

Material Tests for Inflatable Rescue Boats and Liferafts

Amended Guidance

Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use

Reason for Amendment

At the 103rd session of the IMO's Maritime Safety Committee (MSC 103) held in May 2021, a revised version of Resolution MSC.81(70) "Revised Recommendation on Testing of Life-saving Appliances" was adopted. The revised version of MSC.81(70) adopted at MSC 103 was just a "minor correction" defined in accordance with the "Summary of Decisions C/ES.27/D" issued for the 27th Extraordinary Session of the IMO Council held in 2013.

The revisions made to MSC.81(70) were necessary because some of the standards referenced in requirements related to the test procedures for coated fabric material tests for inflatable rescue boats and liferafts had either been renamed or abolished. More specifically, references made to the abolished standard ISO/TR 6065:1991 were replaced with references to the similar standards ISO 15372:2000 and ISO 15372:2000/Amd 1:2021, and references to the renamed standard test oil "ASTM" series were replaced by references to the "IRM" series.

Accordingly, all relevant test requirements were amended based upon the aforementioned minor correction made to MSC.81(70).

Outline of Amendment

Amended references to international standards made in the procedures of porosity tests and oil resistance tests which are required to be carried out as part of the coated fabric material tests for inflatable rescue boats and liferafts.

“Guidance for the approval and type approval of materials and equipment for marine use” has been partly amended as follows:

**Annex 2 PROCEDURES FOR PROTOTYPE TESTS FOR TYPE APPROVAL
AND PRODUCTION TESTS FOR RESCUE BOATS**

**Chapter 1 PROCEDURES FOR PROTOTYPE TESTS FOR TYPE APPROVAL OF
RESCUE BOATS**

1.1 Material Test

1.1.2 Material Test for Inflated Rescue Boats and Inflated Fast Rescue Boats [7.2.14]

Sub-paragraph -10 has been amended as follows.

10 Oil resistance

This test is subject to the test method specified in *ISO 15372:2000/Amd 1:2021*, 6.2.5.

Annex 3 PROCEDURES FOR PROTOTYPE TESTS FOR TYPE APPROVAL AND PRODUCTION TESTS OF INFLATABLE LIFERAFTS

Chapter 1 PROCEDURES FOR PROTOTYPE TESTS FOR TYPE APPROVAL OF INFLATABLE LIFERAFTS

1.1 Material Test [5.17.13]

Paragraph 1.1.1 has been amended as follows.

1.1.1

Materials for main buoyancy chambers, canopy supports, floors, floor buoyancy chambers and canopies are to be subjected to the following tests. The materials when tested are to meet the following requirements. When there are any difficulties in carrying out these tests, other testing means deemed to be equivalent may be acceptable.

1 (Omitted)

2 Tests and performance criteria

(1) (Omitted.)

(2) Fabrics used for the manufacture of buoyancy ~~tubes~~ chambers, inflatable supports for canopies, and floors are to meet the following requirements.

((a) to (f) are omitted.)

(g) Porosity

When tested by the method prescribed below and with a pressure of 27.5 *kPa* applied and maintained beneath the fabric, there is to be no signs of any leakage over a minimum period of 5 *min*.

i) Test for porosity

A specimen of the fabric is to be prepared and tested in accordance with paragraph 6.2.9.2 of ISO TR 6065 paragraph A.2.10.2 15372:2000.

(h) Oil resistance

i) When tested by the method prescribed below, after exposing the outer surface to oil ~~ASTM No. 1~~ IRM 901, for 2 *h* at 20°C ± 2°C, there is to be no separation of coating from textile and no residual tackiness when two exposed faces are pressed together. The coating is not to smear when rubbed with a single pass of the finger.

ii) The test is to be carried out not less than 16 *h* after vulcanisation or curing.

iii) The apparatus, preparation of specimens and test procedure is to be accordance with paragraph 6.2.5 of ISO TR 6065 paragraph A.2.5 15372:2000/Amd 1:2021. Each coated face is to be tested.

((i) to (l) are omitted.)