Potassium mercuric iodide |
| | Promecarb |
| | Propachlor |
| | Propaphos |
| | Propenal, inhibited |
| | Propoxur |
| | Prothoate |
| | Prussic acid, anhydrous, stabilized |
| | Prussic acid, anhydrous, stabilized, absorbed in a porous inert material |

| | |
|---|---|
| PP | Pyrazophos |
| | Quinalphos |
| PP | Quizalofop |
| PP | Quizalofop-p-ethyl |
| | Rotenone |
| | Salithion |
| PP | Silafluofen |
| | Silver arsenite |
| | Silver cyanide |
| | Silver orthoarsenite |
| PP | Sodium copper cyanide, solid |
| PP | Sodium copper cyanide solution |
| PP | Sodium cuprocyanide, solid |
| PP | Sodium cuprocyanide, solution |
| | Sodium cyanide, solid |
| | Sodium cyanide, solution |
| | Sodium dinitro-o-cresolate, *dry or wetted with less than 15 per cent water, by mass* |
| | Sodium dinitro-ortho-cresolate, wetted *with not less than 15 per cent water, by mass* |
| PP | Sodium pentachlorophenate |
| | Strychnine *or* Strychnine salts |
| | Sulfotep |
| PP | Sulprophos |
| | Tallow nitrile |
| | Temephos |
| | TEPP |
| PP | Terbufos |
| | Tetrabromoethane |

| | |
|---|---|
| | Tetrabromomethane |
| | 1,1,2,2-Tetrachloroethane |
| | Tetrachloroethylene |
| | Tetrachloromethane |
| | Tetraethyl dithiopyrophosphate |
| PP | Tetraethyl lead, liquid |
| | Tetramethrin |
| | Tetramethyllead |
| | Thallium chlorate |
| | Thallium compounds, n.o.s. |
| | Thallium compounds (pesticides) |
| | Thallium nitrate |
| | Thallium sulfate |
| | Thallous chlorate |
| | Thiocarbonyl tetrachloride |
| | Triaryl phosphates, isopropylated |
| PP | Triaryl phosphates, n.o.s. |
| | Triazophos |
| | Tribromomethane |
| PP | Tributyltin compounds |
| | Trichlorfon |
| PP | 1,2,3—Trichlorobenzene |
| | Trichlorobenzenes, liquid |
| | Trichlorobutene |
| | Trichlorobutylene |
| | Trichloromethane sulphuryl chloride |
| | Trichloromethyl sulphochloride |

| | |
|---|---|
| | Trichloronat |
| | Tricresyl phosphate (less than 1% ortho-isomer) |
| PP | Tricresyl phosphate, not less than 1% ortho-isomer but not more than 3% orthoisomer |
| PP | Tricresyl phosphate *with more than 3 per cent ortho isomer* |
| | Triethylbenzene |
| | Triisopropylated phenyl phosphates |
| | Trimethylene dichloride |
| PP | Triphenylphosphate |
| | Triphenyl phosphate/tert-butylated triphenyl phosphates mixtures containing 5% to 10% triphenyl phosphates |
| PP | Triphenyl phosphate/tert-butylated triphenyl phosphates mixtures containing 10% to 48% triphenyl phosphates |
| PP | Triphenyltin compounds |
| | Tritolyl phosphate (less than 1% ortho-isomer) |
| PP | Tritolyl phosphate (not less than 1% ortho-isomer) |
| | Trixylenyl phosphate |
| | Vinylidene chloride, stabilized |
| | Warfarin (and salts of) |
| PP | White phosphorus, dry |
| PP | White phosphorus, wet |
| | White spirit, low (15-20%) aromatic |
| PP | Yellow phosphorus, dry |
| PP | Yellow phosphorus, wet |
| | Zinc bromide |
| | Zinc cyanide |

[Amdt. 172–173, 55 FR 52474, Dec. 21, 1990]

**Editorial Note:** ForFederal Registercitations affecting §172.101, see the List of CFR Sections Affected which appears in the Finding Aids section of the printed volume and on GPO Access.

**Editorial Note:** At 70 FR 34388, June 14, 2005, §172.101 was amended; however, two amendments could not be incorporated due to inaccurate amendatory instruction.

**§ 172.102 Special provisions.**

(a) *General.* When column 7 of the §172.101 table refers to a special provision for a hazardous material, the meaning and requirements of that provision are as set forth in this section. When a special provision specifies packaging or packaging requirements—

(1) The special provision is in addition to the standard requirements for all packagings prescribed in §173.24 of this subchapter and any other applicable packaging requirements in subparts A and B of part 173 of this subchapter; and

(2) To the extent a special provision imposes limitations or additional requirements on the packaging provisions set forth in column 8 of the §172.101 table, packagings must conform to the requirements of the special provision.

(b) *Description of codes for special provisions.* Special provisions contain packaging provisions, prohibitions, exceptions from requirements for particular quantities or forms of materials and requirements or prohibitions applicable to specific modes of transportation, as follows:

(1) A code consisting only of numbers (for example, “11”) is multi-modal in application and may apply to bulk and non-bulk packagings.

(2) A code containing the letter “A” refers to a special provision which applies only to transportation by aircraft.

(3) A code containing the letter “B” refers to a special provision that applies only to bulk packaging requirements. Unless otherwise provided in this subchapter, these special provisions do not apply to UN, IM Specification portable tanks or IBCs.

(4) A code containing the letters “IB” or “IP” refers to a special provision that applies only to transportation in IBCs.

(5) A code containing the letter “N” refers to a special provision which applies only to non-bulk packaging requirements.

(6) A code containing the letter “R” refers to a special provision which applies only to transportation by rail.

(7) A code containing the letter “T” refers to a special provision which applies only to transportation in UN or IM Specification portable tanks.

(8) A code containing the letters “TP” refers to a portable tank special provision for UN or IM Specification portable tanks that is in addition to those provided by the portable tank instructions or the requirements in part 178 of this subchapter.

(9) A code containing the letter “W” refers to a special provision that applies only to transportation by water.

(c) *Tables of special provisions.* The following tables list, and set forth the requirements of, the special provisions referred to in column 7 of the §172.101 table.

(1) *Numeric provisions.* These provisions are multi-modal and apply to bulk and non-bulk packagings:

*Code/Special Provisions*

1 This material is poisonous by inhalation (see §171.8 of this subchapter) in Hazard Zone A (see §173.116(a) or §173.133(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.

2 This material is poisonous by inhalation (see §171.8 of this subchapter) in Hazard Zone B (see §173.116(a) or §173.133(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.

3 This material is poisonous by inhalation (see §171.8 of this subchapter) in Hazard Zone C (see §173.116(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.

4 This material is poisonous by inhalation (see §171.8 of this subchapter) in Hazard Zone D (see §173.116(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.

5 If this material meets the definition for a material poisonous by inhalation (see §171.8 of this subchapter), a shipping name must be selected which identifies the inhalation hazard, in Division 2.3 or Division 6.1, as appropriate.

6 This material is poisonous-by-inhalation and must be described as an inhalation hazard under the provisions of this subchapter.

8 A hazardous substance that is not a hazardous waste may be shipped under the shipping description “Other regulated substances, liquid *or* solid, n.o.s.”, as appropriate. In addition, for solid materials, special provision B54 applies.

9 Packaging for certain PCBs for disposal and storage is prescribed by EPA in 40 CFR 761.60 and 761.65.

11 The hazardous material must be packaged as either a liquid or a solid, as appropriate, depending on its physical form at 55 °C (131 °F) at atmospheric pressure.

12 In concentrations greater than 40 percent, this material has strong oxidizing properties and is capable of starting fires in contact with combustible materials. If appropriate, a package containing this material must conform to the additional labeling requirements of §172.402 of this subchapter.

13 The words “Inhalation Hazard” shall be entered on each shipping paper in association with the shipping description, shall be marked on each non-bulk package in association with the proper shipping name and identification number, and shall be marked on two opposing sides of each bulk package. Size of marking on bulk package must conform to §172.302(b) of this subchapter. The requirements of §§172.203(m) and 172.505 of this subchapter do not apply.

14 Motor fuel antiknock mixtures are:

a. Mixtures of one or more organic lead mixtures (such as tetraethyl lead, triethylmethyl lead, diethyldimethyl lead, ethyltrimethyl lead, and tetramethyl lead) with one or more halogen compounds (such as ethylene dibromide and ethylene dichloride), hydrocarbon solvents or other equally efficient stabilizers; or

b. tetraethyl lead.

15 This entry applies to “Chemical kits” and “First aid kits” containing one or more compatible items of hazardous materials in boxes, cases, etc. that, for example, are used for medical, analytical, diagnostic, testing, or repair purposes. For transportation by aircraft, materials forbidden for transportation by passenger aircraft or cargo aircraft may not be included in the kits. Chemical kits and first aid kits are excepted from the specification packaging requirements of this subchapter when packaged in combination packagings. Chemical kits and first aid kits are also excepted from the labeling and placarding requirements of this subchapter, except when offered for transportation or transported by air. Chemical and first aid kits may be transported in accordance with the consumer commodity and ORM exceptions in §173.156, provided they meet all required conditions. Kits that are carried on board transport vehicles for first aid or operating purposes are not subject to the requirements of this subchapter.

16 This description applies to smokeless powder and other solid propellants that are used as powder for small arms and have been classed as Division 1.3 and 4.1 in accordance with §173.56 of this subchapter.

18 This description is authorized only for fire extinguishers listed in §173.309(b) of this subchapter meeting the following conditions:

a. Each fire extinguisher may only have extinguishing contents that are nonflammable, non-poisonous, non-corrosive and commercially free from corroding components.

b. Each fire extinguisher must be charged with a nonflammable, non-poisonous, dry gas that has a dew-point at or below minus 46.7 °C (minus 52 °F) at 101 kPa (1 atmosphere) and is free of corroding components, to not more than the service pressure of the cylinder.

c. A fire extinguisher may not contain more than 30% carbon dioxide by volume or any other corrosive extinguishing agent.

d. Each fire extinguisher must be protected externally by suitable corrosion-resisting coating.

19 For domestic transportation only, the identification number “UN1075” may be used in place of the identification number specified in column (4) of the §172.101 table. The identification number used must be consistent on package markings, shipping papers and emergency response information.

21 This material must be stabilized by appropriate means (e.g., addition of chemical inhibitor, purging to remove oxygen) to prevent dangerous polymerization (see §173.21(f) of this subchapter).

22 If the hazardous material is in dispersion in organic liquid, the organic liquid must have a flash point above 50 °C (122 °F).

23 This material may be transported under the provisions of Division 4.1 only if it is so packed that the percentage of diluent will not fall below that stated in the shipping description at any time during transport. Quantities of not more than 500 g per package with not less than 10 percent water by mass may also be classed in Division 4.1, provided a negative test result is obtained when tested in accordance with test series 6(c) of the UN Manual of Tests and Criteria (IBR, see §171.7 of this subchapter).

24 Alcoholic beverages containing more than 70 percent alcohol by volume must be transported as materials in Packing Group II. Alcoholic beverages containing more than 24 percent but not more than 70 percent alcohol by volume must be transported as materials in Packing Group III.

26 This entry does not include ammonium permanganate, the transport of which is prohibited except when approved by the Associate Administrator.

28 The dihydrated sodium salt of dichloroisocyanuric acid is not subject to the requirements of this subchapter.

29 For transportation by motor vehicle, rail car or vessel, production runs (exceptions for prototypes can be found in §173.185(e)) of not more than 100 lithium cells or batteries are excepted from the testing requirements of §173.185(a)(1) if—

a. For a lithium metal cell or battery, the lithium content is not more than 1.0 g per cell and the aggregate lithium content is not more than 2.0 g per battery, and, for a lithium-ion cell or battery, the equivalent lithium content is not more than 1.5 g per cell and the aggregate equivalent lithium content is not more than 8 g per battery;

b. The cells and batteries are transported in an outer packaging that is a metal, plastic or plywood drum or metal, plastic or wooden box that meets the criteria for Packing Group I packagings; and

c. Each cell and battery is individually packed in an inner packaging inside an outer packaging and is surrounded by cushioning material that is non-combustible, and non-conductive.

