- (3) Averaging determinations. The tensile strength in pounds per square inch and percent ultimate elongation of four determinations shall be averaged for each sample.
- (i) Water absorption—(1) Specimens. Test specimens shall be 4"x4" square and approximately 1" in thickness. The specimen may have the natural skin on the top and bottom surfaces.
- (2) Procedure. The specimens shall be weighed and submerged in water under a 10-foot head of water (equal to 4.35 psi) at room temperature (65°-95°F.) for 48 hours. The specimens shall then be placed in a stream of air for the minimum time required to remove visible water from the surface, and reweighed. The results shall be calculated in terms of pounds of water gain per square foot of total exposed surface.
- (j) Flexibility—(1) The size of the specimen shall be approximately  $1'\times8'$  with a thickness of  $\frac{1}{4'}$   $\pm\frac{1}{16''}$ . The test specimens and equipment shall be conditioned for at least 4 hours at 0 °F.  $\pm2$  °F., and bent  $180^\circ$  around a  $\frac{1}{2''}$  diameter steel mandril within 5 seconds at the test temperature. Care shall be taken to avoid warming the test specimens, particularly at or near the bend point, in performing the test.
- (k) Oil resistance—(1) Specimens. The test specimens shall be a disk approximately 1" in diameter and 1" (approximately) in thickness.
- (2) Procedure. The specimen shall be immersed in fuel oil conforming to Navy special grade of Specification MIL-F-859 for 70 hours. The specimen shall then be removed, dipped in alcohol and blotted with filter paper. The specimen shall then be compared to an untreated specimen of similar size for apparent softness and visible swelling.
- (1) Odor. The odor of unicellular polyvinyl chloride foam shall be determined by sniffing.

[CGFR 65–37, 30 FR 11593, Sept. 10, 1965, as amended by CGFR 65–64, 31 FR 563, Jan. 18, 1966]

### § 164.015-5 Procedure for acceptance.

(a) Unicellular plastic foam is not subject to formal approval, but will be accepted by the Coast Guard on the basis of this subpart for use in the

manufacture of lifesaving equipment utilizing it.

- (b) Upon receipt of an application requesting acceptance, the Commander of the Coast Guard District will detail a marine inspector to the factory to observe the production facilities and manufacturing methods and to select from foam already manufactured sufficient sample material for testing for compliance with the requirements of this specification. A copy of the marine inspector's report, together with the sample material and one copy of an independent laboratory test report will be forwarded to the Commandant and if satisfactory notice of acceptance will be given to the manufacturer.
- (c) Acceptance of unicellular plastic foam prior to being incorporated into finished products, or during the course of manufacture, shall in no case be construed as a guarantee of the acceptance of the finished products.
- (d) The manufacturer of the foam shall provide the manufacturer of the lifesaving equipment with an affidavit certifying that the foam conforms to all of the requirements of this subpart.

# Subpart 164.018—Retroreflective Material for Lifesaving Equipment

Source: CGD 76–028, 44 FR 38786, July 2, 1979, unless otherwise noted.

#### § 164.018-1 Scope.

This subpart prescribes design requirements, approval tests, and procedures for approving retroreflective material used on lifesaving equipment.

#### § 164.018-3 Classification.

The following types of retroreflective material are approved under this specification:

- (a) Type I—Material used on flexible surfaces and rigid surfaces, except rigid surfaces that are continuously exposed.
- (b) Type II—Weather resistant material used on continuously exposed rigid surfaces.

## § 164.018-5 Specifications and standards incorporated by reference.

(a) The following federal and military specifications and standards are incorporated by reference into this subpart: