

(1) *Grade D.* Any combustible liquid having a flashpoint below 150° F. and above 80° F.

(2) *Grade E.* Any combustible liquid having a flashpoint of 150° F. or above.

[CGFR 69-53, 34 FR 11265, July 4, 1969, as amended by CGD 73-96, 42 FR 49025, Sept. 26, 1977]

#### § 105.10-15 Flammable liquid.

(a) The term *flammable liquid* means any liquid which gives off flammable vapors (as determined by flashpoint from an open cup tester, as used for test of burning oils) at or below a temperature of 80° F. Flammable liquids are referred to by grades as follows:

(1) *Grade A.* Any flammable liquid having a Reid<sup>1</sup> vapor pressure of 14 pounds or more.

(2) *Grade B.* Any flammable liquid having a Reid<sup>1</sup> vapor pressure under 14 pounds and over 8½ pounds.

(3) *Grade C.* Any flammable liquid having a Reid<sup>1</sup> vapor pressure of 8½ pounds or less and a flashpoint of 80° F. or below.

[CGFR 69-53, 34 FR 11265, July 4, 1969, as amended by CGD 73-96, 42 FR 49025, Sept. 26, 1977; USCG-2000-7790, 65 FR 58461, Sept. 29, 2000]

#### § 105.10-20 Pressure vacuum relief valve.

(a) The term *pressure vacuum relief valve* means any device or assembly of a mechanical, liquid, weight, or other type used for the automatic regulation of pressure or vacuum in enclosed places.

#### § 105.10-25 Commercial fishing vessel.

(a) The term *commercial fishing vessel* includes fishing vessels, cannery tenders, fishing tender vessels, and vessels processing or assembling fishery products.

[CGD 75-105, 41 FR 17910, Apr. 29, 1976]

<sup>1</sup>American Society of Testing Materials Standard D 323 (incorporated by reference, see §105.01-3) (most recent revision), Method of Test for Vapor Pressure of Petroleum Products (Reid Method).

## Subpart 105.15—Inspection Required

### § 105.15-1 General.

(a) Before a commercial fishing vessel may be used to transport combustible or flammable liquids in bulk in limited quantities for the purpose of dispensing those liquids, the vessel shall be inspected by the Coast Guard to determine that the vessel is in substantial compliance with the requirements in this part.

(b) A vessel with permanently installed cargo tanks shall be inspected biennially, or more frequently if necessary, by the Coast Guard to determine that the vessel is maintained in substantial compliance with the requirements in this part.

(c) A vessel with temporarily installed cargo tanks or containers shall be inspected annually, or more frequently if necessary, by the Coast Guard.

(d) Vessels while laid up or dismantled or out of commission are exempt from any or all inspections required by law or regulations in this part.

### § 105.15-5 Authority of marine inspectors.

(a) Marine inspectors may at any time lawfully inspect any vessel subject to the requirements in this part.

### § 105.15-10 Application for inspection.

(a) Prior to the commencement of the construction of a new vessel, or a conversion of a vessel to a commercial fishing vessel, intended for transporting combustible or flammable liquids in bulk in limited quantities for the purpose of dispensing those liquids, the owners, master, or agent shall submit an application for inspection and a letter of compliance to an Officer in Charge, Marine Inspection, at any Marine Inspection Office, U.S. Coast Guard.

(b) Application for inspection and renewal of letter of compliance of a vessel shall be made in writing by the master, owner, or agent to an Officer in Charge, Marine Inspection, at any Marine Inspection Office, U.S. Coast Guard.

(c) The application for inspection and letter of compliance shall be on Form

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CG-3752 or in letter form and set forth the following information:

- (1) Vessel's name;
- (2) Nature of employment and route or areas in which to be operated;
- (3) Date and place where the vessel may be inspected;
- (4) Date and place where the vessel was last inspected (if inspected); and,
- (5) That application for inspection has not been made to any other Officer in Charge, Marine Inspection.