30 Sulfur is not subject to the requirements of this subchapter if transported in a non-bulk packaging or if formed to a specific shape (for example, prills, granules, pellets, pastilles, or flakes). A bulk packaging containing sulfur is not subject to the placarding requirements of subpart F of this part, if it is marked with the appropriate identification number as required by subpart D of this part. Molten sulfur must be marked as required by §172.325 of this subchapter.

31 Materials which have undergone sufficient heat treatment to render them non-hazardous are not subject to the requirements of this subchapter.

32 Polymeric beads and molding compounds may be made from polystyrene, poly(methyl methacrylate) or other polymeric material.

33 Ammonium nitrites and mixtures of an inorganic nitrite with an ammonium salt are prohibited.

34 The commercial grade of calcium nitrate fertilizer, when consisting mainly of a double salt (calcium nitrate and ammonium nitrate) containing not more than 10 percent ammonium nitrate and at least 12 percent water of crystallization, is not subject to the requirements of this subchapter.

35 Antimony sulphides and oxides which do not contain more than 0.5 percent of arsenic calculated on the total mass do not meet the definition of Division 6.1.

36 The maximum net quantity per package is 5 L (1 gallon) or 5 kg (11 pounds).

37 Unless it can be demonstrated by testing that the sensitivity of the substance in its frozen state is no greater than in its liquid state, the substance must remain liquid during normal transport conditions. It must not freeze at temperatures above −15 °C (5 °F).

38 If this material shows a violent effect in laboratory tests involving heating under confinement, the labeling requirements of Special Provision 53 apply, and the material must be packaged in accordance with packing method OP6 in §173.225 of this subchapter. If the SADT of the technically pure substance is higher than 75 °C, the technically pure substance and formulations derived from it are not self-reactive materials and, if not meeting any other hazard class, are not subject to the requirements of this subchapter.

39 This substance may be carried under provisions other than those of Class 1 only if it is so packed that the percentage of water will not fall below that stated at any time during transport. When phlegmatized with water and inorganic inert material, the content of urea nitrate must not exceed 75 percent by mass and the mixture should not be capable of being detonated by test 1(a)(i) or test 1(a)(ii) in the UN Manual of Tests and Criteria (IBR, see §171.7 of this subchapter).

40 Polyester resin kits consist of two components: a base material (Class 3, Packing Group II or III) and an activator (organic peroxide), each separately packed in an inner packaging. The organic peroxide must be type D, E, or F, not requiring temperature control, and be limited to a quantity of 125 mL (4.22 ounces) per inner packaging if liquid, and 500 g (1 pound) if solid. The components may be placed in the same outer packaging provided they will not interact dangerously in the event of leakage. Packing group will be II or III, according to the criteria for Class 3, applied to the base material.

43 The membrane filters, including paper separators and coating or backing materials, that are present in transport, must not be able to propagate a detonation as tested by one of the tests described in the UN Manual of Tests and Criteria, Part I, Test series 1(a) (IBR, see §171.7 of this subchapter). On the basis of the results of suitable burning rate tests, and taking into account the standard tests in the UN Manual of Tests and Criteria, Part III, subsection 33.2.1 (IBR, see §171.7 of this subchapter), nitrocellulose membrane filters in the form in which they are to be transported that do not meet the criteria for a Division 4.1 material are not subject to the requirements of this subchapter. Packagings must be so constructed that explosion is not possible by reason of increased internal pressure. Nitrocellulose membrane filters covered by this entry, each with a mass not exceeding 0.5 g, are not subject to the requirements of this subchapter when contained individually in an article or a sealed packet.

44 The formulation must be prepared so that it remains homogenous and does not separate during transport. Formulations with low nitrocellulose contents and neither showing dangerous properties when tested for their ability to detonate, deflagrate or explode when heated under defined confinement by the appropriate test methods and criteria in the UN Manual of Tests and Criteria (IBR, see §171.7 of this subchapter), nor classed as a Division 4.1 (flammable solid) when tested in accordance with the procedures specified in §173.124 of this subchapter (chips, if necessary, crushed and sieved to a particle size of less than 1.25 mm), are not subject to the requirements of this subchapter.

45 Temperature should be maintained between 18 °C (64.4 °F) and 40 °C (104 °F). Tanks containing solidified methacrylic acid must not be reheated during transport.

46 This material must be packed in accordance with packing method OP6 (see §173.225 of this subchapter). During transport, it must be protected from direct sunshine and stored (or kept) in a cool and well-ventilated place, away from all sources of heat.

47 Mixtures of solids that are not subject to this subchapter and flammable liquids may be transported under this entry without first applying the classification criteria of Division 4.1, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Except when the liquids are fully absorbed in solid material contained in sealed bags, each packaging must correspond to a design type that has passed a leakproofness test at the Packing Group II level. Small inner packagings consisting of sealed packets and articles containing less than 10 mL of a Class 3 liquid in Packing Group II or III absorbed onto a solid material are not subject to this subchapter provided there is no free liquid in the packet or article.

48 Mixtures of solids which are not subject to this subchapter and toxic liquids may be transported under this entry without first applying the classification criteria of Division 6.1, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Each packaging must correspond to a design type that has passed a leakproofness test at the Packing Group II level. This entry may not be used for solids containing a Packing Group I liquid.

49 Mixtures of solids which are not subject to this subchapter and corrosive liquids may be transported under this entry without first applying the classification criteria of Class 8, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Each packaging must correspond to a design type that has passed a leakproofness test at the Packing Group II level.

50 Cases, cartridge, empty with primer which are made of metallic or plastic casings and meeting the classification criteria of Division 1.4 are not regulated for domestic transportation.

51 This description applies to items previously described as “Toy propellant devices, Class C” and includes reloadable kits. Model rocket motors containing 30 grams or less propellant are classed as Division 1.4S and items containing more than 30 grams of propellant but not more than 62.5 grams of propellant are classed as Division 1.4C.

52 This entry may only be used for substances that do not exhibit explosive properties of Class 1 (explosive) when tested in accordance with Test Series 1 and 2 of Class 1 (explosive) in the UN Manual of Tests and Criteria, Part I (incorporated by reference; see §171.7 of this subchapter).

53 Packages of these materials must bear the subsidiary risk label, “EXPLOSIVE”, and the subsidiary hazard class/division must be entered in parentheses immediately following the primary hazard class in the shipping description, unless otherwise provided in this subchapter or through an approval issued by the Associate Administrator, or the competent authority of the country of origin. A copy of the approval shall accompany the shipping papers.

54 Maneb or maneb preparations not meeting the definition of Division 4.3 or any other hazard class are not subject to the requirements of this subchapter when transported by motor vehicle, rail car, or aircraft.

55 This device must be approved in accordance with §173.56 of this subchapter by the Associate Administrator.

56 A means to interrupt and prevent detonation of the detonator from initiating the detonating cord must be installed between each electric detonator and the detonating cord ends of the jet perforating guns before the charged jet perforating guns are offered for transportation.

57 Maneb *or* Maneb preparations stabilized against self-heating need not be classified in Division 4.2 when it can be demonstrated by testing that a volume of 1 $m^3$ of substance does not self-ignite and that the temperature at the center of the sample does not exceed 200 °C, when the sample is maintained at a temperature of not less than 75 °C ±2 °C for a period of 24 hours, in accordance with procedures set forth for testing self-heating materials in the UN Manual of Tests and Criteria (IBR, see §171.7 of this subchapter).

58 Aqueous solutions of Division 5.1 inorganic solid nitrate substances are considered as not meeting the criteria of Division 5.1 if the concentration of the substances in solution at the minimum temperature encountered in transport is not greater than 80% of the saturation limit.

59 Ferrocerium, stabilized against corrosion, with a minimum iron content of 10 percent is not subject to the requirements of this subchapter.

60 After September 30, 1997, an oxygen generator, chemical, that is shipped with its means of initiation attached must incorporate at least two positive means of preventing unintentional actuation of the generator, and be classed and approved by the Associate Administrator. The procedures for approval of a chemical oxygen generator that contains an explosive means of initiation (e.g., a primer or electric match) are specified in §173.56 of this subchapter. Each person who offers a chemical oxygen generator for transportation after September 30, 1997, shall: (1) ensure that it is offered in conformance with the conditions of the approval; (2) maintain a copy of the approval at each facility where the chemical oxygen generator is packaged; and (3) mark the approval number on the outside of the package.

61 A chemical oxygen generator is spent if its means of ignition and all or a part of its chemical contents have been expended.

64 The group of alkali metals includes lithium, sodium, potassium, rubidium, and caesium.

65 The group of alkaline earth metals includes magnesium, calcium, strontium, and barium.

66 Formulations of these substances containing not less than 30 percent non-volatile, non-flammable phlegmatizer are not subject to this subchapter.

70 Black powder that has been classed in accordance with the requirements of §173.56 of this subchapter may be reclassed and offered for domestic transportation as a Division 4.1 material if it is offered for transportation and transported in accordance with the limitations and packaging requirements of §173.170 of this subchapter.

74 During transport, this material must be protected from direct sunshine and stored or kept in a cool and well-ventilated place, away from all sources of heat.

77 Mixtures containing not more than 23.5% oxygen by volume may be transported under this entry when no other oxidizing gases are present. A Division 5.1 subsidiary risk label is not required if this special provision applies.

78 This entry may not be used to describe compressed air which contains more than 23.5 percent oxygen. An oxidizer label is not required for any oxygen concentration of 23.5 percent or less.

79 This entry may not be used for mixtures that meet the definition for oxidizing gas.

81 Polychlorinated biphenyl items, as defined in 40 CFR 761.3, for which specification packagings are impractical, may be packaged in non-specification packagings meeting the general packaging requirements of subparts A and B of part 173 of this subchapter. Alternatively, the item itself may be used as a packaging if it meets the general packaging requirements of subparts A and B of part 173 of this subchapter.

102 The ends of the detonating cord must be tied fast so that the explosive cannot escape. The articles may be transported as in Division 1.4 Compatibility Group D (1.4D) if all of the conditions specified in §173.63(a) of this subchapter are met.

103 Detonators which will not mass detonate and undergo only limited propagation in the shipping package may be assigned to 1.4B classification code. Mass detonate means that more than 90 percent of the devices tested in a package explode practically simultaneously. Limited propagation means that if one detonator near the center of a shipping package is exploded, the aggregate weight of explosives, excluding ignition and delay charges, in this and all additional detonators in the outside packaging that explode may not exceed 25 grams.

105 The word “Agents” may be used instead of “Explosives” when approved by the Associate Administrator.

106 The recognized name of the particular explosive may be specified in addition to the type.

107 The classification of the substance is expected to vary especially with the particle size and packaging but the border lines have not been experimentally determined; appropriate classifications should be verified following the test procedures in §§173.57 and 173.58 of this subchapter.

108 Fireworks must be so constructed and packaged that loose pyrotechnic composition will not be present in packages during transportation.

109 Rocket motors must be nonpropulsive in transportation unless approved in accordance with §173.56 of this subchapter. A rocket motor to be considered “nonpropulsive” must be capable of unrestrained burning and must not appreciably move in any direction when ignited by any means.

110 Fire extinguishers transported under UN1044 may include installed actuating cartridges (cartridges, power device of Division 1.4C or 1.4S), without changing the classification of Division 2.2, provided the aggregate quantity of deflagrating (propellant) explosives does not exceed 3.2 grams per extinguishing unit.

