

§ 176.410 Division 1.5 materials, ammonium nitrate and ammonium nitrate mixtures.

(a) This section prescribes requirements to be observed with respect to transportation of each of the following hazardous materials by vessel:

- (1) Explosives, blasting, type E, and Explosives, blasting, type B, Division 1.5 compatibility group D, UN 0331 and UN 0332.
- (2) Ammonium nitrate, Division 5.1 (oxidizer), UN1942.
- (3) Ammonium nitrate fertilizer, Division 5.1 (oxidizer), UN 2067.

(b) This section does not apply to Ammonium nitrate fertilizer, Class 9, UN 2071 or to any non-acidic ammonium nitrate mixed fertilizer containing 13 percent or less ammonium nitrate, less than 5 percent organic material, and no other oxidizing material, and which does not meet the criteria for any other hazard set forth in part 173 of this subchapter.

(c) When Division 1.5 compatibility group D materials, ammonium nitrate, or any of the ammonium nitrate fertilizers listed in paragraph (a) of this section are transported by vessel:

- (1) They must be stowed well away from any steam pipe, electric circuit, or other source of heat;
- (2) Smoking is prohibited except in designated areas away from the material and "No-Smoking" signs must be posted in accordance with §176.60;
- (3) Fire hoses must be connected, laid out, and tested before loading or unloading commences; and
- (4) A fire watch must be posted in the hold or compartment where the material is being loaded or unloaded.

(d) When any of the hazardous materials listed in paragraph (a) of this section is transported in bags by vessel:

- (1) The requirements specified in paragraph (c) of this section must be complied with;
- (2) The temperature of the bagged material may not exceed 54 °C (130 °F);
- (3) Minimum dunnage and sweatboards must be used to prevent any friction or abrasion of bags, and to allow for the circulation of air and access of water in the event of fire;
- (4) The bags must be stowed from side to side, out to the sweatboards;
- (5) A space of 46 cm (18 inches) must be provided between any transverse bulkhead and the bags;
- (6) The bags must be stowed so as to provide a 46 cm (18 inch) athwartship trench along the centerline of the compartment, continuous from top to bottom;
- (7) The bags must be stowed so as to provide a 46 cm (18 inch) amidship trench running fore and aft from bulkhead to bulkhead;
- (8) The bags may not be stowed less than 46 cm (18 inches) from any overhead deck beam;
- (9) The bags must be stowed so as to provide vent flues 36 cm (14 inches) square at each corner of the hatch continuous from top to bottom;
- (10) Trenching must be accomplished by alternating the direction of the bags in each tier (bulkheading); and
- (11) The bags must be blocked and braced as necessary to prevent shifting of the bagged cargo adjacent to any trench area.

(e) Notwithstanding §176.83(b) of this part, ammonium nitrate and ammonium nitrate fertilizers classed as Division 5.1 (oxidizers) materials, may be stowed in the same hold, compartment, magazine, or freight container with Class 1 materials (explosive), except those containing chlorates, in accordance with the segregation and separation requirements of §176.144 of this part applying to Explosives, blasting, type B, and Explosives, blasting, type E, Division 1.5 compatibility group D.

(f) No mixture containing ammonium nitrate and any ingredient which would accelerate the decomposition of ammonium nitrate under conditions incident to transportation may be transported by vessel.

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