

(Unpublished draft - Use as guideline only)

**Subpart 160.041**

**First Aid Kit for Lifeboats**

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**AUTHORITY 46USC 3306(a) & (b)**

**Sec.**

<b>160.041-1</b>	Scope
<b>160.041-3</b>	Incorporation by reference
<b>160.041-5</b>	Independent laboratory
<b>160.041-7</b>	Approval procedure
<b>160.041-9</b>	Definitions
<b>160.041-11</b>	Case and unit carton requirements
<b>160.041-13</b>	Case construction
<b>160.041-15</b>	Contents
<b>160.041-17</b>	Approval testing
160.041-19	Marking

**160.041-1 Scope.**

This subpart contains construction and content requirements for unit type first-aid kits for use on merchant vessel lifeboats Approval procedures are in Part 159 of this Chapter

**160.041-3 Incorporation by reference.**

(a) The following standard is incorporated by reference: - American National Standard ANSI Z308.1-1978, Minimum Requirements for Industrial Unit-Type First Aid Kits available from the American National Standards Institute, 1430 Broadway, New York, NY 10018.

(b) The following standard is incorporated by reference:- American Society for Testing and Materials Standard ASTM B117-73, Standard Method of Salt Spray (Fog) Testing, available from the American Society for Testing and Materials, 1916 Race St. Philadelphia, PA 19103.

(c) The following standard is incorporated by reference.- The )Pharmacopoeia of the United States, Nineteenth Revision (1975) published by the U.S Pharmacopoeia Convention Inc , available from the Mack Publishing Company, 20th and No Hampton Streets, Easton, PA 18042

**160.041-5 Independent laboratory.**

(a) The approval and production tests in this Subpart must be conducted by, or under the supervision of an independent laboratory accepted by the Coast Guard under Subpart 159.010 of this Chapter.

**160.041-7 Approval procedure**

**ENCLOSURE (1)**

- (a) General A lifeboat first-aid kit is approved by the Coast Guard under the procedures in Subpart 159.005 of this Chapter.
- (b) Approval testing Each approval test must be conducted in accordance with 160,041-17.

**160.041-9 Definitions.**

- (a) Water resistant. Resistant to penetration but not entirely impervious to water.
- (b) Watertight Unpenetrable by water.
- (c) Unit. A uniform size package which contains one or more complete dressings or applicators of first aid material.
- (d) Unit first-aid kit. A portable, compact, watertight kit that holds a specific quantity of units. The units are uniformly arranged in rows for ease of identification, removal and replacement
- (e) Standard metal case first aid kit. A first-aid kit with a case which meets the construction requirements of 160.041-13(a) and the performance requirements of 160.041-17(a).
- (f) Nonstandard metal case first-aid kit. A first-aid kit with a case that meets the construction requirements of 160.041 - 13(b) and the performance requirements of 160.041-17(b).
- (g) Standard- plastic case first-aid kit. A first-aid kit with a case which meets the construction requirements of 160.041-13(c) and performance requirements of 160.041-17(c).
- (h) Nonstandard plastic case first-aid kit. A first-aid kit with a case which meets the construction requirements of 160.041-13(d) and the performance requirements of 160.041-17(d)

**160.041-11 Case and unit carton requirements.**

(a) General case requirements. Each first-aid kit case for lifeboat use must be rectangular in shape and must not exceed the dimensional requirements for the 24 unit size kit specified in ANSI Z308.1. Each case must have a suitable carrying handle securely mounted on the side or end of the case body.

(b) Case type. Each first-aid kit covered by this specification must be constructed with a metal case meeting 160.041-13(a) or 160.041-13(b) or a plastic case meeting 160.041-13(c) or 160.641-13(d). Alternate cases meeting the applicable performance requirements of 160.041-17 may be considered for acceptance.

(c) Unit carton requirements. Each unit carton must be made of bleached sulphite paperboard, 0.4 mm ± 0.05 mm (0.016 in. + 0.002 in.) thick, or of a material of equivalent strength. and must be one of the following sizes

- Unit size 1 - 10 cm x 5.7 cm x 1.6 cm (4 in. x 2/14 in. x 1/5 in.)
- Unit size 2 - 10 cm x 5.7 cm x 1.9 cm (4 in. x 2 1/4 in. x 3/4 in.)
- Unit size 3 10 cm x 5.7 cm x 3.2 cm (4 in. x 2 1/4 in. x 1 1/4 in.)