111 Explosive substances of Division 1.1 Compatibility Group A (1.1A) are forbidden for transportation if dry or not desensitized, unless incorporated in a device.

113 The sample must be given a tentative approval by an agency or laboratory in accordance with §173.56 of this subchapter.

114 Jet perforating guns, charged, oil well, without detonator may be reclassed to Division 1.4 Compatibility Group D (1.4D) if the following conditions are met:

a. The total weight of the explosive contents of the shaped charges assembled in the guns does not exceed 90.5 kg (200 pounds) per vehicle; and

b. The guns are packaged in accordance with Packing Method US 1 as specified in §173.62 of this subchapter.

115 Boosters with detonator, detonator assemblies and boosters with detonators in which the total explosive charge per unit does not exceed 25 g, and which will not mass detonate and undergo only limited propagation in the shipping package may be assigned to 1.4B classification code. Mass detonate means more than 90 percent of the devices tested in a package explode practically simultaneously. Limited propagation means that if one booster near the center of the package is exploded, the aggregate weight of explosives, excluding ignition and delay charges, in this and all additional boosters in the outside packaging that explode may not exceed 25 g.

116 Fuzes, detonating may be classed in Division 1.4 if the fuzes do not contain more than 25 g of explosive per fuze and are made and packaged so that they will not cause functioning of other fuzes, explosives or other explosive devices if one of the fuzes detonates in a shipping packaging or in adjacent packages.

117 If shipment of the explosive substance is to take place at a time that freezing weather is anticipated, the water contained in the explosive substance must be mixed with denatured alcohol so that freezing will not occur.

118 This substance may not be transported under the provisions of Division 4.1 unless specifically authorized by the Associate Administrator.

119 This substance, when in quantities of not more than 11.5 kg (25.3 pounds), with not less than 10 percent water, by mass, also may be classed as Division 4.1, provided a negative test result is obtained when tested in accordance with test series 6(c) of the UN Manual of Tests and Criteria (IBR, see §171.7 of this subchapter).

120 The phlegmatized substance must be significantly less sensitive than dry PETN.

121 This substance, when containing less alcohol, water or phlegmatizer than specified, may not be transported unless approved by the Associate Administrator.

123 Any explosives, blasting, type C containing chlorates must be segregated from explosives containing ammonium nitrate or other ammonium salts.

125 Lactose or glucose or similar materials may be used as a phlegmatizer provided that the substance contains not less than 90%, by mass, of phlegmatizer. These mixtures may be classified in Division 4.1 when tested in accordance with test series 6(c) of the UN Manual of Tests and Criteria (IBR, see §171.7 of this subchapter) and approved by the Associate Administrator. Testing must be conducted on at least three packages as prepared for transport. Mixtures containing at least 98%, by mass, of phlegmatizer are not subject to the requirements of this subchapter. Packages containing mixtures with not less than 90% by mass, of phlegmatizer need not bear a POISON subsidiary risk label.

127 Mixtures containing oxidizing and organic materials transported under this entry may not meet the definition and criteria of a Class 1 material. (See §173.50 of this subchapter.)

128 Regardless of the provisions of §172.101(c)(12), aluminum smelting by-products and aluminum remelting by-products described under this entry, meeting the definition of Class 8, Packing Group II and III may be classed as a Division 4.3 material and transported under this entry. The presence of a Class 8 hazard must be communicated as required by this Part for subsidiary hazards.

129 These materials may not be classified and transported unless authorized by the Associate Administrator on the basis of results from Series 2 Test and a Series 6(c) Test from the UN Manual of Tests and Criteria (IBR, see §171.7 of this subchapter) on packages as prepared for transport. The packing group assignment and packaging must be approved by the Associate Administrator for Hazardous Materials Safety on the basis of the criteria in §173.21 of this subchapter and the package type used for the Series 6(c) test.

130 For other than a dry battery specifically covered by another entry in the §172.101 Table, “Batteries, dry” are not subject to the requirements of this subchapter when they are securely packaged and offered for transportation in a manner that prevents the dangerous evolution of heat (for example, by the effective insulation of exposed terminals) and protects against short circuits.

131 This material may not be offered for transportation unless approved by the Associate Administrator.

132 This entry may only be used for uniform, ammonium nitrate based fertilizer mixtures, containing nitrogen, phosphate or potash, meeting the following criteria: (1) Contains not more than 70% ammonium nitrate and not more than 0.4% total combustible, organic material calculated as carbon or (2) Contains not more than 45% ammonium nitrate and unrestricted combustible material.

134 This entry only applies to vehicles, machinery and equipment powered by wet batteries, sodium batteries, or lithium batteries that are transported with these batteries installed. Examples of such items are electrically-powered cars, lawn mowers, wheelchairs, and other mobility aids. Self-propelled vehicles that also contain an internal combustion engine must be consigned under the entry “Vehicle, flammable gas powered” or “Vehicle, flammable liquid powered”, as appropriate. Except as provided in Special Provision A101, vehicles, machinery and equipment powered by primary lithium batteries that are transported with these batteries installed are forbidden aboard passenger-carrying aircraft.

135 The entries “Vehicle, flammable gas powered” or “Vehicle, flammable liquid powered,” as appropriate, must be used when internal combustion engines are installed in a vehicle. These entries include hybrid electric vehicles powered by both an internal combustion engine and batteries.

136 This entry only applies to machinery and apparatus containing hazardous materials as in integral element of the machinery or apparatus. It may not be used to describe machinery or apparatus for which a proper shipping name exists in the §172.101 Table. Except when approved by the Associate Administrator, machinery or apparatus may only contain hazardous materials for which exceptions are referenced in Column (8) of the §172.101 Table and are provided in part 173, subpart D, of this subchapter. Hazardous materials shipped under this entry are excepted from the labeling requirements of this subchapter unless offered for transportation or transported by aircraft and are not subject to the placarding requirements of part 172, subpart F, of this subchapter. Orientation markings as described in §172.312 (a)(2) are required when liquid hazardous materials may escape due to incorrect orientation. The machinery or apparatus, if unpackaged, or the packaging in which it is contained shall be marked “Dangerous goods in machinery” or “Dangerous goods in apparatus”, as appropriate, with the identification number UN3363. For transportation by aircraft, machinery or apparatus may not contain any material forbidden for transportation by passenger or cargo aircraft. The Associate Administrator may except from the requirements of this subchapter, equipment, machinery and apparatus provided:

a. It is shown that it does not pose a significant risk in transportation;

b. The quantities of hazardous materials do not exceed those specified in §173.4 of this subchapter; and

c. The equipment, machinery or apparatus conforms with §173.222 of this subchapter.

137 Cotton, dry; flax, dry; and sisal, dry are not subject to the requirements of this subchapter when they are baled in accordance with ISO 8115, “Cotton Bales—Dimensions and Density” (IBR, see §171.7 of this subchapter) to a density of not less than 360 kg/$m^3$ (22.1 lb/$ft^3$ ) for cotton, 400 kg/$m^3$ (24.97 lb/$ft^3$ ) for flax and 620 kg/$m^3$ (38.71 lb/$ft^3$ ) for sisal and transported in a freight container or closed transport vehicle.

138 Lead compounds which, when mixed in a ratio of 1:1000 with 0.07M (Molar concentration) hydrochloric acid and stirred for one hour at a temperature of 23 °C ±2 °C, exhibit a solubility of 5% or less are considered insoluble.

139 Use of the “special arrangement” proper shipping names for international shipments must be made under an IAEA Certificate of Competent Authority issued by the Associate Administrator in accordance with the requirements in §173.471, §173.472, or §173.473 of this subchapter. Use of these proper shipping names for domestic shipments may be made only under a DOT special permit, as defined in, and in accordance with the requirements of subpart B of part 107 of this subchapter.

140 This material is regulated only when it meets the defining criteria for a hazardous substance or a marine pollutant. In addition, the column 5 reference is modified to read “III” on those occasions when this material is offered for transportation or transported by highway or rail.

141 A toxin obtained from a plant, animal, or bacterial source containing an infectious substance, or a toxin contained in an infectious substance, must be classed as Division 6.2, described as an infectious substance, and assigned to UN 2814 or UN 2900, as appropriate.

142 These hazardous materials may not be classified and transported unless authorized by the Associate Administrator. The Associate Administrator will base the authorization on results from Series 2 tests and a Series 6(c) test from the UN Manual of Tests and Criteria (IBR, see §171.7 of this subchapter) on packages as prepared for transport in accordance with the requirements of this subchapter.

144 If transported as a residue in an underground storage tank (UST), as defined in 40 CFR 280.12, that has been cleaned and purged or rendered inert according to the American Petroleum Institute (API) Standard 1604 (IBR, see §171.7 of this subchapter), then the tank and this material are not subject to any other requirements of this subchapter. However, sediments remaining in the tank that meet the definition for a hazardous material are subject to the applicable regulations of this subchapter.

145 This entry applies to formulations that neither detonate in the cavitated state nor deflagrate in laboratory testing, show no effect when heated under confinement, exhibit no explosive power, and are thermally stable (self-accelerating decomposition temperature (SADT) at 60 °C (140 °F) or higher for a 50 kg (110.2 lbs.) package). Formulations not meeting these criteria must be transported under the provisions applicable to the appropriate entry in the Organic Peroxide Table in §173.225 of this subchapter.

146 This description may be used for a material that poses a hazard to the environment but does not meet the definition for a hazardous waste or a hazardous substance, as defined in §171.8 of this subchapter, or any hazard class, as defined in part 173 of this subchapter, if it is designated as environmentally hazardous by another Competent Authority. This provision may be used for both domestic and international shipments.

147 This entry applies to non-sensitized emulsions, suspensions, and gels consisting primarily of a mixture of ammonium nitrate and fuel, intended to produce a Type E blasting explosive only after further processing prior to use. The mixture for emulsions typically has the following composition: 60–85% ammonium nitrate; 5–30% water; 2–8% fuel; 0.5–4% emulsifier or thickening agent; 0–10% soluble flame suppressants; and trace additives. Other inorganic nitrate salts may replace part of the ammonium nitrate. The mixture for suspensions and gels typically has the following composition: 60–85% ammonium nitrate; 0–5% sodium or potassium perchlorate; 0–17% hexamine nitrate or monomethylamine nitrate; 5–30% water; 2–15% fuel; 0.5–4% thickening agent; 0–10% soluble flame suppressants; and trace additives. Other inorganic nitrate salts may replace part of the ammonium nitrate. These substances must satisfactorily pass Test Series 8 of the UN Manual of Tests and Criteria, Part I, Section 18 (IBR, see §171.7 of this subchapter), and may not be classified and transported unless approved by the Associate Administrator.

149 When transported as a limited quantity or a consumer commodity, the maximum net capacity specified in §173.150(b)(2) of this subchapter for inner packagings may be increased to 5 L (1.3 gallons).

150 This description may be used only for uniform mixtures of fertilizers containing ammonium nitrate as the main ingredient within the following composition limits:

a. Not less than 90% ammonium nitrate with not more than 0.2% total combustible, organic material calculated as carbon, and with added matter, if any, that is inorganic and inert when in contact with ammonium nitrate; or

b. Less than 90% but more than 70% ammonium nitrate with other inorganic materials, or more than 80% but less than 90% ammonium nitrate mixed with calcium carbonate and/or dolomite, and not more than 0.4% total combustible, organic material calculated as carbon; or

c. Ammonium nitrate-based fertilizers containing mixtures of ammonium nitrate and ammonium sulphate with more than 45% but less than 70% ammonium nitrate, and not more than 0.4% total combustible, organic material calculated as carbon such that the sum of the percentage of compositions of ammonium nitrate and ammonium sulphate exceeds 70%.

