

Prohibition on the Use and Storage of Fire-extinguishing media Containing PFOS

Background

Perfluoro-Octane Sulfonic Acid (hereinafter referred to as PFOS) has long been used in aqueous film-forming foams (AFFF) because its ultra-low surface tension enables the rapid creation of a uniform aqueous film which is effective in suppressing and extinguishing fires. However, PFOS is known to be harmful to humans, other living organisms and the environment. Therefore, the use of PFOS has been widely banned by the Stockholm Convention on Persistent Organic Pollutants since 2009. Consequently, it has been proposed that a similar restriction should be placed under SOLAS chapter II-2.

Amendments to SOLAS chapter II-2, 1994 HSC Code, and 2000 HSC Code

To further advance global efforts in the maritime sector, the IMO has decided to prohibit the on-board use and storage of fire-extinguishing media containing PFOS with effect from 1 January 2026. Accordingly, SOLAS Chapter II-2 and both the 1994 and 2000 HSC Codes have been amended by resolutions MSC.532(107), MSC.536(107) and MSC.537(107), respectively, as follows:

- For all types of ships and high-speed crafts delivered on or after 1 January 2026, use and storage of fire-extinguishing media containing PFOS (e.g. liquid foam) shall be prohibited;
- For existing ships and high-speed crafts, compliance with this prohibition shall be achieved no later than the first annual, periodical or renewal survey on or after 1 January 2026, whichever comes earlier; and
- Fire-extinguishing media containing PFOS shall be disposed of at an appropriate shore-based reception facility.

For the implementation of the amendments, it is interpreted by MSC.1/Circ.1694 and IACS UI SC 309, as follows:

- Fire-extinguishing media with PFOS concentrations exceeding 10 mg/kg (0.001% by weight) are considered to contain PFOS.
- Maker's declaration¹ or laboratory test reports are acceptable documentation to demonstrate that PFOS is not present.

¹ Maker's declaration should contain information about the foam, such as, foam type, production date, batch No., type approval, etc.



• For all fire-extinguishing media installed before 1 January 2026 without such documentation, sample testing is required.

Implication

Fire-extinguishing media which may contain PFOS (e.g., foam liquid) include, but not limited to, the following examples:

- · Fixed foam fire-extinguishing system
- Deck foam system
- · Portable foam fire-extinguishers; and
- Portable foam applicators

Considering the existing restriction on the use of PFOS under the Stockholm Convention on Persistent Organic Pollutants since 2009, the amendments are not expected to have a significant impact on the maritime industry.

However, in order to verify the compliance on or after 1 Jan 2026, documented evidence confirming that PFOS is not contained (e.g., manufacturer's declarations, test reports, etc.) should be available and kept onboard. Where such evidence cannot be provided, fire-extinguishing media will need to be disposed of at an appropriate shore-based reception facility no later than the first survey on or after 1 January 2026.



Actions to be taken by stakeholders

Shipyards or shipowners/operators shall ensure that documented evidence is provided on board confirming the non-inclusion of PFOS for all shipboard fire-extinguishing media (e.g. foam liquid), no later than ship's delivery (in case of new construction), annual survey, periodical survey or renewal survey, whichever comes first on or after 1 January 2026. Unless compliance may be achieved by the deadline, fire-extinguishing media (e.g. foam liquid) need to be replaced with the one holding such documented evidence and non-compliant media need to be disposed of at an appropriate shore-based reception facility, before the deadline.

Attending surveyor(s) shall confirm that such documented evidence is available on board for all shipboard fire-extinguishing media (e.g. foam liquid) at the time of ship's delivery (in case of new construction), annual survey, periodical survey or renewal survey, whichever comes first on or after 1 January 2026. Any non-compliance, if identified, shall be reported to ship's flag Administration for issuance of a conditional safety certificate (e.g. PSS, SE, or HSC). The end.

General Manager Convention & Legislation Service Team Korean Register

P.I.C KIM Kyoungyong / Principal Surveyor JUNG Bohae / Principal Surveyor

Tel: +82 70 8799 8328

E-mail: convention@krs.co.kr / kykim@krs.co.kr

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