**§ 105.15–15 Letter of compliance.**

(a) When a vessel has been inspected and found to be in substantial compliance with the requirements of this part, a "letter of compliance" shall be issued to the vessel by the Officer in Charge, Marine Inspection.

(b) The letter of compliance shall permit the presence on board of liquid flammable or combustible cargoes in bulk, and describe the conditions governing the transportation and dispensing of such cargoes.

(c) The letter of compliance shall state the maximum amount of liquid flammable or combustible cargo in bulk to be carried on board.

(d) The letter of compliance shall be limited to a period of validity which shall not exceed 2 years. For cause, the letter of compliance may be suspended or revoked as authorized by law or regulations in this chapter.

**§ 105.15–20 Exhibition of letter of compliance.**

(a) On every vessel subject to this part, the original letter of compliance shall be framed under glass or other suitable transparent material and posted in a conspicuous place protected from the weather.

**Subpart 105.20—Specific Requirements—Cargo Tanks**

**§ 105.20–1 Plans and/or sketches.**

(a) The owners, master, or agent of a commercial fishing vessel shall submit with his application for the initial inspection a brief description and the plans and/or sketches of the cargo tanks and piping systems for filling and dispensing cargo; dimensions and identifications of material shall be included.

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(b) If cargo tanks will be located in enclosed compartments or below decks, the plans and/or sketches shall also show the proposed ventilation system.

(c) Plans and/or sketches are not required if the cargo tanks and piping systems have previously been accepted by the Coast Guard.

**§ 105.20–3 Cargo tanks.**

(a) *Construction and Materials.* (1) The cargo tanks must be constructed of iron, steel, copper, nickel alloy, copper alloy; or aluminum. The tanks shall be designed to withstand the maximum head to which they may be subjected, except that in no case shall the thickness of the shell or head be less than that specified in this subparagraph. Tanks of over 150 gallons capacity shall have a minimum thickness as indicated in Table 105.20–3(a)(1):

TABLE 105.20–3(a)(1)

Material	A.S.T.M. specification (latest edition)	Thickness in inches and gage number <sup>2,3</sup>
Nickel copper .....	B127, hot rolled sheet or plate.	0.107 (USSG 12).
Copper nickel <sup>1</sup> .....	B122, Alloy No. 5.	0.128 (AWG 8).
Copper <sup>1</sup> .....	B152, Type ETP	0.182 (AWG 5).
Copper silicon <sup>1</sup> .....	B97, Alloys A, B, and C.	0.144 (AWG 7).
Steel or iron .....	.....	0.179 (MSG 7).
Aluminum <sup>4</sup> .....	B209, Alloy .....	<sup>5</sup> 5086 0.250 (USSG 3).

<sup>1</sup>Tanks fabricated with these materials shall not be utilized for the carriage of diesel oil.

<sup>2</sup>The gage numbers used in this table may be found in many standard engineering reference books. The letters "USSG" stand for "U.S. Standard Gage" which was established by the act of Mar. 3, 1892 (15 U.S.C. 206) for sheet and plate iron and steel. The letters "AWG" stand for "American Wire Gage" (or Brown and Sharpe Gage) for nonferrous sheet thicknesses. The letters "MSG" stand for "Manufacturers' Standard Gage" for sheet steel thicknesses.

<sup>3</sup>Tanks over 400 gallons shall be designed with a factor of safety of four on the ultimate strength of the tank material used with a design head of not less than 4 feet of liquid above the top of the tank.

<sup>4</sup>Anodic to most common metals. Avoid dissimila-metal contact with tank body unless galvanically compatible.

<sup>5</sup>And other alloys acceptable to the Commandant.

(2) All tank joints, connections, and fittings shall be welded or brazed. Tanks with flanged-up top edges will not be acceptable.

(3) All tanks exceeding 30 inches in any horizontal dimension shall be fitted with vertical baffle plates of the same material as the tank. Limber holes at the bottom and air holes at the top of all baffles shall be provided.