

the specimen. Visual luminous intensity readings shall be observed and recorded at approximately 5-second intervals during the burning of the specimen. The minimum photometric distance shall be 3 m (10 ft.). Recording photometers shall have a chart speed of at least 10 cm (4 in.) per minute. The luminous intensity of the specimen shall be computed as the arithmetical average of the readings recorded. The average luminous intensity of a specimen shall be not less than 20,000 candela.

(2) *Elevated temperature, humidity, and storage.* Place specimen in a thermostatically controlled even-temperature oven held at 75 °C. with not less than 90 percent relative humidity for 72 hours. Remove specimen and store at room temperature (20° to 25 °C.) with approximately 65 percent relative humidity for 10 days. If for any reason it is not possible to operate the oven continuously for the 72-hour period, it may be operated at the required temperature and humidity for 8 hours out of each 24 during the 72-hour conditioning period. (Total of 24 hours on and 48 hours off.) The signal shall not ignite or decompose during this conditioning. The signal shall fire and operate satisfactorily following this conditioning.

(3) *Spontaneous ignition.* Place the specimen in a thermostatically controlled even-temperature oven held at 75 °C. with not more than 10% relative humidity for 48 consecutive hours. The signal shall not ignite or undergo marked decomposition.

(4) *Chromaticity.* The color of the burning signal must be vivid red as defined by Sections 13 and 14 of the "Color Names Dictionary." Two identical test plates of white cardboard about 30 cm × 60 cm (12" × 24") are used. Except for a negligible amount of stray daylight, the first test plate is illuminated by light from the specimen placed at a distance of about 1.5 cm (5 ft.). The second test plate is illuminated only by light from an incandescent lamp operated at a color temperature close to 2,848° K at a distance of about 30 cm (1 ft.). The first plate is viewed directly, the second through combinations of lovibond red, yellow, and blue glasses selected so as to ap-

proximate a chromaticity match. By separating the test plates by a wide unilluminated area (subtending at the observer about 45°), it is possible to make accurate determinations of chromaticity in terms of the 1931 CIE Standard Observer and Coordinate System, in spite of fluctuations in luminous intensity of the specimen by factors as high as 2 or 3. The CIE coordinates are converted to the Munsell notation which is cross-referenced to the color name in Section 13 of the "Color Names Dictionary" (see the discussion in section 10 of "the Universal Color Language").

§ 160.024-5 Marking.

(a) *Cartridge.* Each pistol-projected parachute red flare distress signal shall be legibly marked as follows:

PISTOL-PROJECTED PARACHUTE RED FLARE
DISTRESS SIGNAL

20,000 candela—30 seconds burning time
USE ONLY WHEN AIRCRAFT OR VESSEL IS SIGHTED DIRECTIONS—Fire upward from signal pistol
Service Life Expiration Date (date to be inserted by manufacturer) (Month and year manufactured) Lot No. _____
Manufactured by (Name and address of manufacturer)
U.S. COAST GUARD APPROVAL NO. _____

(b) *Marking of expiration date.* The expiration date must be not more than 42 months from the date of manufacture.

(c) *Other marking.* (1) On each pistol-projected parachute red flare distress signal there shall be die-stamped, in figures not less than 3mm ($\frac{1}{8}$ in.) high, on the cartridge, numbers indicating the month and year of manufacture, thus: "6-54" indicating June 1954.

(2) The pyrotechnic candle shall be legibly marked with the month and year of manufacture.

(3) In addition to any other marking placed on the smallest packing carton or box containing cartridges, each carton or box shall be plainly and permanently marked to show the service life expiration date, the date of manufacture, and the lot number.

(4) The largest carton or box in which the manufacturer ships signals must be marked with the following or equivalent words: "Keep under cover in a dry place."

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NOTE: Compliance with the labeling requirements of this section does not relieve the manufacturer of the responsibility of complying with the label requirements of 15 U.S.C. 1263, the Federal Hazardous Substances Act.

§ 160.024-7 Procedure for approval.

(a) Signals are approved by the Coast Guard under the procedures in subpart 159.005 of this chapter.

(b) [Reserved]

Subpart 160.026—Water, Emergency Drinking (In Hermetically Sealed Containers), for Merchant Vessels

§ 160.026-1 Applicable specifications and standard.

(a) *General.* The following specifications and standard, of the issue in effect on the date emergency drinking water is packed, form a part of this subpart:

(1) Military specifications:

MIL-L-7178—Lacquer; cellulose nitrate, gloss for aircraft use.

MIL-E-15090—Enamel, equipment, light-gray (Formula No. 111).

MIL-W-15117—Water, drinking, canned, emergency.

(2) U.S. Public Health Service:

Drinking Water Standards (Publication No. 956).

(b) *Copies on file.* Copies of the specifications referred to in this section shall be kept on file by the packer, together with the approved plans and certificate of approval issued by the Coast Guard. The military specifications may be obtained from the Commanding Officer, Naval Supply Depot, 5801 Tabor Avenue, Philadelphia, Pa., 19120. The “Drinking Water Standards” may be obtained from the U.S. Department of Health and Human Services, Public Health Service, Washington, DC, 20201.

[CGFR 65-9, 30 FR 11466, Sept. 8, 1965, as amended by CGD 84-064, 49 FR 34004, Aug. 28, 1984]

§ 160.026-2 Type.

(a) Emergency drinking water for lifeboats and life rafts and its hermetically sealed container shall be as specified herein, but alternate containers will be given special consideration.

(b) [Reserved]

[CGFR 53-25, 18 FR 7865, Dec. 5, 1953]

§ 160.026-3 Container.

(a) *General.* The emergency drinking water container shall be a sanitary type can, approximately 2 $\frac{1}{16}$ in diameter by 4 $\frac{7}{8}$ in height. The top and bottom of the can shall be double-seamed and compound-lined. The side seam shall be of a locked type, soldered on the outside. The can shall be made of 1.25-pound coating coke tin-plate throughout, with not less than 100-pound plate for the body and 85-pound plate for the ends.

(b) *Interior and exterior coatings.* The interior of the container shall be uncoated, except for the tin-plating required by paragraph (a) of this section. In addition to the tin-plating, the exterior surfaces of the container, including the ends, but excluding the side seam, shall be lithographed a gray enamel conforming to Type I or II, Class 2 of Specification MIL-E-15090, with the marking as provided by § 160.026-5 lithographed in black print. After filling, sealing, autoclaving, and marking, the container shall be dip-coated with one coat of clear base lacquer conforming to Specification MIL-L-7178.

(c) *Plant sanitation, sterilizing and filling.* The plant and equipment in which the water is canned shall be maintained in a clean and sanitary condition at all times, and standard aseptic procedures shall be followed throughout in filling the cans. The container shall be free from all foreign materials, and shall be filled with approximately 10 $\frac{2}{3}$ oz. of water meeting the requirements of § 160.026-4. After filling, it shall be hermetically sealed under vacuum, and after sealing, it shall be autoclaved at a temperature of not less than 250 °F. for not less than 15 minutes.

[CGFR 53-25, 18 FR 7865, Dec. 5, 1953]

§ 160.026-4 Water.

(a) Only water meeting the U.S. Public Health Service “Drinking Water Standards” which has been suitably inhibited to protect the container against corrosion shall be used. After treatment and packing the water shall