

Prohibition of use of PFOS in fire extinguishing media on board ships

Notice to: Ship Owners/ Managers/ Operators/ Surveyors/ Auditors

URC25025 06 November 2025

This circular is to inform all parties concerned about the prohibition of using or storing fire-extinguishing media containing **Perfluorooctane Sulfonic Acid (PFOS)** on board ships.

This directive follows crucial amendments to **SOLAS Chapter II-2** and the **High-Speed Craft (HSC) Codes** (1994 and 2000) adopted by the International Maritime Organization (IMO). These changes are mandated by **IMO Resolutions MSC.532(107), MSC.536(107), and MSC.537(107)**, with an effective enforcement date of **January 1, 2026**.

2. Applicability and Implementation Schedule

The prohibition applies to all fire-extinguishing media, encompassing both **fixed and portable systems** and equipment, including firefighting foams.

The implementation timeline is as follows:

- **New Ships:** Vessels with a keel-laying date on or after **January 1, 2026**, must be compliant upon delivery.
- **Existing Ships:** Vessels constructed before **January 1, 2026**, must achieve compliance by the first survey conducted on or after this date.

3. Recommended Actions for Compliance

To ensure timely and effective compliance, URACOS strongly recommends the following actions:

- **Immediate Inventory Assessment:** Conduct a thorough inventory of all fire-extinguishing media currently on board, covering both fixed and portable systems, to assess compliance with the new requirements.
- **Verify Documentation:** Confirm the availability of a **manufacturer's declaration** or a **laboratory test report** for all media. This documentation must verify that the foam concentrate meets IMO requirements and should include details such as foam type, production date, batch number, and reference to its type approval or MED certificate.
- **Engage with Suppliers:** If required reports or declarations are not available, contact the media suppliers immediately to obtain the necessary documentation or to arrange for testing.
- **Removal or Replacement of Non-Compliant Media:** Any fire-extinguishing media found to contain PFOS in concentrations exceeding **10~mg/kg (10 ppm)** must be removed from the vessel or replaced. All replacement media must be approved and certified as PFOS-free according to IMO guidelines.
- **Proper Disposal:** Ensure all removed media are delivered to appropriate **shore-based reception facilities**. This removal and disposal must be recorded in the ship's **official logbook**.
- **Testing Requirements:** For media installed before January 1, 2026, that lack the required declarations, sampling and testing must be conducted in accordance with accepted standards.
- **Crew Training and Awareness:** Educate all crew members and relevant shoreside personnel about these new regulations. Update procedures for fire drills and emergency exercises to reflect the use of new, compliant media.

- **Flag or RO Verification:** Request the ship's Flag Administration or Recognized Organization (RO) to review all declarations and test reports to formally verify that no PFOS-containing media are used or stored onboard.

4. 🌐 Future Outlook

It is anticipated that the IMO, European Union, and other regulatory bodies will continue to adopt stricter measures to restrict environmentally hazardous substances in firefighting media.

5. 🚨 Proactive Measures Required

Shipowners and operators are strongly urged to take proactive measures to ensure full compliance with this prohibition by the **January 1, 2026 deadline**.

Early implementation demonstrates a commitment to environmental responsibility and is crucial for mitigating the risk of **detention during Port State Control (PSC)** inspections, thereby preventing potential operational disruptions.

Annexes: Referenced IMO Resolutions

For your detailed reference and guidance, the full text of the aforementioned IMO Resolutions is attached to this circular:

1. **Annex 1:** MSC.532(107) – Amendments to SOLAS 1974 (Relating to Chapter II-2)
2. **Annex 2:** MSC.536(107) – Amendments to the 1994 HSC Code
3. **Annex 3:** MSC.537(107) – Amendments to the 2000 HSC Code

For further clarification or assistance, please do not hesitate to contact URACOS

Action Required

All Ship Owners, Managers, and Operators are strongly advised to thoroughly review the provisions of this new Regulation and take all necessary measures to ensure their vessels and operations are in full compliance to avoid severe penalties.

Detailed information regarding URACOS circulars, including updates on regulations and guidelines, can be found at <https://uracos.org/circulars>.

Best Regards

UNITED REGISTRATION AND CLASSIFICATION OF SERVICES

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 moveable 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;¹
- .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.²

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 Organization³ 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 Organization² 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.^{2,3}

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.^{2, 3}

¹ 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.

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

³ 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.