151 If this material meets the definition of a flammable liquid in §173.120 of this subchapter, a FLAMMABLE LIQUID label is also required and the basic description on the shipping paper must indicate the Class 3 subsidiary hazard.

155 Fish meal or fish scrap may not be transported if the temperature at the time of loading either exceeds 35 °C (95 °F), or exceeds 5 °C (41 °F) above the ambient temperature, whichever is higher.

156 Asbestos that is immersed or fixed in a natural or artificial binder material, such as cement, plastic, asphalt, resins or mineral ore, or contained in manufactured products is not subject to the requirements of this subchapter.

157 This entry includes hybrid electric vehicles powered by both an internal combustion engine and wet, sodium or lithium batteries installed. Vehicles containing an internal combustion engine must be consigned under the entry “Vehicle, flammable gas powered” or “Vehicle, flammable liquid powered”, as appropriate. Except as provided in Special Provision A101, vehicles powered by primary lithium batteries, that are transported with these batteries installed are forbidden aboard passenger-carrying aircraft.

159 This material must be protected from direct sunshine and kept in a cool, well-ventilated place away from sources of heat.

160 This entry applies to articles that are used as life-saving vehicle air bag inflators, air bag modules or seat-belt pretensioners containing Class 1 (explosive) materials or materials of other hazard classes. Air bag inflators and modules must be tested in accordance with Test series 6(c) of Part I of the UN Manual of Tests and Criteria (incorporated by reference; see §171.7 of this subchapter), with no explosion of the device, no fragmentation of device casing or pressure vessel, and no projection hazard or thermal effect that would significantly hinder fire-fighting or other emergency response efforts in the immediate vicinity. If the air bag inflator unit satisfactorily passes the series 6(c) test, it is not necessary to repeat the test on the air bag module.

161 For domestic transport, air bag inflators, air bag modules or seat belt pretensioners that meet the criteria for a Division 1.4G explosive must be transported using the description, “Articles, pyrotechnic *for technical purposes* ,” UN0431.

162 This material may be transported under the provisions of Division 4.1 only if it is packed so that at no time during transport will the percentage of diluent fall below the percentage that is stated in the shipping description.

163 Substances must satisfactorily pass Test Series 8 of the UN Manual of Tests and Criteria, Part I, Section 18 (IBR, see §171.7 of this subchapter).

164 Substances must not be transported under this entry unless approved by the Associate Administrator on the basis of the results of appropriate tests according to Part I of the UN Manual of Tests and Criteria (IBR, see §171.7 of this subchapter). The material must be packaged so that the percentage of diluent does not fall below that stated in the approval at any time during transportation.

165 These substances are susceptible to exothermic decomposition at elevated temperatures. Decomposition can be initiated by heat, moisture or by impurities (e.g., powdered metals (iron, manganese, cobalt, magnesium)). During the course of transportation, these substances must be shaded from direct sunlight and all sources of heat and be placed in adequately ventilated areas.

166 When transported in non-friable tablet form, calcium hypochlorite, dry, may be transported as a Packing Group III material.

167 These storage systems shall always be considered as containing hydrogen.

168 For lighters containing a Division 2.1 gas ( *see* §171.8 of this subchapter), representative samples of each new lighter design must be examined and successfully tested as specified in §173.308(b)(3). For criteria in determining what is a new lighter design, *see* §173.308(b)(1). For transportation of new lighter design samples for examination and testing, *see* §173.308(b)(2). The examination and testing of each lighter design must be performed by a person authorized by the Associate Administrator under the provisions of subpart E of part 107 of this chapter, as specified in §173.308(a)(4). For continued use of approvals dated prior to January 1, 2012, *see* §173.308(b)(5).

For non-pressurized lighters containing a Class 3 (flammable liquid) material, its design, description, and packaging must be approved by the Associate Administrator prior to being offered for transportation or transported in commerce. In addition, a lighter design intended to contain a non-pressurized Class 3 material is excepted from the examination and testing criteria specified in §173.308(b)(3). An unused lighter or a lighter that is cleaned of residue and purged of vapors is not subject to the requirements of this subchapter.

169 This entry applies to lighter refills ( *see* §171.8 of this subchapter) that contain a Division 2.1 (flammable) gas but do not contain an ignition device. Lighter refills offered for transportation under this entry may not exceed 4 fluid ounces capacity (7.22 cubic inches) or contain more than 65 grams of fuel. A lighter refill exceeding 4 fluid ounces capacity (7.22 cubic inches) or containing more than 65 grams of fuel must be classed as a Division 2.1 material, described with the proper shipping name appropriate for the material, and packaged in the packaging specified in part 173 of this subchapter for the flammable gas contained therein. In addition, a container exceeding 4 fluid ounces volumetric capacity (7.22 cubic inches) or containing more than 65 grams of fuel may not be connected or manifolded to a lighter or similar device and must also be described and packaged according to the fuel contained therein. For transportation by passenger-carrying aircraft, the net mass of lighter refills may not exceed 1 kg per package, and, for cargo-only aircraft, the net mass of lighter refills may not exceed 15 kg per package. See §173.306(h) of this subchapter.

170 Air must be eliminated from the vapor space by nitrogen or other means.

171 This entry may only be used when the material is transported in non-friable tablet form or for granular or powered mixtures that have been shown to meet the PG III criteria in §173.127.

172 This entry includes alcohol mixtures containing up to 5% petroleum products.

173 An appropriate generic entry may be used for this material.

175 This substance must be stabilized when in concentrations of not more than 99%.

188 *Small lithium cells and batteries.* Lithium cells or batteries, including cells or batteries packed with or contained in equipment, are not subject to any other requirements of this subchapter if they meet all of the following:

a. *Primary lithium batteries and cells.* (1) Primary lithium batteries and cells are forbidden for transport aboard passenger-carrying aircraft. The outside of each package that contains primary (nonrechargeable) lithium batteries or cells must be marked “PRIMARY LITHIUM BATTERIES—FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT” or “LITHIUM METAL BATTERIES—FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT” on a background of contrasting color. The letters in the marking must be:

(i) At least 12 mm (0.5 inch) in height on packages having a gross weight of more than 30 kg (66 pounds); or

(ii) At least 6 mm (0.25 inch) on packages having a gross weight of 30 kg (66 pounds) or less, except that smaller font may be used as necessary to fit package dimensions; and

(2) The provisions of paragraph (a)(1) do not apply to packages that contain 5 kg (11 pounds) net weight or less of primary lithium batteries or cells that are contained in or packed with equipment and the package contains no more than the number of lithium batteries or cells necessary to power the piece of equipment;

b. For a lithium metal or lithium alloy cell, the lithium content is not more than 1.0 g. For a lithium-ion cell, the equivalent lithium content is not more than 1.5 g;

c. For a lithium metal or lithium alloy battery, the aggregate lithium content is not more than 2.0 g. For a lithium-ion battery, the aggregate equivalent lithium content is not more than 8 g;

d. Effective October 1, 2009, the cell or battery must be of a type proven to meet the requirements of each test in the UN Manual of Tests and Criteria (IBR; see §171.7 of this subchapter);

e. Cells or batteries are separated so as to prevent short circuits and are packed in a strong outer packaging or are contained in equipment;

f. Effective October 1, 2008, except when contained in equipment, each package containing more than 24 lithium cells or 12 lithium batteries must be:

(1) Marked to indicate that it contains lithium batteries, and special procedures should be followed in the event that the package is damaged;

(2) Accompanied by a document indicating that the package contains lithium batteries and special procedures should be followed in the event that the package is damaged;

(3) Capable of withstanding a 1.2 meter drop test in any orientation without damage to cells or batteries contained in the package, without shifting of the contents that would allow short circuiting and without release of package contents; and

(4) Gross weight of the package may not exceed 30 kg (66 pounds). This requirement does not apply to lithium cells or batteries packed with equipment;

g. Electrical devices must conform to §173.21 of this subchapter; and

h. Lithium batteries or cells are not authorized aboard an aircraft in checked or carry-on luggage except as provided in §175.10.

189 *Medium lithium cells and batteries.* Effective October 1, 2008, when transported by motor vehicle or rail car, lithium cells or batteries, including cells or batteries packed with or contained in equipment, are not subject to any other requirements of this subchapter if they meet all of the following:

a. The lithium content anode of each cell, when fully charged, is not more than 5 grams.

b. The aggregate lithium content of the anode of each battery, when fully charged, is not more than 25 grams.

c. The cells or batteries are of a type proven to meet the requirements of each test in the UN Manual of Tests and Criteria (IBR; see §171.7 of this subchapter). A cell or battery and equipment containing a cell or battery that was first transported prior to January 1, 2006 and is of a type proven to meet the criteria of Class 9 by testing in accordance with the tests in the UN Manual of Tests and Criteria, Third Revised Edition, 1999, need not be retested.

d. Cells or batteries are separated so as to prevent short circuits and are packed in a strong outer packaging or are contained in equipment.

e. The outside of each package must be marked “LITHIUM BATTERIES—FORBIDDEN FOR TRANSPORT ABOARD AIRCRAFT AND VESSEL” on a background of contrasting color, in letters:

(1) At least 12 mm (0.5 inch) in height on packages having a gross weight of more than 30 kg (66 pounds); or

(2) At least 6 mm (0.25 inch) on packages having a gross weight of 30 kg (66 pounds) or less, except that smaller font may be used as necessary to fit package dimensions.

f. Except when contained in equipment, each package containing more than 24 lithium cells or 12 lithium batteries must be:

(1) Marked to indicate that it contains lithium batteries, and that special procedures should be followed in the event that the package is damaged;

(2) Accompanied by a document indicating that the package contains lithium batteries and that special procedures should be followed in the event that the package is damaged;

(3) Capable of withstanding a 1.2 meter drop test in any orientation without damage to cells or batteries contained in the package, without shifting of the contents that would allow short circuiting and without release of package contents; and

(4) Gross weight of the package may not exceed 30 kg (66 pounds). This requirement does not apply to lithium cells or batteries packed with equipment.

g. Electrical devices must conform to §173.21 of this subchapter.

190 Until the effective date of the standards set forth in Special Provision 189, medium lithium cells or batteries, including cells or batteries packed with or contained in equipment, are not subject to any other requirements of this subchapter if they meet all of the following:

a. *Primary lithium batteries and cells* . (1) Primary lithium batteries and cells are forbidden for transport aboard passenger-carrying aircraft. The outside of each package that contains primary (nonrechargeable) lithium batteries or cells must be marked “PRIMARY LITHIUM BATTERIES—FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT” or “LITHIUM METAL BATTERIES—FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT” on a background of contrasting color. The letters in the marking must be:

(i) At least 12 mm (0.5 inch) in height on packages having a gross weight of more than 30 kg (66 pounds); or

(ii) At least 6 mm (0.25 inch) on packages having a gross weight of 30 kg (66 pounds) or less, except that smaller font may be used as necessary to fit package dimensions; and

(2) The provisions of paragraph (a)(1) do not apply to packages that contain 5 kg (11 pounds) net weight or less of primary lithium batteries or cells that are contained in or packed with equipment and the package contains no more than the number of lithium batteries or cells necessary to power the piece of equipment.

b. The lithium content of each cell, when fully charged, is not more than 5 grams.

c. The aggregate lithium content of each battery, when fully charged, is not more than 25 grams.

d. The cells or batteries are of a type proven to meet the requirements of each test in the UN Manual of Tests and Criteria (IBR; see §171.7 of this subchapter). A cell or battery and equipment containing a cell or battery that was first transported prior to January 1, 2006 and is of a type proven to meet the criteria of Class 9 by testing in accordance with the tests in the UN Manual of Tests and Criteria, Third Revised Edition, 1999, need not be retested.

e. Cells or batteries are separated so as to prevent short circuits and are packed in a strong outer packaging or are contained in equipment.

f. Electrical devices must conform to §173.21 of this subchapter.

