

**§ 173.313 UN Portable Tank Table for Liquefied Compressed Gases.**

The UN Portable Tank Table for Liquefied Compressed Gases is referenced in §172.102(c)(7)(iii) of this subchapter for portable tanks that are used to transport liquefied compressed gases. The table applies to each liquefied compressed gas that is identified with Special Provision T50 in Column (7) of the §172.101 Table. In addition to providing the UN identification number and proper shipping name, the table provides maximum allowable working pressures, bottom opening requirements, pressure relief device requirements, and degree of filling requirements for liquefied compressed gas permitted for transportation in a T50 portable tank. In the minimum test pressure column, “small” means a portable tank with a diameter of 1.5 meters or less when measured at the widest part of the shell, “sunshield” means a portable tank with a shield covering at least the upper third of the shell, “bare” means no sunshield or insulation is provided, and “insulated” means a complete cladding of sufficient thickness of insulating material necessary to provide a minimum conductance of not more than 0.67 w/m<sup>2</sup> /k. In the pressure relief requirements column, the word “Normal” denotes that a frangible disc as specified in §178.276(e)(3) of this subchapter is not required.

UN Portable Tank Table for Liquefied Compressed Gases

UN No.	Non-refrigerated liquefied compressed gases	Minimum design pressure (bar) small; bare; sunshield; insulated	Openings below liquid level	Pressure relief requirements ( See §178.276(e))	Maximum filling density (kg/l)
1005	Ammonia, anhydrous	29.0	Allowed	§178.276(e)(3)	0.53
		25.7			
		22.0			
		19.7			
1009	Bromotrifluoromethane or Refrigerant gas R 13B1	38.0	Allowed	Normal	1.13
		34.0			
		30.0			
		27.5			
1010	Butadienes, stabilized	7.5	Allowed	Normal	0.55
		7.0			
		7.0			
		7.0			
1011	Butane	7.0	Allowed	Normal	0.51
		7.0			
		7.0			
		7.0			
1012	Butylene	8.0	Allowed	Normal	0.53
		7.0			
		7.0			
		7.0			

1017	Chlorine	19.0	Not	§178.276(e)(3)	1.25
		17.0	Allowed		
		15.0			
		13.5			
1018	Chlorodifluoromethane or Refrigerant gas R 22	26.0	Allowed	Normal	1.03
		24.0			
		21.0			
		19.0			
1020	Chloropentafluoroethane or Refrigerant gas R 115	23.0	Allowed	Normal	1.06
		20.0			
		18.0			
		16.0			
1021	1-Chloro-1,2,2,2-tetrafluoroethane or Refrigerant gas R 124	10.3	Allowed	Normal	1.2
		9.8			
		7.9			
		7.0			
1027	Cyclopropane	18.0	Allowed	Normal	0.53
		16.0			
		14.5			
		13.0			
1028	Dichlorodifluoromethane or Refrigerant gas R 12	16.0	Allowed	Normal	1.15
		15.0			
		13.0			
		11.5			
1029	Dichlorofluoromethane or Refrigerant gas R 21	7.0	Allowed	Normal	1.23
		7.0			
		7.0			
		7.0			
1030	1,1-Difluoroethane or Refrigerant gas R 152a	16.0	Allowed	Normal	0.79
		14.0			
		12.4			
		11.0			
1032	Dimethylamine, anhydrous	7.0	Allowed	Normal	0.59
		7.0			

