



---

---

## **Life-Saving Appliances - Immersion Suits - Acceptance Criteria for Airtight Packaging**

**Notice to all Ship Owners, Ship Operators and Managers, Masters, Officers and Crew of Merchant Ships and Manufacturers of Immersion Suits.**

---

---

### **Summary**

This note provides guidance on the acceptance criteria against which the MCA will allow immersion suits stored in airtight packaging to be subject to a visual inspection of the suit inside the bag, as opposed to a physical inspection of the suit itself.

### **1. Background**

- 1.1 Immersion suits are to be inspected every month as required by SOLAS Chapter III/20.7.2. Some manufacturers are now offering airtight packing of immersion suits to ensure that they remain in good condition during storage. This storage method does not replace the SOLAS Chapter III/20.7.2 requirement for monthly inspection. Instead, it changes the inspection from a physical check of the immersion suit itself to a close visual examination of the visible parts of the packed immersion suit and a check of the integrity of the airtight packaging. This requires the airtight packaging to be completely transparent.
- 1.2 MSC/Circ.1114 identifies that even under ideal conditions, the materials and adhesives used in the construction of immersion suits have a finite service life and will inevitably experience a reduction in strength and or a loss of water integrity with age. To ensure the maintenance of adequate strength and water integrity of seams and closures of immersion suits and anti-exposure suits with age, it is recommended that each suit be subjected to an air pressure test in accordance with MSC/Circ.1114 at intervals not exceeding 3 years, or every 2 years for suits over ten years of age.
- 1.3 Where immersion suits are stored using conventional methods (not in airtight packaging), the suits themselves are expected to be physically inspected on a monthly basis in accordance with IMO MSC/Circ.1047.

### **2. Actions**

- 2.1 Where immersion suits have been packed in an airtight packaging, the packaging must be transparent and of sufficient strength that it will not be broken while in stowage during ship



operations. The airtight packaging must also be capable of being opened without damaging the suit and with minimal effort e.g. have a pre-cut V for opening. If this has been met, then the following will be accepted in lieu of complying with MSC/Circ.1047:

- a. Monthly onboard inspections of the airtight packaging in line with the manufacturer's recommendations (and a basic check of the visible portions of the packaged suit).
- b. If faults or damages are found with airtight packaging during an inspection or the suit has obviously been damaged while still within the packaging, the immersion suit should be removed from its packaging and inspected in accordance with MSC/Circ.1047.
- c. Should there be any doubt as to the condition of the inside of the airtight packaging or the state of the immersion suit contained within, then the suit should be removed from its packaging and inspected in accordance with MSC/Circ.1047.
- d. If inspection in accordance with MSC/Circ.1047 shows defect in packaged immersion suits, then a sample of a further 25% of the packaged immersion suits should be removed from their packaging and inspected in accordance with MSC/Circ.1047. Any further faulty suits should result in the inspection of all suits according to MSC/Circ.1047.
- e. The vessel must ensure that, once opened, there is sufficient suitable storage space for the open suits.
- f. There should be a suitable number of immersion suits not kept in airtight packaging to be used during drills, the number of which should be identified and documented in the vessels Safety Management System.
- g. During a survey or inspection the surveyor may request to open the airtight packaging on any number of suits to his satisfaction, provided an inspection in accordance with 21(d) warrants such measures.

## 2.2 Notwithstanding paragraph 2.1 above:

- a. The air pressure test required by MSC/Circ. 1114 should be conducted at every required service by an authorized service station at 3 years intervals, after which the suit must be re-bagged, providing the airtight bag sealing is checked by ship personnel at least annually and found to be intact. It is also recommended that, whenever possible, inspections, as required by MSC/Circ. 1047 be carried out at the same time.
- b. Any immersion suits over 10 years of age should be serviced annually at an authorized service stations.



## **More Information**

Marine Technology Branch  
Maritime and Coastguard Agency  
Bay 2/27  
Spring Place  
105 Commercial Road  
Southampton  
SO15 1EG

Tel : +44 (0) 23 8032 9100  
Fax : +44 (0) 23 8032 9104  
e-mail: MTU@mcga.gov.uk

General Inquiries: [infoline@mcga.gov.uk](mailto:infoline@mcga.gov.uk)

MCA Website Address: [www.dft.gov.uk/mca](http://www.dft.gov.uk/mca)

File Ref: MS003/072/0053

Published: December 2014  
Please note that all addresses and  
telephone numbers are correct at time of publishing

© Crown Copyright 2014

***Safer Lives, Safer Ships, Cleaner Seas***

