

Subject

Requirements for prohibition of fire-extinguishing media containing Perfluorooctane Sulfonic Acid (PFOS)

# **ClassNK**

## ***Technical Information***

No. TEC-1362

Date 9 September 2025

To whom it may concern

At the 107th session of the Maritime Safety Committee (MSC 107) in May 2023, amendments to SOLAS Chapter II-2 prohibiting fire-extinguishing media containing PFOS were adopted as Resolution MSC.532(107). At the MSC 110 in June 2025, a unified interpretation regarding verification by the maker's declarations and laboratory test reports that the extinguishing media containing PFOS are not used or stored on ships was adopted as MSC.1/Circ.1694.

As the amendment of SOLAS will come into force on 1 January 2026, we would like to inform the requirements for necessary preparation in advance.

### 1. Outline

Use or storage of fire-extinguishing media containing PFOS will be prohibited on or after 1 January 2026.

The phrase "containing PFOS" means present in concentrations of PFOS above 10 mg/kg (0.001% by weight).

In order to verify that foam fire-extinguishing media does not contain PFOS, one of the following documents is to be kept on board.

- (1) Maker's declaration
- (2) Laboratory test reports

Where documents of (1) or (2) are not available, following is required to be conducted.

- (3) Sampling and testing of the extinguishing media on board

### 2. Application

Ships engaged on international voyages (for ships not engaged on international voyages, the instruction of the flag administration to be referred to).

### 3. Surveys

- (1) New ships (constructed on or after 1 January 2026)

The maker's declaration or laboratory test reports are to be confirmed at the time of the Classification Survey during Construction.

- (2) Existing ships (constructed before 1 January 2026)

The maker's declaration or laboratory test reports are to be confirmed at the time of the first Safety Equipment Survey (except for Occasional Survey) on or after 1 January 2026. Where the maker's declaration or laboratory test reports are not available, sampling and testing of the extinguishing media on board is required.

(To be continued)

#### NOTES:

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For the ships delivered on or after 1 January 2026, the documents are to be confirmed at the time of the Classification Survey during Construction.

- (3) When foam fire-extinguishing media are replaced or newly provided after ship's delivery  
Since 1 January 2026, the maker's declaration or laboratory test reports are to be confirmed at the time of periodical Classification Survey.

4. Maker's declaration

Declaration issued by the foam maker is to contain information about the foam such as, but not limited to, foam type, production period, batch No., ref. to type approval / MED Certificate for the foam.

5. Sampling and testing of the extinguishing media on board

For foam fire-extinguishing media installed before 1 January 2026, where the maker's declaration or laboratory test reports are not available, sampling and testing of the extinguishing media on board is required in accordance with guidance deemed appropriate by the ClassNK. Here, "guidance deemed appropriate by the ClassNK" means, for example, the guidance set out in Annex C, section C.a.4 "Sampling and analysis of PFOS" of the EMSA Guidance on the Inventory of Hazardous Materials. It is specified on the EMSA Guidance that such testing is to be measured at a laboratory accredited in accordance with ISO 17025 or an equivalent standard. The EMSA Guidance can be found on following website.

URL: <https://emsa.europa.eu/about/financial-regulations/items.html?cid=280&id=3003>

For any questions about the above, please contact:

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(To be continued)

Attachment:

1. Resolution MSC.532(107)
2. MSC.1/Circ. 1694

**ANNEX 2**

**RESOLUTION MSC.532(107)  
(adopted on 8 June 2023)**

**AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE  
SAFETY OF LIFE AT SEA, 1974**

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

RECALLING ALSO article VIII(b) of the International Convention for the Safety of Life at Sea, 1974 ("the Convention"), concerning the amendment procedure applicable to the annex to the Convention, other than to the provisions of chapter I,

HAVING CONSIDERED, at its 107th session, amendments to the Convention proposed and circulated in accordance with article VIII(b)(i) of the Convention,

1 ADOPTS, in accordance with article VIII(b)(iv) of the Convention, amendments to the Convention, the text of which is set out in the annex to the present resolution;

