

(b) A containment system carrying sulfuric acid may be:

(1) Made of unlined steel if the cargo composition is between 70 and 80 or between 90 and 100 percent acid by weight;

(2) Lined with lead if the cargo composition does not exceed 96 percent acid by weight; or

(3) Lined with natural rubber or neoprene if the cargo composition does not exceed 51 percent acid by weight.

(c) A containment system for oleum may be of unlined steel if the concentration of free sulfur trioxide in the oleum exceeds 20 percent by weight.

[CGD 73-96, 42 FR 49027, Sept. 26, 1977, as amended by CGD 82-063b, 48 FR 4782, Feb. 3, 1983]

§ 153.557 Special requirements for hydrochloric acid.

(a) A containment system that carries hydrochloric acid must be lined with:

(1) Natural rubber;

(2) Neoprene; or

(3) A material approved for hydrochloric acid tanks by the Commandant (CG-ENG).

(b) Containment systems for contaminated hydrochloric acid are approved by the Commandant (CG-ENG) on a case by case basis.

[CGD 73-96, 42 FR 49027, Sept. 26, 1977, as amended by CGD 82-063b, 48 FR 4781, Feb. 3, 1983]

§ 153.558 Special requirements for phosphoric acid.

A phosphoric acid containment system must be:

(a) Lined with natural rubber or neoprene;

(b) Lined with a material approved for phosphoric acid tanks by the Commandant (CG-ENG); or

(c) Made of a stainless steel that resists corrosion by phosphoric acid.

NOTE: "Phosphoric acid", as defined in §153.2, includes phosphoric acid, superphosphoric acid, and aqueous solutions of phosphoric acid.

[CGD 73-96, 42 FR 49027, Sept. 26, 1977, as amended by CGD 82-063b, 48 FR 4782, Feb. 3, 1983; CGD 88-100, 54 FR 40042, Sept. 29, 1989]

§ 153.559 Special requirements for nitric acid (less than 70 percent).

A containment system that carries nitric acid (less than 70 percent) must be of stainless steel that resists corrosion by nitric acid.

§ 153.560 Special requirements for 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 below 1.5 °C(2.7 °F)/hour, for a fire of 650 °C (1200 °F).

[CGD 88-100, 54 FR 40042, Sept. 29, 1989, as amended by CGD 92-100, 59 FR 17028, Apr. 11, 1994; CGD 94-900, 59 FR 45139, Aug. 31, 1994]

§ 153.565 Special requirement for temperature sensors.

If a cargo listed in table 1 of this part refers to this section, temperature sensors must be used to monitor the cargo pump temperature to detect overheating due to pump failures, when carrying that cargo.

[CGD 94-900, 59 FR 45139, Aug. 31, 1994]

§ 153.602 Special requirements for cargoes reactive with water.

When Table 1 refers to this section, the air inlet to the pressure-vacuum valve for the cargo tank must be located at least 2m (approx. 6.6 ft) above the weatherdeck.

[CGD 78-128, 47 FR 21210, May 17, 1982]

TESTING AND INSPECTION

§ 153.806 Loading information.

Each tankship must have a manual containing information that enables the master to load and ballast the tankship while keeping structural stresses within design limits.

[CGD 79-023, 48 FR 51009, Nov. 4, 1983]