		7.0			
		7.0			
1033	Dimethyl ether	15.5	Allowed	Normal	0.58
		13.8			
		12.0			
		10.6			
1036	Ethylamine	7.0	Allowed	Normal	0.61
		7.0			
		7.0			
		7.0			
1037	Ethyl chloride	7.0	Allowed	Normal	0.8
		7.0			
		7.0			
		7.0			
1040	Ethylene oxide with nitrogen up to a total pressure of 1MPa (10 bar) at 50 °C	Only authorized in 10 bar insulated portable tanks —	Not Allowed	§178.276(e)(3)	0.78
1041	Ethylene oxide and carbon dioxide mixture with more than 9% but not more than 87% ethylene oxide	See MAWP definition in §178.276(a)	Allowed	Normal	See §173.32(f)
1055	Isobutylene	8.1	Allowed	Normal	0.52
		7.0			
		7.0			
		7.0			
1060	Methyl acetylene and propadiene mixture, stabilized	28.0	Allowed	Normal	0.43
		24.5			
		22.0			
		20.0			
1061	Methylamine, anhydrous	10.8	Allowed	Normal	0.58
		9.6			
		7.8			
		7.0			
1062	Methyl bromide	7.0	Not Allowed	§178.276(e)(3)	1.51
		7.0			
		7.0			
		7.0			
1063	Methyl chloride <i>or</i> Refrigerant gas R 40	14.5	Allowed	Normal	0.81

		12.7			
		11.3			
		10.0			
1064	Methyl mercaptan	7.0	Not Allowed	§178.276(e)(3)	0.78
		7.0			
		7.0			
		7.0			
1067	Dinitrogen tetroxide	7.0	Not Allowed	§178.276(e)(3)	1.3
		7.0			
		7.0			
		7.0			
1075	Petroleum gas, liquefied	See MAWP definition in §178.276(a)	Allowed	Normal	See §173.32(f)
1077	Propylene	28.0	Allowed	Normal	0.43
		24.5			
		22.0			
		20.0			
1078	Refrigerant gas, n.o.s.	See MAWP definition in §178.276(a)	Allowed	Normal	See §173.32(f)
1079	Sulphur dioxide	11.6	Not Allowed	§178.276(e)(3)	1.23
		10.3			
		8.5			
		7.6			
1082	Trifluorochloroethylene, stabilized <i>or</i> Refrigerant gas R 1113	17.0	Not Allowed	§178.276(e)(3)	1.13
		15.0			
		13.1			
		11.6			
1083	Trimethylamine, anhydrous	7.0	Allowed	Normal	0.56
		7.0			
		7.0			
		7.0			
1085	Vinyl bromide, stabilized	7.0	Allowed	Normal	1.37
		7.0			
		7.0			
		7.0			
1086	Vinyl chloride, stabilized	10.6	Allowed	Normal	0.81
		9.3			

		8.0			
		7.0			
1087	Vinyl methyl ether, stabilized	7.0	Allowed	Normal	0.67
		7.0			
		7.0			
		7.0			
1581	Chloropicrin and methyl bromide mixture	7.0	Not Allowed	§178.276(e)(3)	1.51
		7.0			
		7.0			
		7.0			
1582	Chloropicrin and methyl chloride mixture	19.2	Not Allowed	§178.276(e)(3)	0.81
		16.9			
		15.1			
		13.1			
1858	Hexafluoropropylene compressed <i>or</i> Refrigerant gas R 1216	19.2	Allowed	Normal	1.11
		16.9			
		15.1			
		13.1			
1912	Methyl chloride and methylene chloride mixture	15.2	Allowed	Normal	0.081
		13.0			
		11.6			
		10.1			
NA, 1954	Insecticide gases, <i>flammable</i> , n.o.s.	See MAWP definition in §178.276(a)	Allowed	Normal	§173.32(f)
1958	1,2-Dichloro-1,1,2,2-tetrafluoroethane <i>or</i> Refrigerant gas R 114	7.0	Allowed	Normal	1.3
		7.0			
		7.0			
		7.0			
1965	Hydrocarbon gas, mixture liquefied, n.o.s.	See MAWP definition in 178.276(a)	Allowed	Normal	See §173.32(f)
1969	Isobutane	8.5	Allowed	Normal	0.49
		7.5			
		7.0			
		7.0			