2 DETERMINES, in accordance with article VIII(b)(vi)(2)(bb) of the Convention, that the said amendments shall be deemed to have been accepted on 1 July 2025, unless, prior to that date, more than one third of the Contracting Governments to the Convention or Contracting Governments the combined merchant fleets of which constitute not less than 50% of the gross tonnage of the world's merchant fleet have notified the Secretary-General of their objections to the amendments;

3 INVITES Contracting Governments to the Convention to note that, in accordance with article VIII(b)(vii)(2) of the Convention, the amendments shall enter into force on 1 January 2026 upon their acceptance in accordance with paragraph 2 above;

4 REQUESTS the Secretary-General, for the purposes of article VIII(b)(v) of the Convention, to transmit certified copies of the present resolution and the text of the amendments contained in the annex to all Contracting Governments to the Convention;

5 ALSO REQUESTS the Secretary-General to transmit copies of this resolution and its annex to Members of the Organization which are not Contracting Governments to the Convention.

ANNEX

**AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE  
SAFETY OF LIFE AT SEA, 1974**

**CHAPTER II-1  
CONSTRUCTION – STRUCTURE, SUBDIVISION AND STABILITY,  
MACHINERY AND ELECTRICAL INSTALLATIONS**

**Part A  
General**

**Regulation 2**

*Definitions*

1 The following new paragraphs are added after existing paragraph 29:

"30 *Lifting appliance* means any load-handling ship's equipment:

- .1 used for cargo loading, transfer or discharge;
- .2 used for raising and lowering hold hatch covers or movable bulkheads;
- .3 used as engine-room cranes;
- .4 used as stores cranes;
- .5 used as hose handling cranes;
- .6 used for launch and recovery of tender boats and similar applications;  
and
- .7 used as personnel handling cranes.

31 *Anchor handling winch* means any winch for the purpose of deploying, recovering and repositioning anchors and mooring lines in subsea operations.

32 *Loose gear* means an article of ships equipment by means of which a load can be attached to a lifting appliance or an anchor handling winch but which does not form an integral part of the appliance or load.

33 The expression *installed on or after 1 January 2026*, as provided in regulation 3-13, means:

- .1 for ships the keel of which is laid or which is at a similar stage of construction on or after 1 January 2026, any installation date on the ship; or
- .2 for ships other than those specified in .1, including those constructed before 1 January 2009, a contractual delivery date for lifting appliance or anchor handling winches, or in the absence of a contractual delivery date, the actual delivery date of the lifting appliance or anchor handling winches to the ship on or after 1 January 2026."

## **Part A-1**

### **Structure of ships**

2 The following new regulation is added after existing regulation II-1/3-12, together with the associated footnotes:

#### **"Regulation 3-13**

*Lifting appliances and anchor handling winches*

#### **1 Application**

1.1 Unless expressly provided otherwise, this regulation shall apply to lifting appliances and anchor handling winches, and loose gear utilized with the lifting appliances and the anchor handling winches.

1.2 Notwithstanding the above, this regulation does not apply to:

- .1 lifting appliances on ships certified as MODUs;<sup>1</sup>
- .2 lifting appliances used on offshore construction ships, such as pipe/cable laying/repair or offshore installation vessels, including ships for decommissioning work, which comply with standards acceptable to the Administration;
- .3 integrated mechanical equipment for opening and closing hold hatch covers; and
- .4 life-saving launching appliances complying with the International Life-Saving Appliance (LSA) Code.

1.3 The Administration shall determine to what extent the provisions of paragraphs 2.1 and 2.4 do not apply to lifting appliances which have a safe working load below 1,000 kg.

#### **2 Design, construction and installation**

2.1 Lifting appliances installed on or after 1 January 2026 shall be:

- .1 designed, constructed and installed in accordance with the requirements of a classification society which is recognized by the Administration in accordance with the provisions of regulation XI-1/1 or standards acceptable to the Administration which provide an equivalent level of safety; and
- .2 load tested and thoroughly examined after installation and before being taken into use for the first time and after repairs, modifications or alterations of major character.

