

Implementation of Resolution MSC. 520(106) – Amendments to SOLAS chapter II-2 for safety measure on use of fuel oil



Introduction

Recent amendments to SOLAS Chapter II-2, Regulation 4.2, have been adopted by the International Maritime Organization (IMO) through Resolution MSC.520 (106) to strengthen safety measures related to the use, storage, and testing of fuel oil on ships.

These amendments are aimed at preventing fire risks associated with low-flashpoint fuels and improving the traceability and certification of oil-fuel quality delivered through bunkering operations. The revised regulation was accepted under Article VIII(b) of the SOLAS Convention and shall enter into force on 1 January 2026.

1. Scope of Regulation II-2/4.2

Regulation 4.2 sets out specific arrangements and limitations for systems using oil fuel, lubricating oil, or other flammable oils within machinery spaces. The scope covers:

- Fuel flashpoint limitations: Prohibiting the use of fuel oil having a flashpoint lower than 60°C, unless specifically permitted for emergency generators or certain auxiliary installations outside Category A machinery spaces.
- Structural and thermal protection: Tanks must be part of the ship's structural arrangement and adequately shielded from surfaces with temperatures of 220°C or above.
- System safety arrangement: Existing SOLAS requirements regarding remotely operated quick-closing valves for fuel-oil tanks remain applicable and unchanged by Resolution MSC.520 (106). (for all fuel-oil tanks exceeding 500 liter)
- Testing and certification: Flashpoint testing shall be carried out in accordance with ISO 2719:2016 (Pensky-Martens closed cup method) or other standards acceptable to the Organization.
- Administrative control: Flag Administrations and ship operators must ensure compliance; instances of non-conformity are to be reported to IMO.



The amendments introduced by Resolution MSC.520 (106) are administrative and procedural in nature and do not introduce new design or equipment requirements.

2. Summary of Amendments (MSC.520 (106))

The latest amendment clarifies and expands procedural requirements governing the delivery and verification of oil fuel prior to use onboard ships. Principal modifications include:

2.1 Mandatory Supplier Declaration:

Before bunkering, each ship must be provided with a declaration signed and certified by the fuel-oil supplier or its authorized representative.

This declaration shall confirm compliance with the requirements of SOLAS Regulation II-2/4.2.1.6, and specify the test method used for determining flashpoint.

2.2 Bunker Delivery Note (BDN): Inclusion of Flashpoint Information

The BDN must now record the flashpoint of the fuel oil delivered, either by:

- Specifying the measured flashpoint in degrees Celsius per approved ISO testing method, or
- Declaring that the fuel flashpoint is not less than 60°C.

This addition ensures that all fuels supplied for marine use are traceable and verified against the minimum safety criterion, thereby preventing inadvertent loading of lower-grade combustible fuels.

2.3 Flashpoint test standards:

Flashpoint determination shall be conducted using test methods acceptable to the Organization, such as ISO 2719:2016.

2.4 Retroactive Applicability:

The revised documentation and design requirements extend to existing ships by way of paragraphs 2.1.6 – 2.1.8 of Regulation II-2/4.2. **Consequently, all vessels—new or existing—must comply from 1 January 2026 onward.**

3. Responsibilities and verification

- 1) **Shipowners and managers** are responsible for ensuring that only compliant fuel oil is used onboard.
- 2) **Fuel oil suppliers** are responsible for the accuracy of declarations and bunker delivery documentation.
- 3) **Surveyors** shall verify compliance through documentation review during statutory surveys and audits.

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