
to be ignited by the dropping buoy in the same manner as it would be when used on a vessel. The signal and buoy must be mounted at least 27 m (90 ft.) above the surface of a body of water. The buoy is released and must cause the signal to ignite and fall to the water with the buoy. The signal must remain afloat and emit smoke at least 15 minutes.

(2) Wave test. A signal shall be tested in a manner simulating its use at sea. The signal shall be ignited and thrown overboard under conditions where waves are at least 30 cm (1 ft.) high. The smoke emitting time must be for the full 15 minutes and the signal shall float in such a manner that it shall function properly during this test. The signal shall be attached to a ring life buoy in accordance with the manufacturer’s instructions.

(3) Underwater smoke emission. Condition the signal in accordance with paragraph (c)(2)(i) of this section. Ignite specimen and let it burn about 15 seconds in air. Submerge the burning signal in water in a vertical position with head down. Obtain underwater smoke emission time by stop watch measurements from time of submersion until smoke emission ceases. The test specimen shall emit smoke under water not less than 30 seconds when subjected to this test.

(4) 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 ignite and operate satisfactorily following this conditioning.

(5) 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 must not ignite or undergo marked decomposition.

(6) Susceptibility to explosion. Remove smoke composition from signal and punch a small hole in the composition. Insert a No. 6 commercial blasting cap. Ignite the cap. The test specimen shall not explode or ignite.

(7) Corrosion resistance. Expose the complete specimen with cover secured hand-tight to a finely divided spray of 20 percent by weight sodium chloride solution at a temperature between 32 °C and 38 °C (90 °F and 100 °F) for 100 hours. The container and cap must not be corroded in any fashion that would impair their proper functioning.

(8) Color of smoke. Ignite specimen in the open air in daytime according to the directions printed on the signal, and determine the smoke color by direct visual comparison of the unshadowed portions of the smoke with a color chart held so as to receive the same daylight illumination as the unshadowed portions of the smoke. The color of the smoke must be orange as defined by sections 13 and 14 of the “Color Names Dictionary” (colors 34–39 and 48–54).

(9) Volume and density of smoke. The test specimen shall show less than 70 percent transmission for not less than 12 minutes when measured with apparatus having a light path of 19 cm (7½ in.), an optical system aperture of +3.7 degrees, and an entrance air flow of 18.4m³ per minute (650 cu. ft. per minute), such apparatus to be as described in National Bureau of Standards Report No. 4792.

§ 160.057–5 Marking.

(a) Directions for use. Each floating orange smoke distress signal shall be plainly and indelibly marked in black lettering not less than 3 mm (¼ in.) high “Approved for daytime use only”, and in black lettering not less than 5 mm (⅛ in.) high with the word “Directions”. Immediately below shall be similarly marked in black lettering not less than 3 mm (⅛ in.) high in numbered paragraphs, and in simple and easily understood wording; instructions to be followed to make the device operative. Pasted-on labels are not acceptable.
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(b) Other markings. (1) There shall be embossed or die-stamped, in the outer container in figures not less than 5 mm (3/16 in.) high, numbers, indicating the month and year of manufacture, thus: “6-54” indicating June 1954. The outer container shall also be plainly and indelibly marked with the commercial designation of the signal, the words “Floating Orange Smoke Distress Signal (15 minutes)”, name and address of the manufacturer, the Coast Guard Approval No., the service life expiration date (month and year to be entered by the manufacturer), the month and year of manufacture and the lot number.

(2) In addition to any other marking placed on the smallest packing carton or box containing floating orange smoke distress signals, such cartons or boxes shall be plainly and indelibly marked to show the service life expiration date, the month and year of manufacture, and the lot number.

(3) 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.”

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

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.

§ 160.057-7 Procedure for approval.

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

(b) [Reserved]

Subpart 160.058—Desalter Kits, Sea Water, for Merchant Vessels

§ 160.058-1 Applicable specification.

(a) Specification. The following specification, of the issue in effect on the date the desalter kits are manufactured, forms a part of this subpart:

(1) Military specification. MIL-D-5531D—Desalter Kit, Sea Water, Mark 2.

(b) Copies on file. A copy of the specification referred to in this section shall be kept on file by the manufacturer, together with the approved plans and certificate of approval. The Military Specification may be obtained from the Military Specifications and Standards, Standardization Documents Order Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, https://assist.daps.dla.mil/quicksearch/.


§ 160.058-2 Type.

(a) Desalter kits specified by this subpart shall be of the type described in the specification listed in §160.058–1(a)(1).

(b) [Reserved]

§ 160.058-3 Materials, workmanship, construction and performance requirements.

(a) The materials, construction, workmanship, general and detail requirements shall conform to the requirements of the specification listed in §160.058–1(a)(1), except as otherwise specifically provided by this subpart.

(b) [Reserved]

§ 160.058-4 Inspections.

(a) Desalter kits specified by this subpart are not inspected at regularly scheduled factory inspections; however, the Commander of the Coast Guard District in which the desalter kits are manufactured may detail a marine inspector at any time to visit places where desalter kits are manufactured to check materials and construction methods and to satisfy himself that the desalter kits are being manufactured in compliance with the requirements of the specification listed in §160.058–1(a)(1) as modified by this specification and are suitable for the intended purpose. The manufacturer shall admit the marine inspector to his plant and shall provide a suitable place and the necessary apparatus for the use of the marine inspector in conducting tests at the place of manufacture.

(b) [Reserved]