2.2 Anchor handling winches installed on or after 1 January 2026 shall be designed, constructed, installed and tested to the satisfaction of the Administration, based on the Guidelines developed by the Organization.<sup>2</sup>

2.3 Lifting appliances installed on or after 1 January 2026 shall be permanently marked and provided with documentary evidence for the safe working load (SWL).

2.4 Lifting appliances installed before 1 January 2026 shall be tested and thoroughly examined, based on the Guidelines developed by the Organization<sup>3</sup> and comply with paragraph 2.3 no later than the date of the first renewal survey on or after 1 January 2026.

2.5 Anchor handling winches installed before 1 January 2026 shall be tested and thoroughly examined, based on the Guidelines developed by the Organization<sup>2</sup> no later than the date of the first renewal survey on or after 1 January 2026.

### **3 Maintenance, operation, inspection and testing**

All lifting appliances and anchor handling winches, regardless of installation date, and all loose gear utilized with any lifting appliances and anchor handling winches, shall be operationally tested, thoroughly examined, inspected, operated and maintained, based on the Guidelines developed by the Organization.<sup>2,3</sup>

### **4 Inoperative lifting appliances and anchor handling winches**

Except as provided in regulation I/11(c), while all reasonable steps shall be taken to maintain lifting appliances, anchor handling winches and loose gear to which this regulation applies in working order, malfunctions of that equipment shall not be assumed as making the ship unseaworthy or as a reason for delaying the ship in ports, provided that action has been taken by the master to take the inoperative lifting appliance or anchor handling winch into account in planning and executing a safe voyage.<sup>2, 3</sup>

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<sup>1</sup> Ships certified as MODUs are those subject to the MODU Code and which carry a MODU Code Certificate on board issued by the Administration or a recognized organization. The carriage of this certificate includes authorized electronic versions available on board.

<sup>2</sup> Refer to the *Guidelines for anchor handling winches* (MSC.1/Circ.1662).

<sup>3</sup> Refer to the *Guidelines for lifting appliances* (MSC.1/Circ.1663)."

## **CHAPTER II-2 CONSTRUCTION – FIRE PROTECTION, FIRE DETECTION AND FIRE EXTINCTION**

### **Part A General**

#### **Regulation 1** *Application*

#### **2 Applicable requirements to existing ships**

3 The following new paragraph 2.10 is added after existing paragraph 2.9, together with the associated footnote:

"2.10 Ships constructed before 1 January 2026 shall comply with regulation 10.11.2, as adopted by resolution MSC.532(107), not later than the date of the first survey\* on or after 1 January 2026.

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\* Refer to the *Unified interpretation of the term "first survey" referred to in SOLAS regulations* (MSC.1/Circ.1290)."

## **Part C**

### **Suppression of fire**

#### **Regulation 10** *Fire fighting*

4 The following new paragraph 11 is added after existing section 10:

##### **"11 Fire-extinguishing media restrictions**

The purpose of this paragraph is to protect persons on board against exposure to dangerous substances used in fire fighting, as well as to minimize the impact of fire-extinguishing media that are deemed detrimental to the environment.

##### **11.1 Application**

This regulation applies to ships constructed on or after 1 January 2026.

##### **11.2 General**

11.2.1 The prohibited substances in this regulation shall be delivered to appropriate shore-based reception facilities when removed from the ship.

11.2.2 Use or storage of extinguishing media containing perfluorooctane sulfonic acid (PFOS) shall be prohibited."

## **CHAPTER V**

### **SAFETY OF NAVIGATION**

#### **Regulation 2** *Definitions*

5 The following new paragraphs are added after existing paragraph 7, together with the associated footnotes:

"8 *Bulk carrier* means a bulk carrier as defined in regulation XII/1.1.<sup>1</sup>

9 *Containership* means a ship which is intended primarily to carry containers.<sup>2</sup>

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1 Refer to *Clarification of the term "bulk carrier" and guidance for application of regulations in SOLAS to ships which occasionally carry dry cargoes in bulk and are not determined as bulk carriers in accordance with regulation XII/1.1 and chapter II-1* (resolution MSC.277(85)).