(2) *"A" codes.* These provisions apply only to transportation by aircraft:

*Code/Special Provisions*

A1 Single packagings are not permitted on passenger aircraft.

A2 Single packagings are not permitted on aircraft.

A3 For combination packagings, if glass inner packagings (including ampoules) are used, they must be packed with absorbent material in tightly closed metal receptacles before packing in outer packagings.

A4 Liquids having an inhalation toxicity of Packing Group I are not permitted on aircraft.

A5 Solids having an inhalation toxicity of Packing Group I are not permitted on passenger aircraft and may not exceed a maximum net quantity per package of 15 kg (33 pounds) on cargo aircraft.

A6 For combination packagings, if plastic inner packagings are used, they must be packed in tightly closed metal receptacles before packing in outer packagings.

A7 Steel packagings must be corrosion-resistant or have protection against corrosion.

A8 For combination packagings, if glass inner packagings (including ampoules) are used, they must be packed with cushioning material in tightly closed metal receptacles before packing in outer packagings.

A9 For combination packagings, if plastic bags are used, they must be packed in tightly closed metal receptacles before packing in outer packagings.

A10 When aluminum or aluminum alloy construction materials are used, they must be resistant to corrosion.

A11 For combination packagings, when metal inner packagings are permitted, only specification cylinders constructed of metals which are compatible with the hazardous material may be used.

A13 Bulk packagings are not authorized for transportation by aircraft.

A14 This material is not authorized to be transported as a limited quantity or consumer commodity in accordance with §173.306 of this subchapter when transported aboard an aircraft.

A19 Combination packagings consisting of outer fiber drums or plywood drums, with inner plastic packagings, are not authorized for transportation by aircraft.

A20 Plastic bags as inner receptacles of combination packagings are not authorized for transportation by aircraft.

A29 Combination packagings consisting of outer expanded plastic boxes with inner plastic bags are not authorized for transportation by aircraft.

A30  Ammonium permanganate is not authorized for transportation on aircraft.

A34  Aerosols containing a corrosive liquid in Packing Group II charged with a gas are not permitted for transportation by aircraft.

A35  This includes any material which is not covered by any of the other classes but which has an anesthetic, narcotic, noxious or other similar properties such that, in the event of spillage or leakage on an aircraft, extreme annoyance or discomfort could be caused to crew members so as to prevent the correct performance of assigned duties.

A37  This entry applies only to a material meeting the definition in §171.8 of this subchapter for self-defense spray.

A51  When transported by cargo-only aircraft, an oxygen generator must conform to the provisions of an approval issued under Special Provision 60 and be contained in a packaging prepared and originally offered for transportation by the approval holder.

A52  A cylinder containing Oxygen, compressed, may not be loaded into a passenger-carrying aircraft or into an inaccessible cargo location on a cargo-only aircraft unless it is placed in an overpack or outer packaging that conforms to the performance criteria of Air Transport Association (ATA) Specification No. 300 (IBR, see §171.7 of this subchapter) for Category I shipping containers.

A53  Refrigerating machines and refrigerating machine components are not subject to the requirements of this subchapter when containing less than 12 kg (26.4 pounds) of a non-flammable gas or when containing 12 L (3 gallons) or less of ammonia solution (UN2672) (see §173.307 of this subchapter).

A54  Lithium batteries or lithium batteries contained or packed with equipment that exceed the maximum gross weight allowed by Column (9B) of the §172.101 Table may only be transported on cargo aircraft if approved by the Associate Administrator.

A55  Prototype lithium batteries and cells that are packed with not more than 24 cells or 12 batteries per packaging that have not completed the test requirements in Sub-section 38.3 of the UN Manual of Tests and Criteria (incorporated by reference; see §171.7 of this subchapter) may be transported by cargo aircraft if approved by the Associate Administrator and provided the following requirements are met:

a. The cells and batteries must be transported in rigid outer packagings that conform to the requirements of Part 178 of this subchapter at the Packing Group I performance level; and

b. Each cell and battery must be protected against short circuiting, must be surrounded by cushioning material that is non-combustible and non-conductive, and must be individually packed in an inner packaging that is placed inside an outer specification packaging.

A56  Radioactive material with a subsidiary hazard of Division 4.2, Packing Group I, must be transported in Type B packages when offered for transportation by aircraft. Radioactive material with a subsidiary hazard of Division 2.1 is forbidden from transport on passenger aircraft.

A59  Sterilization devices, when containing less than 30 mL per inner packaging with no more than 300 mL per outer packaging may be transported in accordance with provisions in §173.4(a)(11)(i). In addition, after filling, each inner packaging must be determined to be leak-tight by placing the inner packaging in a hot water bath at a temperature and for a period of time sufficient to ensure an internal pressure equal to the vapor pressure of ethylene oxide at 55 °C is achieved. Any inner packaging showing evidence of leakage, distortion or other defect under this test may not be transported under the terms of this special provision. In addition to the packaging required in §173.4, inner packagings must be placed in a sealed plastic bag compatible with ethylene oxide and capable of containing the contents in the event of breakage or leakage of the inner packaging. Glass inner packagings must be placed within a protective shield capable of preventing the glass from puncturing the plastic bag in the event of damage to the packaging (e.g., crushing).

A60  Articles such as sterilization devices, UN2014, Hydrogen peroxide, aqueous solutions *with more than 40 percent but not more than 60 percent hydrogen peroxide (stabilized as necessary* ), when containing less than 30 mL per inner packaging with not more than 150 mL per outer packaging, may be transported in accordance with the provisions in §173.4, irrespective of §173.4(a)(11)(i), provided such packagings were first subjected to comparative fire testing. Comparative fire testing must show no difference in burning rate between a package as prepared for transport (including the substance to be transported) and an identical package filled with water.

A82  The quantity limits in columns (9A) and (9B) do not apply to human or animal body parts, whole organs or whole bodies known to contain or suspected of containing an infectious substance.

A100  Primary (non-rechargeable) lithium batteries and cells are forbidden for transport aboard passenger carrying aircraft. Secondary (rechargeable) lithium batteries and cells are authorized aboard passenger carrying aircraft in packages that do not exceed a gross weight of 5 kg.

A101  A primary lithium battery or cell packed with or contained in equipment is forbidden for transport aboard a passenger carrying aircraft unless the equipment and the battery conform to the following provisions and the package contains no more than the number of lithium batteries or cells necessary to power the intended piece of equipment:

(1) The lithium content of each cell, when fully charged, is not more than 5 grams.

(2) The aggregate lithium content of the anode of each battery, when fully charged, is not more than 25 grams.

(3) The net weight of lithium batteries does not exceed 5 kg (11 pounds).

A103 Equipment is authorized aboard passenger carrying aircraft if the gross weight of the inner package of secondary lithium batteries or cells packed with the equipment does not exceed 5 kg (11 pounds).

A104 The net weight of secondary lithium batteries or cells contained in equipment may not exceed 5 kg (11 pounds) in packages that are authorized aboard passenger carrying aircraft.

A105 The total net quantity of dangerous goods contained in one package, excluding magnetic material, must not exceed the following:

a. 1 kg (2.2 pounds) in the case of solids;

b. 0.5 L (0.1 gallons) in the case of liquids;

c. 0.5 kg (1.1 pounds) in the case of Division 2.2 gases; or

d. any combination thereof.

(3) *"B" codes.* These provisions apply only to bulk packagings. Except as otherwise provided in this subchapter, these special provisions do not apply to UN portable tanks or IBCs:

*Code/Special Provisions*

B1 If the material has a flash point at or above 38 °C (100 °F) and below 93 °C (200 °F), then the bulk packaging requirements of §173.241 of this subchapter are applicable. If the material has a flash point of less than 38 °C (100 °F), then the bulk packaging requirements of §173.242 of this subchapter are applicable.

B2 MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized.

B3 MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks and DOT 57 portable tanks are not authorized.

B4 MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized.

B5 Only ammonium nitrate solutions with 35 percent or less water that will remain completely in solution under all conditions of transport at a maximum lading temperature of 116 °C (240 °F) are authorized for transport in the following bulk packagings: MC 307, MC 312, DOT 407 and DOT 412 cargo tanks with at least 172 kPa (25 psig) design pressure. The packaging shall be designed for a working temperature of at least 121 °C (250 °F). Only Specifications MC 304, MC 307 or DOT 407 cargo tank motor vehicles are authorized for transportation by vessel.

B6 Packagings shall be made of steel.

B7 Safety relief devices are not authorized on multi-unit tank car tanks. Openings for safety relief devices on multi-unit tank car tanks shall be plugged or blank flanged.

B8 Packagings shall be made of nickel, stainless steel, or steel with nickel, stainless steel, lead or other suitable corrosion resistant metallic lining.

B9 Bottom outlets are not authorized.

B10 MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks, and DOT 57 portable tanks are not authorized.

B11 Tank car tanks must have a test pressure of at least 2,068.5 kPa (300 psig). Cargo and portable tanks must have a design pressure of at least 1,207 kPa (175 psig).

B13 A nonspecification cargo tank motor vehicle authorized in §173.247 of this subchapter must be at least equivalent in design and in construction to a DOT 406 cargo tank or MC 306 cargo tank (if constructed before August 31, 1995), except as follows:

a. Packagings equivalent to MC 306 cargo tanks are excepted from the certification, venting, and emergency flow requirements of the MC 306 specification.

b. Packagings equivalent to DOT 406 cargo tanks are excepted from §§178.345–7(d)(5), circumferential reinforcements; 178.345–10, pressure relief; 178.345–11, outlets; 178.345–14, marking, and 178.345–15, certification.

c. Packagings are excepted from the design stress limits at elevated temperatures, as described in Section VIII of the ASME Code (IBR, see §171.7 of this subchapter). However, the design stress limits may not exceed 25 percent of the stress for 0 temper at the maximum design temperature of the cargo tank, as specified in the Aluminum Association's “Aluminum Standards and Data” (IBR, see §171.7 of this subchapter).

B14 Each bulk packaging, except a tank car or a multi-unit-tank car tank, must be insulated with an insulating material so that the overall thermal conductance at 15.5 °C (60 °F) is no more than 1.5333 kilojoules per hour per square meter per degree Celsius (0.075 Btu per hour per square foot per degree Fahrenheit) temperature differential. Insulating materials must not promote corrosion to steel when wet.

B15 Packagings must be protected with non-metallic linings impervious to the lading or have a suitable corrosion allowance.

B16 The lading must be completely covered with nitrogen, inert gas or other inert materials.

B18 Open steel hoppers or bins are authorized.

B23 Tanks must be made of steel that is rubber lined or unlined. Unlined tanks must be passivated before being placed in service. If unlined tanks are washed out with water, they must be repassivated prior to return to service. Lading in unlined tanks must be inhibited so that the corrosive effect on steel is not greater than that of hydrofluoric acid of 65 percent concentration.

B25 Packagings must be made from monel or nickel or monel-lined or nickel-lined steel.

B26 Tanks must be insulated. Insulation must be at least 100 mm (3.9 inches) except that the insulation thickness may be reduced to 51 mm (2 inches) over the exterior heater coils. Interior heating coils are not authorized. The packaging may not be loaded with a material outside of the packaging's design temperature range. In addition, the material also must be covered with an inert gas or the container must be filled with water to the tank's capacity. After unloading, the residual material also must be covered with an inert gas or the container must be filled with water to the tank's capacity.