* 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 firefighting, 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/1.1.¹

9 *Containership* means a ship which is intended primarily to carry containers.²

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:¹

- .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.

¹ 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
----	---------------------------

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
---	---------------------------

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
---	---------------------------

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"

ANNEX 6

**RESOLUTION MSC.536(107)
(adopted on 8 June 2023)**

**AMENDMENTS TO THE INTERNATIONAL CODE OF SAFETY
FOR HIGH-SPEED CRAFT, 1994 (1994 HSC CODE)**

THE MARITIME SAFETY COMMITTEE,

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

NOTING resolution MSC.36(63), by which it adopted the International Code of Safety for High-Speed Craft ("the 1994 HSC Code") which has become mandatory under chapter X of the International Convention for the Safety of Life at Sea, 1974 ("the Convention"),

NOTING ALSO article VIII(b) and regulation X/1.1 of the Convention concerning the procedure for amending the 1994 HSC Code,

HAVING CONSIDERED, at its 107th session, amendments to the 1994 HSC Code 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 1994 HSC Code, 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 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 CODE OF SAFETY FOR HIGH-SPEED CRAFT, 1994 (1994 HSC CODE)

CHAPTER 7 FIRE SAFETY

Part A General

7.9 Miscellaneous

1 The following new paragraph 7.9.4 is added after existing paragraph 7.9.3.4, together with the associated footnote:

"7.9.4 Fire-extinguishing media restrictions

7.9.4.1 The following restrictions should apply for the use, storage or disposal of perfluorooctane sulfonic acid (PFOS):

- .1 on all craft, use or storage of extinguishing media containing perfluorooctane sulfonic acid (PFOS) should be prohibited no later than the date of the first survey* on or after 1 January 2026; and
- .2 the substances prohibited by the requirements of 7.9.4.1.1 should be delivered to appropriate shore-based reception facilities when removed from the craft.

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

ANNEX 1

FORM OF SAFETY CERTIFICATE FOR HIGH-SPEED CRAFT

Record of Equipment for High-Speed Craft Safety Certificate

2 In the table for "Details of life-saving appliances", entries 9 to 10.2 are replaced by the following:

9	Number of immersion suits
10	Number of anti-exposure suits

ANNEX 7**RESOLUTION MSC.537(107)
(adopted on 8 June 2023)****AMENDMENTS TO THE INTERNATIONAL CODE OF SAFETY
FOR HIGH-SPEED CRAFT, 2000 (2000 HSC CODE)**

THE MARITIME SAFETY COMMITTEE,

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

NOTING resolution MSC.97(73), by which it adopted the International Code of Safety for High-Speed Craft, 2000 ("the 2000 HSC Code") which has become mandatory under chapter X of the International Convention for the Safety of Life at Sea, 1974 ("the Convention"),

NOTING ALSO article VIII(b) and regulation X/1.2 of the Convention concerning the procedure for amending the 2000 HSC Code,

HAVING CONSIDERED, at its 107th session, amendments to the 2000 HSC Code 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 2000 HSC Code, 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 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 CODE OF SAFETY
FOR HIGH-SPEED CRAFT, 2000 (2000 HSC CODE)**

**CHAPTER 7
FIRE SAFETY**

**Part A
General**

7.9 Miscellaneous

1 The following new paragraph 7.9.4 is added after existing paragraph 7.9.3.5, together with the associated footnote:

"7.9.4 Fire-extinguishing media restrictions

7.9.4.1 The following restrictions shall apply for the use, storage or disposal of perfluorooctane sulfonic acid (PFOS):

- .1 on craft constructed on or after 1 January 2026, use or storage of extinguishing media containing perfluorooctane sulfonic acid (PFOS) shall be prohibited;
- .2 craft constructed before 1 January 2026 shall comply with the requirements of 7.9.4.1.1 no later than the date of the first survey* on or after 1 January 2026; and
- .3 the substances prohibited by the requirements of 7.9.4.1.1 or 7.9.4.1.2 shall be delivered to appropriate shore-based reception facilities when removed from the craft.

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

ANNEX 1

FORM OF HIGH-SPEED CRAFT SAFETY CERTIFICATE AND RECORD OF EQUIPMENT

Record of Equipment for High-Speed Craft Safety Certificate

2 In the table for "Details of life-saving appliances", entries 9 to 10.2 are replaced by the following:

9	Number of immersion suits
10	Number of anti-exposure suits