2 Refer to the term "container" as defined in article II of the International Convention for Safe Containers (CSC), 1972."

#### **Regulation 18** *Approval, surveys and performance standards of navigational systems and equipment and voyage data recorder*

6 The following reference is added to the footnote corresponding to paragraph 2:

"*Performance standards for electronic inclinometers* (resolution MSC.363(92))"



## **Regulation 19**

*Carriage requirements for shipborne navigational systems and equipment*

7 The following new paragraph 2.12 is added after existing paragraph 2.11:

"2.12 Containerships and bulk carriers of 3,000 gross tonnage and upwards constructed on or after 1 January 2026 shall be fitted with an electronic inclinometer, or other means, to determine, display and record the ship's roll motion."

## **CHAPTER XIV SAFETY MEASURES FOR SHIPS OPERATING IN POLAR WATERS**

### **Regulation 2**

*Application*

8 Regulation 2 is replaced by the following:

#### **"Regulation 2**

*Application*

1 Unless expressly provided otherwise, this chapter applies to the following ships operating in polar waters:<sup>1</sup>

- .1 ships certified in accordance with chapter I;
- .2 fishing vessels of 24 metres in length overall and above;
- .3 pleasure yachts of 300 gross tonnage and upwards not engaged in trade; and
- .4 cargo ships of 300 gross tonnage and upwards but below 500 gross tonnage.

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<sup>1</sup> Refer to the *Interim safety measures for ships not certified under the SOLAS Convention operating in polar waters* (resolution A.1137(31)).

2 Ships subject to paragraph 1.1 constructed before 1 January 2017 shall meet the relevant requirements of the Polar Code by the first intermediate or renewal survey, whichever occurs first, after 1 January 2018.

3 Ships subject to paragraphs 1.2, 1.3 or 1.4 constructed before 1 January 2026 shall meet the relevant requirements of chapters 9-1 and 11-1 in part I-A of the Polar Code by 1 January 2027.

4 In applying part I-A of the Polar Code, consideration should be given to the additional guidance in part I-B of the Polar Code.

5 This chapter shall not apply to ships owned or operated by a Contracting Government and used, for the time being, only in government non-commercial service. However, ships owned or operated by a Contracting Government and used, for the time being, only in government non-commercial service are encouraged to act in a manner consistent, so far as reasonable and practicable, with this chapter.

6 Nothing in this chapter shall prejudice the rights or obligations of States under international law."

### **Regulation 3**

*Requirements for ships to which this chapter applies*

9 Regulation 3 is replaced by the following:

#### **"Regulation 3**

*Requirements for ships certified in accordance with chapter I*

1 Ships subject to regulation 2.1.1 above shall comply with the requirements of the safety-related provision of the introduction and with part I-A of the Polar Code and shall, in addition to the requirements of regulations I/7, I/8, I/9 and I/10, as applicable, be surveyed and certified, as provided for in that Code.

2 Ships subject to regulation 2.1.1 above holding a certificate issued pursuant to the provisions of paragraph 1 shall be subject to the control established in regulations I/19 and XI-1/4. For this purpose, such certificates shall be treated as a certificate issued under regulation I/12 or I/13."

10 The following new regulation is inserted after existing regulation 3:

#### **"Regulation 3-1**

*Requirements for fishing vessels of 24 metres in length overall and above, pleasure yachts of 300 gross tonnage and upwards not engaged in trade and cargo ships of 300 gross tonnage and upwards but below 500 gross tonnage*

1 Ships subject to regulations 2.1.2, 2.1.3 or 2.1.4 on all voyages in the Antarctic area and voyages in Arctic waters beyond the outer limit of the territorial sea of the Contracting Government whose flag the ship is entitled to fly shall comply with the provisions of chapters 9-1 and 11-1 of part I-A of the Polar Code, taking into account the introduction and the safety-related provisions of paragraphs 1.2, 1.4 and 1.5 of chapter 1 of part I-A of the Polar Code.