Note: All sizes have ± 0.3 cm (\* 1/8 in.) allowable tolerance.

(d) Individual units. Each individual unit must be overwrapped and heat sealed in transparent watertight material at least 0.03 mm (3012 in) thick. Vinyl, or polyethylene film or equivalent materials will be considered for acceptance.

**160.041-13 Case construction.**

(a) Standard metal case. Each standard metal case must meet the following requirements:

(1) Each standard metal case must be watertight and moisture resistant with seamless or welded joints. The case must have rounded corners and no sharp edges. The cover or body must have a rubber or synthetic gasket to provide a watertight seal. Each case must be constructed of a minimum 20 gauge steel and have a baked enamel finish or equivalent corrosion resistant coating on each metal part.

(2) The cover must be held to the body by either of the following methods:

(i) The cover must be fastened to the body by two closed type pull-down snap fasteners on one edge. Two positive open type pull-down snap fasteners must be on the opposite edge and one positive open type pull-down snap fastener must be on each of the other two edges. The fasteners must effectively hold the bearing surfaces together to provide the required watertight closure.

(ii) The cover must be attached to the body by a continuous piano hinge with a 90 (ft 5.) stop, welded in place. Two or more open type pull-down snap fasteners must hold the bearing surfaces together to provide the required watertight closure.

(b) Nonstandard metal case. Each nonstandard metal case must meet the following requirements:

(1) Each nonstandard metal case must be water-resistant and have seamless or welded joints. Each case must have rounded corners and no sharp edges and must be constructed of a minimum 20 gauge steel with a baked enamel finish or equivalent corrosion resistant coating applied to each metal part.

(2) The cover of each case must be permanently attached to the body. At least two fasteners of sufficient type, size, and strength must be placed opposite of the hinge to assure a 5 al. - free case which can be opened quickly and easily with one hand.

(3) Each nonstandard metal case must be enclosed in a rectangular vinyl (or equivalent) pouch not less than 0.2 mm (0.008 in.) nominal thickness, sealed around three edges, with the fourth edge capable of being opened and reclosed watertight.

(c) Standard plastic case. Each standard plastic case must meet the following requirements:

(1) Each standard plastic case must be watertight and moisture resistant with rounded corners and no sharp edges. The cover or body must have a rubber or synthetic gasket to provide a watertight seal. The plastic used in the case construction must have a minimum thickness of 1.5 mm (0.0625 in)

(2) The cover must be held to the body by either of the following methods:

(i) The cover must be fastened to the body by two closed type pull-down snap fasteners on one edge. Two positive open type pull-down snap fasteners must be on the opposite edge and one positive open type pull-down snap fastener must be on each of the other two edges. The fasteners must effectively hold the bearing surfaces together to provide the required watertight closure.

(ii) The cover must be attached to the body by a continuous hinge with a 90 (+5. ) stop. Two or more open type pull-down snap fasteners must hold the bearing surfaces together to provide the required watertight closure.

(d) Nonstandard plastic case. Each nonstandard plastic case must meet the following

requirements

(1) Each nonstandard plastic case must be water-resistant. Each case must have round corners and no sharp edges. The plastic used in the case construction must have a minimum thickness of 1.5 mm (0.0625 in )

(2) The cover of each case must be permanently attached to the body. At least two fasteners of sufficient type, size, and strength must be placed opposite of the hinge to assure a jar-free case which can be opened quickly and easily with one hand.

(3) Each nonstandard plastic case must be enclosed in a rectangular vinyl (or equivalent) pouch not less than 0.2 mm (0.008 in.) nominal thickness, sealed around three edges, with the fourth edge capable of being opened and reclosed watertight.

**160.041-15 Contents.**

(a) Items. The items contained in each first-aid kit must be those listed in Table 15(a)(i). Medicines must meet the requirements of the U.S. PHARMACOPOEIA.

