

Part II***Lifebuoys (610mm) for Use Only on Ships of Classes IV, V, VI, IX, Ships of Classes III and VIII of Less Than 500 Gross Tonnage and Ships of Class X Which Are Not Deep Sea Fishing Vessels***

4. Construction—(1) A lifebuoy shall be constructed with proper workmanship and materials.

(2) As applicable the materials of a lifebuoy shall be rot-proof, corrosion resistant and not be unduly affected by sea water, oil or fungal attack.

(3) A lifebuoy shall be of a highly visible colour.

(4) It shall be fitted on each side at 4 evenly spaced points with a piece of retro-reflective material 50mm × 100mm in size.

(5) If of circular shape a lifebuoy shall have an outer diameter of not less than 610mm and an inner diameter of not less than 350mm. If of horseshoe shape it shall have equivalent buoyancy.

(6) A lifebuoy shall be constructed of inherently buoyant material. It shall not depend upon rushes, cork shavings or granulated cork, any other loose granulated material or any air compartment which depends on inflation for buoyancy.

(7) It shall have a mass of not less than 1.3kg provided that if intended to operate the quick release arrangement for a self-activating smoke signal and self-igniting light it shall have a mass sufficient to operate the quick release arrangement or 4kg whichever is the greater.

(8) It shall be constructed to withstand a drop into the water from the height at which it is stowed above the waterline in the lightest seagoing condition or 10 metres, whichever is the greater, without impairing either its operating capability or that of its attached components.

(9) It shall be fitted with a grabline not less than 6mm in diameter and of length not less than 4 times the outside diameter of the lifebuoy. The grabline shall be secured at 4 equidistant points around the circumference of the lifebuoy to form 4 equal loops.

5. Performance—(1) It shall not be damaged in stowage throughout the air temperature range -30°C to $+65^{\circ}\text{C}$.

(2) It shall operate throughout a sea water temperature range of -1°C to $+30^{\circ}\text{C}$.

(3) A lifebuoy shall be resistant to deterioration from exposure to sunlight.

(4) It shall be capable of satisfactory operation in a seaway.

(5) A lifebuoy shall be capable of supporting not less than 10.5kg of iron in fresh water for a period of 24 hours.

(6) It shall not sustain burning or continue melting after being totally enveloped in a fire for a period of 2 seconds.

(7) It shall be deemed to be capable of supporting 1 person in the water.

6. Marking—(1) A lifebuoy shall be marked in block capitals of the Roman alphabet with the name and the port of registry of the ship on which it is carried.

(2) A lifebuoy constructed of synthetic materials shall be permanently marked with the manufacturer's trade mark or trade name of the lifebuoy and the words "M.O.T APPROVED", or mark of another approving authority.

(3) A lifebuoy shall be permanently marked with the maximum height above the waterline at which it can be stowed.

Part III***Lifebuoy Self-igniting Lights***

7. Construction—(1) A lifebuoy self-igniting light shall be constructed with proper workmanship and materials.

(2) As applicable the materials of a lifebuoy self-igniting light

shall be rot-proof, corrosion resistant, and not be unduly affected by sea water, oil or fungal attack.

(3) It shall be constructed to withstand a drop into the water from the height at which it is stowed above the waterline in the lightest seagoing condition or 30 metres, whichever is the greater, without impairing either its operating capability or that of the lifebuoy to which it is attached.

(4) It shall be provided with means for being efficiently attached to a lifebuoy.

(5) A lifebuoy self-igniting light to be attached to a lifebuoy carried by a tanker shall be of an electric battery type.

(6) Components of electronic circuits shall comply with the quality control requirements of BS 9000 or an equivalent standard. Where components cannot be obtained under one of the above standards these components shall be covered by a Certificate of Conformance from the manufacturer of the components.

8. Performance—(1) A lifebuoy self-igniting light shall not be damaged in stowage throughout the air temperature range -30°C to $+65^{\circ}\text{C}$.

(2) It shall operate throughout a sea water temperature range of -1°C to $+30^{\circ}\text{C}$.

(3) It shall be resistant to deterioration from exposure to sunlight.

(4) It shall be capable of satisfactory operation in a seaway.

(5) A lifebuoy self-igniting light shall be such that it cannot be extinguished by water.

(6) It shall be capable of either burning continuously with a luminous intensity of not less than 2 candela in all directions of the upper hemisphere or flashing (discharge flashing) at a rate of not less than 50 flashes per minute with at least the corresponding effective luminous intensity and be provided with a source of energy which will give this performance for a period of at least 2 hours.

9. Marking—(1) A lifebuoy self-igniting light shall be marked indelibly with:

(a) the manufacturer's name or trade mark

(b) the words "M.O.T. APPROVED", or mark of another approving authority;

(c) clear and concise directions for use in English supported where necessary by illustrations;

(d) type of energy source;

(e) date of manufacture and expiry in the case of a light with a non-replaceable energy source; and

(f) maximum height above waterline at which it can be stowed.

10. Instructions and information—(1) Instructions and information required for inclusion in the training manual specified in Part I of the Performance Standard on Training Manual and Maintenance Instructions and, if appropriate, in the instructions for on-board maintenance specified in Part II of the Performance Standard on Training Manual and Maintenance Instructions shall be in a form suitable for inclusion in such a training manual or instructions for on-board maintenance. Instructions and information shall be in English in a clear and concise form and shall include the following:

(a) the stowage of the light and attachment to lifebuoy;

(b) type of energy source and if replaceable, method and frequency of replacement;

(c) type of light source and whether replaceable;

(d) any maintenance requirements including the method and recommended frequency of checks of energy source if energy source capable of checking; and

(e) operation of light and duration.