B27 Tanks must have a service pressure of 1,034 kPa (150 psig). Tank car tanks must have a test pressure rating of 1,379 kPa (200 psig). Lading must be blanketed at all times with a dry inert gas at a pressure not to exceed 103 kPa (15 psig).

B28 Packagings must be made of stainless steel.

B30 MC 312, MC 330, MC 331 and DOT 412 cargo tanks and DOT 51 portable tanks must be made of stainless steel, except that steel other than stainless steel may be used in accordance with the provisions of §173.24b(b) of this subchapter. Thickness of stainless steel for tank shell and heads for cargo tanks and portable tanks must be the greater of 7.62 mm (0.300 inch) or the thickness required for a tank with a design pressure at least equal to 1.5 times the vapor pressure of the lading at 46 °C (115 °F). In addition, MC 312 and DOT 412 cargo tank motor vehicles must:

a. Be ASME Code (U) stamped for 100% radiography of all pressure-retaining welds;

b. Have accident damage protection which conforms with §178.345–8 of this subchapter;

c. Have a MAWP or design pressure of at least 87 psig: and

d. Have a bolted manway cover.

B32 MC 312, MC 330, MC 331, DOT 412 cargo tanks and DOT 51 portable tanks must be made of stainless steel, except that steel other than stainless steel may be used in accordance with the provisions of §173.24b(b) of this subchapter. Thickness of stainless steel for tank shell and heads for cargo tanks and portable tanks must be the greater of 6.35 mm (0.250 inch) or the thickness required for a tank with a design pressure at least equal to 1.3 times the vapor pressure of the lading at 46 °C (115 °F). In addition, MC 312 and DOT 412 cargo tank motor vehicles must:

a. Be ASME Code (U) stamped for 100% radiography of all pressure-retaining welds;

b. Have accident damage protection which conforms with §178.345–8 of this subchapter;

c. Have a MAWP or design pressure of at least 87 psig; and

d. Have a bolted manway cover.

B33 MC 300, MC 301, MC 302, MC 303, MC 305, MC 306, and DOT 406 cargo tanks equipped with a 1 psig normal vent used to transport gasoline must conform to Table I of this Special Provision. Based on the volatility class determined by using ASTM D 439 and the Reid vapor pressure (RVP) of the particular gasoline, the maximum lading pressure and maximum ambient temperature permitted during the loading of gasoline may not exceed that listed in Table I.

**Table I—Maximum Ambient Temperature—Gasoline**

| ASTM D439 volatility class | Maximum lading and ambient temperature (see note 1) |
|---|---|
| A | 131 °F |
| (RVP<=9.0 psia) | |
| B | 124 °F |
| (RVP<=10.0 psia) | |
| C | 116 °F |
| (RVP<=11.5 psia) | |
| D | 107 °F |
| (RVP<=13.5 psia) | |
| E | 100 °F |
| (RVP<=15.0 psia) | |

Note 1: Based on maximum lading pressure of 1 psig at top of cargo tank.

B35 Tank cars containing hydrogen cyanide may be alternatively marked “Hydrocyanic acid, liquefied” if otherwise conforming to marking requirements in subpart D of this part. Tank cars marked “HYDROCYANIC ACID” prior to October 1, 1991 do not need to be remarked.

B37 The amount of nitric oxide charged into any tank car tank may not exceed 1,379 kPa (200 psig) at 21 °C (70 °F).

B42 Tank cars must have a test pressure of 34.47 Bar (500 psig) or greater and conform to Class 105J. Each tank car must have a reclosing pressure relief device having a start-to-discharge pressure of 10.34 Bar (150 psig). The tank car specification may be marked to indicate a test pressure of 13.79 Bar (200 psig).

B44 All parts of valves and safety relief devices in contact with lading must be of a material which will not cause formation of acetylides.

B45 Each tank must have a reclosing combination pressure relief device equipped with stainless steel or platinum rupture discs approved by the AAR Tank Car Committee.

B46 The detachable protective housing for the loading and unloading valves of multi-unit tank car tanks must withstand tank test pressure and must be approved by the Associate Administrator.

B47 Each tank may have a reclosing pressure relief device having a start-to-discharge pressure setting of 310 kPa (45 psig).

B48 Portable tanks in sodium metal service may be visually inspected at least once every 5 years instead of being retested hydrostatically. Date of the visual inspection must be stenciled on the tank near the other required markings.

B49 Tanks equipped with interior heater coils are not authorized. Single unit tank car tanks must have a reclosing pressure relief device having a start-to-discharge pressure set at no more than 1551 kPa (225 psig).

B50 Each valve outlet of a multi-unit tank car tank must be sealed by a threaded solid plug or a threaded cap with inert luting or gasket material. Valves must be of stainless steel and the caps, plugs, and valve seats must be of a material that will not deteriorate as a result of contact with the lading.

B52 Notwithstanding the provisions of §173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks.

B53 Packagings must be made of either aluminum or steel.

B54 Open-top, sift-proof rail cars are also authorized.

B55 Water-tight, sift-proof, closed-top, metal-covered hopper cars, equipped with a venting arrangement (including flame arrestors) approved by the Associate Administrator are also authorized.

B56 Water-tight, sift-proof, closed-top, metal-covered hopper cars are also authorized if the particle size of the hazardous material is not less than 149 microns.

B57 Class 115A tank car tanks used to transport chloroprene must be equipped with a non-reclosing pressure relief device of a diameter not less than 305 mm (12 inches) with a maximum rupture disc pressure of 310 kPa (45 psig).

B59 Water-tight, sift-proof, closed-top, metal-covered hopper cars are also authorized provided that the lading is covered with a nitrogen blanket.

B60 DOT Specification 106A500X multi-unit tank car tanks that are not equipped with a pressure relief device of any type are authorized. For the transportation of phosgene, the outage must be sufficient to prevent tanks from becoming liquid full at 55 °C (130 °F).

B61 Written procedures covering details of tank car appurtenances, dome fittings, safety devices, and marking, loading, handling, inspection, and testing practices must be approved by the Associate Administrator before any single unit tank car tank is offered for transportation.

B64 Each single unit tank car tank built after December 31, 1990 must be equipped with a tank head puncture resistance system that conforms to §179.16 of this subchapter.

B65 Tank cars must have a test pressure of 34.47 Bar (500 psig) or greater and conform to Class 105A. Each tank car must have a pressure relief device having a start-to-discharge pressure of 15.51 Bar (225 psig). The tank car specification may be marked to indicate a test pressure of 20.68 Bar (300 psig).

B66 Each tank must be equipped with gas tight valve protection caps. Outage must be sufficient to prevent tanks from becoming liquid full at 55 °C (130 °F). Specification 110A500W tanks must be stainless steel.

B67 All valves and fittings must be protected by a securely attached cover made of metal not subject to deterioration by the lading, and all valve openings, except safety valve, must be fitted with screw plugs or caps to prevent leakage in the event of valve failure.

B68 Sodium must be in a molten condition when loaded and allowed to solidify before shipment. Outage must be at least 5 percent at 98 °C (208 °F). Bulk packagings must have exterior heating coils fusion welded to the tank shell which have been properly stress relieved. The only tank car tanks authorized are Class DOT 105 tank cars having a test pressure of 2,069 kPa (300 psig) or greater.

B69 Dry sodium cyanide or potassium cyanide may be shipped in sift-proof weather-resistant metal covered hopper car, covered motor vehicles, portable tanks or non-specification bins. Bins must be approved by the Associate Administrator.

B70 If DOT 103ANW tank car tank is used: All cast metal in contact with the lading must have 96.7 percent nickel content; and the lading must be anhydrous and free from any impurities.

B71 Tank cars must have a test pressure of 20.68 Bar (300 psig) or greater and conform to Class 105, 112, 114 or 120.

B72 Tank cars must have a test pressure of 34.47 Bar (500 psig) or greater and conform to Class 105J, 106, or 110.

B74 Tank cars must have a test pressure of 20.68 Bar (300 psig) or greater and conform to Class 105S, 106, 110, 112J, 114J or 120S.

B76 Tank cars must have a test pressure of 20.68 Bar (300 psig) or greater and conform to Class 105S, 112J, 114J or 120S. Each tank car must have a reclosing pressure relief device having a start-to-discharge pressure of 10.34 Bar (150 psig). The tank car specification may be marked to indicate a test pressure of 13.79 Bar (200 psig).

B77 Other packaging are authorized when approved by the Associate Administrator.

B78 Tank cars must have a test pressure of 4.14 Bar (60 psig) or greater and conform to Class 103, 104, 105, 109, 111, 112, 114 or 120. Heater pipes must be of welded construction designed for a test pressure of 500 psig. A 25 mm (1 inch) woven lining of asbestos or other approved material must be placed between the bolster slabbing and the bottom of the tank. If a tank car tank is equipped with a non-reclosing pressure relief device, the rupture disc must be perforated with a 3.2 mm (0.13 inch) diameter hole. If a tank car tank is equipped with a reclosing pressure relief valve, the tank must also be equipped with a vacuum relief valve.

B80 Each cargo tank must have a minimum design pressure of 276 kPa (40 psig).

B81 Venting and pressure relief devices for tank car tanks and cargo tanks must be approved by the Associate Administrator.

B82 Cargo tanks and portable tanks are not authorized.

B83 Bottom outlets are prohibited on tank car tanks transporting sulfuric acid in concentrations over 65.25 percent.

B84 Packagings must be protected with non-metallic linings impervious to the lading or have a suitable corrosion allowance for sulfuric acid or spent sulfuric acid in concentration up to 65.25 percent.

B85 Cargo tanks must be marked with the name of the lading in accordance with the requirements of §172.302(b).

B90 Steel tanks conforming or equivalent to ASME specifications which contain solid or semisolid residual motor fuel antiknock mixture (including rust, scale, or other contaminants) may be shipped by rail freight or highway. The tank must have been designed and constructed to be capable of withstanding full vacuum. All openings must be closed with gasketed blank flanges or vapor tight threaded closures.

B115 Rail cars, highway trailers, roll-on/roll-off bins, or other non-specification bulk packagings are authorized. Packagings must be sift-proof, prevent liquid water from reaching the hazardous material, and be provided with sufficient venting to preclude dangerous accumulation of flammable, corrosive, or toxic gaseous emissions such as methane, hydrogen, and ammonia. The material must be loaded dry.

