

cargo transfer piping must be disconnected at the cargo tanks. After the cargo piping is disconnected, both ends of the line must be plugged or fitted with blind flanges.

[CGD 80-001, 46 FR 63280, Dec. 31, 1981, as amended by CGD 82-063b, 48 FR 4781, Feb. 3, 1983; CGD 88-100, 54 FR 40041, Sept. 29, 1989; 55 FR 17276, Apr. 24, 1990]

**§ 151.50-86 Alkyl (C7-C9) nitrates.**

(a) The carriage temperature of octyl nitrates must be maintained below 100 °C (212 °F) in order to prevent the occurrence of a self-sustaining exothermic decomposition reaction.

(b) Octyl nitrates may not be carried in a deck tank unless the tank has a combination of insulation and a water deluge system sufficient to maintain the tank's cargo temperature below 100 °C (212 °F) and the cargo temperature rise at or below 1.5 °C(2.7 °F)/hour, for a fire of 650 °C (1200 °F).

[CGD 88-100, 54 FR 40040, Sept. 29, 1989; CGD 92-100, 59 FR 17028, Apr. 11, 1994]

**Subpart 151.55—Special Requirements for Materials of Construction**

**§ 151.55-1 General.**

(a) This section provides special requirements for the materials of construction of equipment that may come into contact with various cargoes. Table 151.05 contains specific requirements for various cargoes.

(b) Copper, copper alloys, zinc, and aluminum shall not be used as materials of construction for tanks, pipelines, valves, fittings, and other items of equipment that may come in contact with the cargo liquid or vapor. (Equivalent to §151.56-1(a),(b), and (c).)

(c) Copper, copper alloys, zinc, galvanized steel, and mercury shall not be used as materials of construction for tanks, pipelines, valves, fittings, and other items of equipment that may come in contact with the cargo liquid or vapor. (Equivalent to §151.56-1(b),(c), and (g).)

(d) Aluminum, magnesium, zinc, and lithium shall not be used as materials of construction for tanks, pipelines, valves, fittings, and other items of equipment that may come in contact

with the cargo liquid or vapor. (Equivalent to §151.56-1(a),(c), and (d).)

(e) Copper and copper bearing alloys shall not be used as materials of construction for tanks, pipelines, valves, fittings, and other items of equipment that may come in contact with the cargo liquid or vapor. (Equivalent to §151.56-1(b).)

(f) Aluminum or copper or alloys of either shall not be used as materials of construction for tanks, pipelines, valves, fittings, and other items of equipment that may come in contact with the cargo vapor or liquid. (Equivalent to §151.56-1(a) and (b).)

(g) Aluminum, stainless steel, or steel covered with a suitable protective lining or coating shall be used as materials of construction for tanks, pipelines, valves fittings, and other items of equipment that may come in contact with the cargo liquid or vapor. (Equivalent to §151.58-1(a).)

(h) Alkaline or acidic materials, such as caustic soda or sulfuric acid, should not be allowed to contaminate this cargo.

(i) For concentrations of 98 percent or greater, aluminum or stainless steel shall be used as materials of construction. For concentrations of less than 98 percent, 304L or 316 stainless steel shall be used as materials of construction.

(j) Zinc, alloys that have more than 10 percent zinc by weight, and aluminum may not be used as materials of construction for tanks, pipelines, valves, fittings, and other items of equipment that may come in contact with cargo liquid or vapor. (Equivalent to §151.56-1(a) and (c).)

[CGFR 70-10, 35 FR 3714, Feb. 25, 1970, as amended by CGD 73-275R, 41 FR 3087, Jan. 21, 1976; CGD 75-223, 42 FR 8378, Feb. 10, 1977; CGD 88-100, 54 FR 40041, Sept. 29, 1989]

**Subpart 151.56—Prohibited Materials of Construction**

**§ 151.56-1 Prohibited materials.**

When one of the following paragraphs of this section is referenced in table 151.05, the materials listed in that paragraph may not be used in components that contact the cargo or its vapor:

- (a) Aluminum or aluminum alloys.
- (b) Copper or copper alloys.