2 Notwithstanding paragraph 1 above, the Administration shall determine to what extent the provisions of regulations 9-1.3.1 and 9-1.3.2 of chapter 9-1 of part I-A of the Polar Code do not apply to:

- .1 fishing vessels of 24 metres in length overall and above; and
- .2 ships of 300 gross tonnage and upwards but below 500 gross tonnage not engaged in international voyages."

**APPENDIX**  
**CERTIFICATES**

**Record of equipment for passenger ship safety (Form P)**

**2 Details of life-saving appliances**

11 In the table for "Details of life-saving appliances", entries 10 to 10.2 are replaced by the following:

10	Number of immersion suits
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**Form of Safety Equipment Certificate for Cargo Ships**

***Cargo Ship Safety Equipment Certificate***

**Type of ship**

12 The following new entry is added after "Gas carrier":

"Containership"

**Record of equipment for cargo ship safety (Form E)**

**2 Details of life-saving appliances**

13 In the table for "Details of life-saving appliances", entries 9 to 9.2 are replaced by the following:

9	Number of immersion suits
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**3 Details of navigational systems and equipment**

14 In the table for "Details of navigational systems and equipment", the following new entry is added after existing entry 15 (Bridge navigational watch alarm system (BNWAS)):

"16 Electronic inclinometer"

**Form of Safety Certificate for Nuclear Cargo Ships**

***Nuclear Cargo Ship Safety Certificate***

**Type of Ship**

15 The following new entry is added after "Gas carrier":

"Containership"

## **Record of equipment for cargo ship safety (Form C)**

### **2 Details of life-saving appliances**

16 In the table for "Details of life-saving appliances", entries 9 to 9.2 are replaced by the following:

9	Number of immersion suits
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### **5 Details of navigational systems and equipment**

17 In the table for "Details of navigational systems and equipment", the following new entry is added after existing entry 15 (Bridge navigational watch alarm system (BNWAS)):

"16 Electronic inclinometer"

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**E**

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MSC.1/Circ.1694  
4 July 2025

**UNIFIED INTERPRETATIONS OF SOLAS CHAPTER II-2,  
AND THE 1994 AND 2000 HSC CODES**

1 The Maritime Safety Committee, at its 110th session (18 to 27 June 2025), approved the *Unified interpretations of SOLAS chapter II-2, and the 1994 and 2000 HSC Codes*, prepared by the Sub-Committee on Ship Systems and Equipment, at its eleventh session (24 to 28 February 2025), in order to provide the necessary clarity on how compliance with the requirements to prohibit PFOS will be demonstrated for both new and existing ships, as set out in the annex.

2 Member States are invited to use the annexed unified interpretations as guidance from 1 January 2026 when applying SOLAS regulations II-2/1.2.10 and 10.11.2.2, and regulation 7.9.4 of the 1994 and 2000 HSC Codes, respectively, and to bring them to the attention of all parties concerned.

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## **ANNEX**

### **UNIFIED INTERPRETATIONS OF SOLAS CHAPTER II-2, AND THE 1994 AND 2000 HSC CODES**

#### **SOLAS regulations II-2/1.2.10 and 10.11.2.2, as amended by resolution MSC.532(107), and regulation 7.9.4 of the 1994 and 2000 HSC Codes**

- 1 The phrase "fire-extinguishing media" should include the fire-fighting foams.
- 2 The phrase "containing perfluorooctane sulfonic acid (PFOS)" should mean present in concentrations of PFOS above 10 mg/kg (0.001% by weight).
- 3 Verification that "extinguishing media containing perfluorooctane sulfonic acid (PFOS)" are not used or stored on ships should require the Administration or its recognized organization to review the maker's declaration or laboratory test reports for the extinguishing media covered by the SOLAS Convention, which should be provided to the Administration or to its recognized organization by shipyards, repair yards and equipment makers.
- 4 The declaration issued by the foam maker should contain information about the foam such as, but not limited to: foam type, production period, batch number, reference to type approval/Marine Equipment Directive (MED) Certificate for the foam.
- 5 For extinguishing media installed before 1 January 2026, where the maker's declaration or laboratory test reports are not available, sampling and testing of the extinguishing media on board should be required to be conducted in accordance with a recognized standard.