(4) *Table 1 and Table 2—IB Codes and IP Special IBC Packing Provisions.* These provisions apply only to transportation in IBCs. When no IBC code is assigned in the §172.101 Table for a specific proper shipping name, or in §173.225(e) for Type F organic peroxides, an IBC may not be used unless authorized by the Associate Administrator. The letter “Z” shown in the marking code for composite IBCs must be replaced with a capital code letter designation found in §178.702(a)(2) of this subchapter to specify the material used for the outer packaging. Tables 1 and 2 follow:

**Table 1—IB Codes (IBC Codes)**

| IBC Code | Authorized IBCs |
|---|---|
| IB1 | *Authorized IBCs:* Metal (31A, 31B and 31N). |
| | *Additional Requirement:* Only liquids with a vapor pressure less than or equal to 110 kPa at 50 °C (1.1 bar at 122 °F), or 130 kPa at 55 °C (1.3 bar at 131 °F) are authorized. |
| IB2 | *Authorized IBCs:* Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). |
| | *Additional Requirement:* Only liquids with a vapor pressure less than or equal to 110 kPa at 50 °C (1.1 bar at 122 °F), or 130 kPa at 55 °C (1.3 bar at 131 °F) are authorized. |
| IB3 | *Authorized IBCs:* Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). |
| | *Additional Requirement:* Only liquids with a vapor pressure less than or equal to 110 kPa at 50 °C (1.1 bar at 122 °F), or 130 kPa at 55 °C (1.3 bar at 131 °F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). |
| IB4 | *Authorized IBCs:* Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N). |
| IB5 | *Authorized IBCs:* Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 21HZ1 and 31HZ1). |
| IB6 | *Authorized IBCs:* Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2). |

| | |
|---|---|
| | *Additional Requirement:* Composite IBCs 11HZ2 and 21HZ2 may not be used when the hazardous materials being transported may become liquid during transport. |
| IB7 | *Authorized IBCs:* Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Wooden (11C, 11D and 11F). |
| | *Additional Requirement:* Liners of wooden IBCs must be sift- proof. |
| IB8 | *Authorized IBCs:* Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2). |
| IB9 | IBCs are only authorized if approved by the Associate Administrator. |

**Table 2—IP Codes**

| IBC Code | Authorized IBCs |
|---|---|
| IP1 | IBCs must be packed in closed freight containers or a closed transport vehicle. |
| IP2 | When IBCs other than metal or rigid plastics IBCs are used, they must be offered for transportation in a closed freight container or a closed transport vehicle. |
| IP3 | Flexible IBCs must be sift-proof and water-resistant or must be fitted with a sift-proof and water-resistant liner. |
| IP4 | Flexible, fiberboard or wooden IBCs must be sift-proof and water-resistant or be fitted with a sift-proof and water-resistant liner. |
| IP5 | IBCs must have a device to allow venting. The inlet to the venting device must be located in the vapor space of the IBC under maximum filling conditions. |
| IP6 | Non-specification bulk bins are authorized. |
| IP7 | For UN identification numbers 1327, 1363, 1364, 1365, 1386, 1841, 2211, 2217, 2793 and 3314, IBCs are not required to meet the IBC performance tests specified in part 178, subpart N of this subchapter. |
| IP8 | Ammonia solutions may be transported in rigid or composite plastic IBCs (31H1, 31H2 and 31HZ1) that have successfully passed, without leakage or permanent deformation, the hydrostatic test specified in §178.814 of this subchapter at a test pressure that is not less than 1.5 times the vapor pressure of the contents at 55 °C (131 °F). |
| IP13 | Transportation by vessel in IBCs is prohibited. |
| IP14 | Air shall be eliminated from the vapor space by nitrogen or other means. |
| IP20 | Dry sodium cyanide or potassium cyanide is also permitted in siftproof, water-resistant, fiberboard IBCs when transported in closed freight containers or transport vehicles. |

(5) *"N" codes.* These provisions apply only to non-bulk packagings:

*Code/Special Provisions*

N3 Glass inner packagings are permitted in combination or composite packagings only if the hazardous material is free from hydrofluoric acid.

N4 For combination or composite packagings, glass inner packagings, other than ampoules, are not permitted.

N5 Glass materials of construction are not authorized for any part of a packaging which is normally in contact with the hazardous material.

N6 Battery fluid packaged with electric storage batteries, wet or dry, must conform to the packaging provisions of §173.159 (g) or (h) of this subchapter.

N7  The hazard class or division number of the material must be marked on the package in accordance with §172.302 of this subchapter. However, the hazard label corresponding to the hazard class or division may be substituted for the marking.

N8  Nitroglycerin solution in alcohol may be transported under this entry only when the solution is packed in metal cans of not more than 1 L capacity each, overpacked in a wooden box containing not more than 5 L. Metal cans must be completely surrounded with absorbent cushioning material. Wooden boxes must be completely lined with a suitable material impervious to water and nitroglycerin.

N11  This material is excepted for the specification packaging requirements of this subchapter if the material is packaged in strong, tight non-bulk packaging meeting the requirements of subparts A and B of part 173 of this subchapter.

N12  Plastic packagings are not authorized.

N20  A 5M1 multi-wall paper bag is authorized if transported in a closed transport vehicle.

N25  Steel single packagings are not authorized.

N32  Aluminum materials of construction are not authorized for single packagings.

N33  Aluminum drums are not authorized.

N34  Aluminum construction materials are not authorized for any part of a packaging which is normally in contact with the hazardous material.

N36  Aluminum or aluminum alloy construction materials are permitted only for halogenated hydrocarbons that will not react with aluminum.

N37  This material may be shipped in an integrally-lined fiber drum (1G) which meets the general packaging requirements of subpart B of part 173 of this subchapter, the requirements of part 178 of this subchapter at the packing group assigned for the material and to any other special provisions of column 7 of the §172.101 table.

N40  This material is not authorized in the following packagings:

a. A combination packaging consisting of a 4G fiberboard box with inner receptacles of glass or earthenware;

b. A single packaging of a 4C2 sift-proof, natural wood box; or

c. A composite packaging 6PG2 (glass, porcelain or stoneware receptacles within a fiberboard box).

N41  Metal construction materials are not authorized for any part of a packaging which is normally in contact with the hazardous material.

N42  1A1 drums made of carbon steel with thickness of body and heads of not less than 1.3 mm (0.050 inch) and with a corrosion-resistant phenolic lining are authorized for stabilized benzyl chloride if tested and certified to the Packing Group I performance level at a specific gravity of not less than 1.8.

N43  Metal drums are permitted as single packagings only if constructed of nickel or monel.

N45  Copper cartridges are authorized as inner packagings if the hazardous material is not in dispersion.

N65  Outage must be sufficient to prevent cylinders or spheres from becoming liquid full at 55 °C (130 °F). The vacant space (outage) may be charged with a nonflammable nonliquefied compressed gas if the pressure in the cylinder or sphere at 55 °C (130 °F) does not exceed 125 percent of the marked service pressure.

N72  Packagings must be examined by the Bureau of Explosives and approved by the Associate Administrator.

N73  Packagings consisting of outer wooden or fiberboard boxes with inner glass, metal or other strong containers; metal or fiber drums; kegs or barrels; or strong metal cans are authorized and need not conform to the requirements of part 178 of this subchapter.

N74 Packages consisting of tightly closed inner containers of glass, earthenware, metal or polyethylene, capacity not over 0.5 kg (1.1 pounds) securely cushioned and packed in outer wooden barrels or wooden or fiberboard boxes, not over 15 kg (33 pounds) net weight, are authorized and need not conform to the requirements of part 178 of this subchapter.

N75 Packages consisting of tightly closed inner packagings of glass, earthenware or metal, securely cushioned and packed in outer wooden barrels or wooden or fiberboard boxes, capacity not over 2.5 kg (5.5 pounds) net weight, are authorized and need not conform to the requirements of part 178 of this subchapter.

N76 For materials of not more than 25 percent active ingredient by weight, packages consisting of inner metal packagings not greater than 250 mL (8 ounces) capacity each, packed in strong outer packagings together with sufficient absorbent material to completely absorb the liquid contents are authorized and need not conform to the requirements of part 178 of this subchapter.

N77 For materials of not more than two percent active ingredients by weight, packagings need not conform to the requirements of part 178 of this subchapter, if liquid contents are absorbed in an inert material.

N78 Packages consisting of inner glass, earthenware, or polyethylene or other nonfragile plastic bottles or jars not over 0.5 kg (1.1 pounds) capacity each, or metal cans not over five pounds capacity each, packed in outer wooden boxes, barrels or kegs, or fiberboard boxes are authorized and need not conform to the requirements of part 178 of this subchapter. Net weight of contents in fiberboard boxes may not exceed 29 kg (64 pounds). Net weight of contents in wooden boxes, barrels or kegs may not exceed 45 kg (99 pounds).

N79 Packages consisting of tightly closed metal inner packagings not over 0.5 kg (1.1 pounds) capacity each, packed in outer wooden or fiberboard boxes, or wooden barrels, are authorized and need not conform to the requirements of part 178 of this subchapter. Net weight of contents may not exceed 15 kg (33 pounds).

N80 Packages consisting of one inner metal can, not over 2.5 kg (5.5 pounds) capacity, packed in an outer wooden or fiberboard box, or a wooden barrel, are authorized and need not conform to the requirements of part 178 of this subchapter.

N82 See §173.306 of this subchapter for classification criteria for flammable aerosols.

N83 This material may not be transported in quantities of more than 11.5 kg (25.4 lbs) per package.

N84 The maximum quantity per package is 500 g (1.1 lbs.).

N85 Packagings certified at the Packing Group I performance level may not be used.

N86 UN pressure receptacles made of aluminum alloy are not authorized.

N87 The use of copper valves on UN pressure receptacles is prohibited.

N88 Any metal part of a UN pressure receptacle in contact with the contents may not contain more than 65% copper, with a tolerance of 1%.

N89 When steel UN pressure receptacles are used, only those bearing the “H” mark are authorized.

(6) *“R” codes.* These provisions apply only to transportation by rail. [Reserved]

(7) *“T” codes.* (i) These provisions apply to the transportation of hazardous materials in UN portable tanks. Portable tank instructions specify the requirements applicable to a portable tank when used for the transportation of a specific hazardous material. These requirements must be met in addition to the design and construction specifications in part 178 of this subchapter. Portable tank instructions T1 through T22 specify the applicable minimum test pressure, the minimum shell thickness (in reference steel), bottom opening requirements and pressure relief requirements. Liquefied compressed gases are assigned to portable tank instruction T50. Refrigerated liquefied gases that are authorized to be transported in portable tanks are specified in tank instruction T75.

(ii) The following table specifies the portable tank requirements applicable to “T” Codes T1 through T22. Column 1 specifies the “T” Code. Column 2 specifies the minimum test pressure, in bar (1 bar = 14.5 psig), at which the periodic hydrostatic testing required by §180.605 of this subchapter must be conducted. Column 3 specifies the section reference for minimum shell thickness or, alternatively, the minimum shell thickness value. Column 4 specifies the applicability of §178.275(g)(3) of this subchapter for the pressure relief devices. When the word “Normal” is indicated, §178.275(g)(3) of this subchapter does not apply. Column 5 references the applicable requirements for bottom openings in part 178 of this subchapter or references “Prohibited” which means bottom openings are prohibited. The table follows:

## Table of Portable Tank T Codes T1–T22

[Portable tank codes T1–T22 apply to liquid and solid hazardous materials of Classes 3 through 9 which are transported in portable tanks.]

| Portable tank instruction (1) | Minimum test pressure (bar) (2) | Minimum shell thickness (in mm-reference steel) ( *See* §178.274(d)) (3) | Pressure-relief requirements ( *See* §178.275(g)) (4) | Bottom opening requirements ( *See* §178.275(d)) (5) |
|---|---|---|---|---|
| T1 | 1.5 | §178.274(d)(2) | Normal | §178.275(d)(2) |
| T2 | 1.5 | §178.274(d)(2) | Normal | §178.275(d)(3) |
| T3 | 2.65 | §178.274(d)(2) | Normal | §178.275(d)(2) |
| T4 | 2.65 | §178.274(d)(2) | Normal | §178.275(d)(3) |
| T5 | 2.65 | §178.274(d)(2) | §178.275(g)(3) | Prohibited |
| T6 | 4 | §178.274(d)(2) | Normal | §178.275(d)(2) |
| T7 | 4 | §178.274(d)(2) | Normal | §178.275(d)(3) |
| T8 | 4 | §178.274(d)(2) | Normal | Prohibited |
| T9 | 4 | 6 mm | Normal | Prohibited |
| T10 | 4 | 6 mm | §178.275(g)(3) | Prohibited |
| T11 | 6 | §178.274(d)(2) | Normal | §178.275(d)(3) |
| T12 | 6 | §178.274(d)(2) | §178.275(g)(3) | §178.275(d)(3) |
| T13 | 6 | 6 mm | Normal | Prohibited |
| T14 | 6 | 6 mm | §178.275(g)(3) | Prohibited |
| T15 | 10 | §178.274(d)(2) | Normal | §178.275(d)(3) |
| T16 | 10 | §178.274(d)(2) | §178.275(g)(3) | §178.275(d)(3) |
| T17 | 10 | 6 mm | Normal | §178.275(d)(3) |
| T18 | 10 | 6 mm | §178.275(g)(3) | §178.275(d)(3) |
| T19 | 10 | 6 mm | §178.275(g)(3) | Prohibited |
| T20 | 10 | 8 mm | §178.275(g)(3) | Prohibited |
| T21 | 10 | 10 mm | Normal | Prohibited |
| T22 | 10 | 10 mm | §178.275(g)(3) | Prohibited |

(iii) *T50.* When portable tank instruction T50 is referenced in Column (7) of the §172.101 Table, the applicable liquefied compressed gases are authorized to be transported in portable tanks in accordance with the requirements of §173.313 of this subchapter.