1973	Chlorodifluoromethane and chloropentafluoroethane mixture with fixed boiling point, with approximately 49% chlorodifluoromethane or Refrigerant gas R 502	28.3	Allowed	Normal	1.05
		25.3			
		22.8			
		20.3			
1974	Chlorodifluorobromomethane <i>or</i> Refrigerant gas R 12B1	7.4	Allowed	Normal	1.61
		7.0			
		7.0			
		7.0			
1976	Octafluorocyclobutane <i>or</i> Refrigerant gas RC 318	8.8	Allowed	Normal	1.34
		7.8			
		7.0			
		7.0			
1978	Propane	22.5	Allowed	Normal	0.42
		20.4			
		18.0			
		16.5			
1983	1-Chloro-2,2,2-trifluoroethane or Refrigerant gas R 133a	7.0	Allowed	Normal	1.18
		7.0			
		7.0			
		7.0			
2035	1,1,1-Trifluoroethane compressed or Refrigerant gas R 143a	31.0	Allowed	Normal	0.76
		27.5			
		24.2			
		21.8			
2424	Octafluoropropane or Refrigerant gas R 218	23.1	Allowed	Normal	1.07
		20.8			
		18.6			
		16.6			
2517	1-Chloro-1,1-difluoroethane or Refrigerant gas R 142b	8.9	Allowed	Normal	0.99
		7.8			
		7.0			

		7.0			
2602	Dichlorodifluoromethane and difluoroethane azeotropic mixture with approximately 74% dichlorodifluoromethane or Refrigerant gas R 500	20.0	Allowed	Normal	1.01
		18.0			
		16.0			
		14.5			
3057	Trifluoroacetyl chloride	14.6	Not allowed	§178.276(e)(3)	1.17
		12.9			
		11.3			
		9.9			
3070	Ethylene oxide and dichlorodifluoromethane mixture with not more than 12.5% ethylene oxide	14.0	Allowed	§178.276(e)(3)	1.09
		12.0			
		11.0			
		9.0			
3153	Perfluoro (methyl vinyl ether)	14.3	Allowed	Normal	1.14
		13.4			
		11.2			
		10.2			
3159	1,1,1,2-Tetrafluoroethane or Refrigerant gas R 134a	17.7	Allowed	Normal	1.04
		15.7			
		13.8			
		12.1			
3161	Liquefied gas, flammable, n.o.s.	See MAWP definition in §178.276(a)	Allowed	Normal	§173.32(f)
3163	Liquefied gas, n.o.s.	See MAWP definition in §178.276(a)	Allowed	Normal	§173.32(f)
3220	Pentafluoroethane or Refrigerant gas R 125	34.4	Allowed	Normal	0.95
		30.8			
		27.5			
		24.5			
3252	Difluoromethane or Refrigerant gas R 32	43.0	Allowed	Normal	0.78
		39.0			
		34.4			

		30.5			
3296	Heptafluoropropane or Refrigerant gas R 227	16.0	Allowed	Normal	1.2
		14.0			
		12.5			
		11.0			
3297	Ethylene oxide and chlorotetrafluoroethane mixture, with not more than 8.8% ethylene oxide	8.1	Allowed	Normal	1.16
		7.0			
		7.0			
		7.0			
3298	Ethylene oxide and pentafluoroethane mixture, with not more than 7.9% ethylene oxide	25.9	Allowed	Normal	1.02
		23.4			
		20.9			
		18.6			
3299	Ethylene oxide and tetrafluoroethane mixture, with not more than 5.6% ethylene oxide	16.7	Allowed	Normal	1.03
		14.7			
		12.9			
		11.2			
3318	Ammonia solution, relative density less than 0.880 at 15 °C in water, with more than 50% ammonia	See MAWP definition in §178.276(a)	Allowed	§178.276(e)(3)	§173.32(f)
3337	Refrigerant gas R 404A	31.6	Allowed	Normal	0.84
		28.3			
		25.3			
		22.5			
3338	Refrigerant gas R 407A	31.3	Allowed	Normal	0.95
		28.1			
		25.1			
		22.4			
3339	Refrigerant gas R 407B	33.0	Allowed	Normal	0.95
		29.6			
		26.5			
		23.6			
3340	Refrigerant gas R 407C	29.9	Allowed	Normal	0.95
		26.8			


23.9
21.3

[69 FR 76174, Dec. 20, 2004, as amended at 70 FR 34399, June 14, 2005]