(i) The items listed in Table 15(a)(i) must meet the applicable size, construction, and packaging requirements of ANSI Z308.1. Antiseptic swabs and burn treatment compounds proposed by the applicant must be accepted by the Commandant (G-MSE-4)

Table 15(a)(i)  
Contents of Lifeboat First-Aid Kit

<u>Item</u>	<u>Unit Size Carton</u>	<u>Number of Units</u>
Adhesive Bandage Compress (16 per Unit)	Size 1 or 2	2
Bandage Compress (4 per Unit) 5 cm (2 in.)	Size 1 or 2	<u>2</u>
Bandage Compress (1 per Unit) 10 cm (4 in.)	Size 1	3
Triangular Bandage (1 per Unit)	Size 1 or 2	2
Absorbent Gauze Compress (1 per Unit)	Size 1	2
Gauze Roller Bandage (1 per Unit) 10 cm (4 in. )	Size 1	2
Aluminum Splint (1 per Unit)	Size 1	1
Tourniquet (1 per Unit)	Size 1 or 2	1
Eye Dressing Packet (Pads & Strips) (4 per Unit)	Size 1	1
Eye Wash Solution (30 ml (1 oz) per Unit)	Size 1 or 2	2

Ammonia Inhalants (10 per Unit)	Size 1	1
Antiseptic Swabs (10 per Unit)	Size 1	1
Burn Treatment Compound, ointment Type (3.0 grams (0.11 oz.)) (6 per Unit)	Size 1	2
Aspirin, 324 milligram (5 grain) tablets (48 per Unit)	Size 1	2

24 Units Total

(b) General Instructions. General instructions for the use of the contents of each first-aid kit must be printed in legible type on white paper laminated or treated to be waterproof. These instructions must be securely attached to the inside cover of the case. The general instructions for use of the kit must read as follows:

These are General Instructions for the Use of the Items in this First-Aid Kit.

DETAILED INSTRUCTIONS FOR THE USE OF EACH ITEM ARE LOCATED ON EACH INDIVIDUAL CARTON

<u>Item</u>	<u>Use</u>
Absorbent Gauze Compress	Apply as dressing over large wound.
Adhesive Bandage Compress	Apply as dressing over small wound.
Aluminum Splint	Use to immobilize broken or fractured bones. Pad with gauze or cloth. Hold in place with roller bandage.
Ammonia Inhalant	Break one and inhale for faintness or fainting. DON'T use on suspected heart attack victims
Antiseptic Swabs	Break one and apply to cuts scratches, etc, to prevent infection. DON'T use in or around eyes
Aspirin	Adults take 2 tablets every 4 hours as needed for fever, muscle aches, headaches, and general discomfort.
Bandage Compress 5 cm (2 in.)	

and 10 cm (4 in.)	Apply as dressing over wound.
Burn Treatment Compound	Apply to minor burns and sunburn. DON'T use in eyes.
Eye Dressing Packet	After washing eye, secure eye pad over eye using adhesive strips.
Eye Wash Solution	Use to cleanse irritated eye prior to applying eye pad.
Gauze Roller Bandage	Use to secure bandages, splints, etc.
Tourniquet	Use as last resort in controlling severe bleeding. Loosen a few seconds every 15 minutes.
Triangular Bandage	Use as a sling tourniquet or to retain splint or dressings in place.

**160.041-17 Approval testing.**

(a) Standard metal case first aid-kit. Five standard metal case kits must pass the following consecutive tests:

(1) Salt spray. Each case without contents must be exposed to a salt spray test, as specified by ASTM B117, for 100 hours. There must be no evidence of corrosion or disintegration of the case as a result of this test.

(2) Extreme temperature. Each case without contents must be exposed to a temperature of 65° C (150 F) for one hour and then allowed to cool at 20 C (68F) for twenty-four hours. Immediately following the twenty-four hour period, each case must be exposed to a temperature of -30°C (-22°F) for one hour. There must be no deterioration or warpage of the case.

(3) Case watertightness. Each empty case must be lined with colored blotting paper and closed and then submerged under 30 cm (1 ft) of water for 15 minutes, with the cover in a horizontal position and uppermost. At the end of this period the case must be removed, opened, and examined for water. No evidence of water seepage is permitted.

(4) Drop. After the completion of the above tests, each case must be subjected to the drop tests specified in paragraph 4.(10)(a) of ANSI z308.1. There must be no evidence of cracking as a result of this test.

(b) Nonstandard metal case first-aid kits Five nonstandard metal case kits must pass the of 1 lowing consecutive tests

(1) Salt spray. Each case, without contents and without its protective pouch, must pass the salt spray test specified in 160.041-17(a)(1)

(2) Rain precipitation. Each case, which does not have the protective pouch in place, must be subjected to the rain precipitation test specified in paragraph 4.(10)(b) of ANSI Z308.1. There must be no evidence of water inside the case upon completion of the test.