(iv) *T75.* When portable tank instruction T75 is referenced in Column (7) of the §172.101 Table, the applicable refrigerated liquefied gases are authorized to be transported in portable tanks in accordance with the requirements of §178.277 of this subchapter.

(v) *UN and IM portable tank codes/special provisions.* When a specific portable tank instruction is specified by a "T" Code in Column (7) of the §172.101 Table for a specific hazardous material, a specification portable tank conforming to an alternative tank instruction may be used if:

(A) The alternative portable tank has a higher or equivalent test pressure (for example, 4 bar when 2.65 bar is specified);

(B) The alternative portable tank has greater or equivalent wall thickness (for example, 10 mm when 6 mm is specified);

(C) The alternative portable tank has a pressure relief device as specified in the "T" Code. If a frangible disc is required in series with the reclosing pressure relief device for the specified portable tank, the alternative portable tank must be fitted with a frangible disc in series with the reclosing pressure relief device; and

(D) With regard to bottom openings—

( *1* ) When two effective means are specified, the alternative portable tank is fitted with bottom openings having two or three effective means of closure or no bottom openings; or

( *2* ) When three effective means are specified, the portable tank has no bottom openings or three effective means of closure; or

( *3* ) When no bottom openings are authorized, the alternative portable tank must not have bottom openings.

(vi) Except when an organic peroxide is authorized under §173.225(g), if a hazardous material is not assigned a portable tank "T" Code, the hazardous material may not be transported in a portable tank unless approved by the Associate Administrator.

(8) *"TP" codes.* (i) These provisions apply to the transportation of hazardous materials in IM and UN Specification portable tanks. Portable tank special provisions are assigned to certain hazardous materials to specify requirements that are in addition to those provided by the portable tank instructions or the requirements in part 178 of this subchapter. Portable tank special provisions are designated with the abbreviation TP (tank provision) and are assigned to specific hazardous materials in Column (7) of the §172.101 Table.

(ii) The following is a list of the portable tank special provisions:

*Code/Special Provisions*

TP1 The maximum degree of filling must not exceed the degree of filling determined by the following:

$$\left(\text{Degree of filling} = \frac{97}{1+\alpha\left(t_r - t_f\right)}\right).$$

Where:

$t_r$ is the maximum mean bulk temperature during transport, and $t_f$ is the temperature in degrees celsius of the liquid during filling.

TP2 a. The maximum degree of filling must not exceed the degree of filling determined by the following:

$$\left(\text{Degree of filling} = \frac{95}{1+\alpha\left(t_r - t_f\right)}\right).$$

Where:

$t_r$is the maximum mean bulk temperature during transport,

$t_f$is the temperature in degrees celsius of the liquid during filling, and

α is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling ($t_f$) and the maximum mean bulk temperature during transportation ($t_r$) both in degrees celsius.

b. For liquids transported under ambient conditions α may be calculated using the formula:

$$\alpha = \frac{d_{15} - d_{50}}{35\, d_{50}}$$

Where:

$d_{15}$and $d_{50}$are the densities (in units of mass per unit volume) of the liquid at 15 °C (59 °F) and 50 °C (122 °F), respectively.

TP3  The maximum degree of filling (in %) for solids transported above their melting points and for elevated temperature liquids shall be determined by the following:

$$\left(\textit{Degree of filling} = 95\frac{d_r}{d_f}\right).$$

Where: $d_f$and $d_r$are the mean densities of the liquid at the mean temperature of the liquid during filling and the maximum mean bulk temperature during transport respectively.

TP4  The maximum degree of filling for portable tanks must not exceed 90%.

TP5  For a portable tank used for the transport of flammable refrigerated liquefied gases or refrigerated liquefied oxygen, the maximum rate at which the portable tank may be filled must not exceed the liquid flow capacity of the primary pressure relief system rated at a pressure not exceeding 120 percent of the portable tank's design pressure. For portable tanks used for the transport of refrigerated liquefied helium and refrigerated liquefied atmospheric gas (except oxygen), the maximum rate at which the tank is filled must not exceed the liquid flow capacity of the pressure relief device rated at 130 percent of the portable tank's design pressure. Except for a portable tank containing refrigerated liquefied helium, a portable tank shall have an outage of at least two percent below the inlet of the pressure relief device or pressure control valve, under conditions of incipient opening, with the portable tank in a level attitude. No outage is required for helium.

TP6  The tank must be equipped with a pressure release device which prevent a tank from bursting under fire engulfment conditions (the conditions prescribed in CGA pamphlet S–1.2 (see §171.7 of this subchapter) or alternative conditions approved by the Associate Administrator may be used to consider the fire engulfment condition), taking into account the properties of the hazardous material to be transported.

TP7  The vapor space must be purged of air by nitrogen or other means.

TP8  A portable tank having a minimum test pressure of 1.5 bar (150 kPa) may be used when the flash point of the hazardous material transported is greater than 0 °C (32 °F).

TP9  A hazardous material assigned to special provision TP9 in Column (7) of the §172.101 Table may only be transported in a portable tank if approved by the Associate Administrator.

TP10  The portable tank must be fitted with a lead lining at least 5 mm (0.2 inches) thick. The lead lining must be tested annually to ensure that it is intact and functional. Another suitable lining material may be used if approved by the Associate Administrator.

TP12  This material is considered highly corrosive to steel.

TP13 Self-contained breathing apparatus must be provided when this hazardous material is transported by sea.

TP16 The portable tank must be protected against over and under pressurization which may be experienced during transportation. The means of protection must be approved by the approval agency designated to approve the portable tank in accordance with the procedures in part 107, subpart E, of this subchapter. The pressure relief device must be preceded by a frangible disk in accordance with the requirements in §178.275(g)(3) of this subchapter to prevent crystallization of the product in the pressure relief device.

TP17 Only inorganic non-combustible materials may be used for thermal insulation of the tank.

TP18 The temperature of this material must be maintained between 18 °C (64.4 °F) and 40 °C (104 °F) while in transportation. Portable tanks containing solidified methacrylic acid must not be reheated during transportation.

TP19 The calculated wall thickness must be increased by 3 mm at the time of construction. Wall thickness must be verified ultrasonically at intervals midway between periodic hydraulic tests (every 2.5 years). The portable tank must not be used if the wall thickness is less than that prescribed by the applicable T code in Column (7) of the Table for this material.

TP20 This hazardous material must only be transported in insulated tanks under a nitrogen blanket.

TP21 The wall thickness must not be less than 8 mm. Portable tanks must be hydraulically tested and internally inspected at intervals not exceeding 2.5 years.

TP22 Lubricants for portable tank fittings (for example, gaskets, shut-off valves, flanges) must be oxygen compatible.

TP24 The portable tank may be fitted with a device to prevent the build up of excess pressure due to the slow decomposition of the hazardous material being transported. The device must be in the vapor space when the tank is filled under maximum filling conditions. This device must also prevent an unacceptable amount of leakage of liquid in the case of overturning.

TP25 Sulphur trioxide 99.95% pure and above may be transported in tanks without an inhibitor provided that it is maintained at a temperature equal to or above 32.5 °C (90.5 °F).

TP26 The heating device must be exterior to the shell. For UN 3176, this requirement only applies when the hazardous material reacts dangerously with water.

TP27 A portable tank having a minimum test pressure of 4 bar (400 kPa) may be used provided the calculated test pressure is 4 bar or less based on the MAWP of the hazardous material, as defined in §178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

TP28 A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in §178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

TP29 A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in §178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

TP30 This hazardous material may only be transported in insulated tanks.

TP31 This hazardous material may only be transported in tanks in the solid state.

TP32 Portable tanks may be used subject to the following conditions:

a. Each portable tank constructed of metal must be fitted with a pressure-relief device consisting of a reclosing spring loaded type, a frangible disc or a fusible element. The set to discharge for the spring loaded pressure relief device and the burst pressure for the frangible disc, as applicable, must not be greater than 2.65 bar for portable tanks with minimum test pressures greater than 4 bar;

b. The suitability for transport in tanks must be demonstrated using test 8(d) in Test Series 8 (see UN Manual of Tests and Criteria, Part 1, Sub-section 18.7) (IBR, see §171.7 of this subchapter) or an alternative means approved by the Associate Administrator.

TP33 The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank

instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter.

TP37 IM portable tanks are only authorized for the shipment of hydrogen peroxide solutions in water containing 72% or less hydrogen peroxide by weight. Pressure relief devices shall be designed to prevent the entry of foreign matter, the leakage of liquid and the development of any dangerous excess pressure. In addition, the portable tank must be designed so that internal surfaces may be effectively cleaned and passivated. Each tank must be equipped with pressure relief devices conforming to the following requirements:

| Concentration of hydrogen per peroxide solution | Total[1] |
|---|---|
| 52% or less | 11 |
| Over 52%, but not greater than 60% | 22 |
| Over 60%, but not greater than 72% | 32 |

[1]Total venting capacity in standard cubic feet hour (S.C.F.H.) per pound of hydrogen peroxide solution.

TP38 Each portable tank must be insulated with an insulating material so that the overall thermal conductance at 15.5 °C (60 °F) is no more than 1.5333 kilojoules per hour per square meter per degree Celsius (0.075 Btu per hour per square foot per degree Fahrenheit) temperature differential. Insulating materials may not promote corrosion to steel when wet.

TP44 Each portable tank must be made of stainless steel, except that steel other than stainless steel may be used in accordance with the provisions of §173.24b(b) of this subchapter. Thickness of stainless steel for tank shell and heads must be the greater of 7.62 mm (0.300 inch) or the thickness required for a portable tank with a design pressure at least equal to 1.5 times the vapor pressure of the hazardous material at 46 °C (115 °F).

TP45 Each portable tank must be made of stainless steel, except that steel other than stainless steel may be used in accordance with the provisions of 173.24b(b) of this subchapter. Thickness of stainless steel for portable tank shells and heads must be the greater of 6.35 mm (0.250 inch) or the thickness required for a portable tank with a design pressure at least equal to 1.3 times the vapor pressure of the hazardous material at 46 °C (115 °F).

TP46 Portable tanks in sodium metal service are not required to be hydrostatically retested.

(9) *“W” codes.* These provisions apply only to transportation by water:

*Code/Special Provisions*

W7 Vessel stowage category for uranyl nitrate hexahydrate solution is “D” as defined in §172.101(k)(4).

W8 Vessel stowage category for pyrophoric thorium metal or pyrophoric uranium metal is “D” as defined in §172.101(k)(4).

W9 When offered for transportation by water, the following Specification packagings are not authorized unless approved by the Associate Administrator: woven plastic bags, plastic film bags, textile bags, paper bags, IBCs and bulk packagings.

W41 When offered for transportation by water, this material must be packaged in bales and be securely and tightly bound with rope, wire or similar means.

[Amdt. 172–123, 55 FR 52582, Dec. 21, 1990]

**Editorial Note:** ForFederal Registercitations affecting §172.102, see the List of CFR Sections Affected which appears in the Finding Aids section of the printed volume and on GPO Access.