(3) Extreme temperature. Each case, without contents and with its protective pouch. must pass the extreme temperature test specified in 160.04117(a) (2).

(4) Pouch and case watertightness. Each complete first-aid kit with its protective pouch closed must be submerged under 30 mm (1 ft. ) of water, with the re-closable edge uppermost. for 15 minutes. At the end of this period, the kit must be removed and examined for the presence of water. There must be no seepage inside either the pouch or the case.

(5) Drop. After the completion of the above tests, each case must be removed from its pouch and emptied of its contents. Each case must then pass the drop test specified in 160.041-17(a)(4).

(c) Standard plastic case first-aid kit. Five standard plastic case kits must pass the following consecutive tests:

(1) Salt spray. Each case without contents must be exposed to a salt spray test, as specified by ASTM B117. tot 100 hours. There must be no evidence of corrosion or disintegration of the case as a result of this test.

(2) Extreme temperature. Each case without contents must be exposed to a temperature of 65°C (150°F) for one hour and then allowed to cool at 20°C (68°F) for twenty-four hours. Immediately following the twenty-four hour period, each case must be exposed to a temperature of -30°C (-22°F) for one hour. There must be no deterioration or warpage of the case as a result of this test.

(3) Case watertightness. Each empty case must be lined with colored blotting paper and closed and then submerged under 30 cm (1 ft) of water for 15 minutes, with the cover in a horizontal position and uppermost. At the end of this period the case must be removed, opened, and examined for water. No evidence of water seepage is permitted.

(4) Drop. After the completion of the above tests, each case must be subjected to the drop tests specified in paragraph 4. 10) (a) of ANSI Z308. 1 There must be no evidence of cracking as a result at. this test.

(d) Nonstandard plastic case first-aid kits. Five nonstandard plastic case kits must pass the following consecutive tests.

(1) Salt spray. Each case, without contents and without its protective pouch, must pass the salt spray test specified in 160.041-17(a)(1).

(2) Rain precipitation. Each case, which does not have the protective pouch in place, must be subjected to the rain precipitation test specified in paragraph 4. (10) (b) of ANSI z308. 1. There must be no evidence of water inside the case upon completion of the test.

(3) Extreme temperature . Each case without contents and with its protective pouch, must pass the extreme temperature test specified in 160.041-17(a) (2).

(4) Pouch and case watertightness. Each complete first-aid kit with its protective pouch closed must be submerged under 30 cm (1 ft. ) of water, with the re-closable edge uppermost, for 15 minutes. At the end of this period, the kit must be removed and examined for the presence of water. There must be no seepage inside either the pouch or the case.

(5) Drop. After the completion of the above tests, each case must be removed from its pouch and emptied of its contents. Each case must then pass the drop test specified in 160.041-17(a)(4)

(e) Carton watertightness. One unit carton from each case must be submerged under 30 cm (1 ft. ) of water for 15 minutes. There must be no evidence of water leakage when the wrappers are removed.

#### **160.041-19 Marking.**

(a) Standard metal case first-aid kits. Each case must be permanently marked with the following information: name and address of the manufacturer, model number or other identification used by the manufacturer, the Coast Guard Approval Number, and the words "FIRST-AID KIT-for Lifeboats." This information must be protected as necessary to withstand the required tests.

(b) Nonstandard\_metal\_case first-aid kits. The plastic pouch of each first-aid kit must be plainly and permanently marked with the following information: name and address of the manufacturer, model number or other identification used by the manufacturer, the Coast Guard Approval Number, and the words "FIRST-AID KIT-for Lifeboats." If the means for opening and reclosing the pouch are not self-evident, suitable directions must be marked along the closure. Each case must be marked as prescribed in 160.041-19(a). It must also be marked, "To be Kept in the Plastic Pouch to Assure Watertightness" in letters visible from six feet away.

(c) Standard, plastic case first-aid kits. The plastic case of each standard first-aid kit must be marked as prescribed in 160.041-19(a).

(d) Nonstandard plastic first-aid kits. The plastic pouch of each nonstandard first-aid kit must be marked as specified in 160.041-19(b) Each case must be marked as prescribed in 160.041-19(a). The case must also be marked, "To be Kept in the Plastic Pouch to Assure Watertightness" in letters visible from six feet away.