
**Petroleum products — Fuels
(class F) — Considerations for fuel
suppliers and users regarding
marine fuel quality in view of the
implementation of maximum 0,50
% sulfur in 2020**

*Produits pétroliers — Combustibles (classe F) — Considérations
à l'usage des fournisseurs de combustibles et des utilisateurs
pour la qualité des combustibles pour la marine en vue de la
mise en application de la teneur maximale en soufre de 0,50 %
en 2020*





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Foreword

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This document was prepared by Technical Committee ISO/TC 28, *Petroleum and related products, fuels and lubricants from natural or synthetic sources*, Subcommittee SC 4, *Classifications and specifications*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This document was developed in cooperation with ship owners, ship operators, classification societies, fuel testing services, engine designers, marine fuel suppliers, traders, fuel additive suppliers and the petroleum industry, in view of the implementation of maximum 0,50 mass % S in marine fuels in 2020 for operation outside Emission Control Areas (ECAs).

Petroleum products — Fuels (class F) — Considerations for fuel suppliers and users regarding marine fuel quality in view of the implementation of maximum 0,50 % sulfur in 2020

1 Scope

This document addresses quality considerations that apply to marine fuels in view of the implementation of maximum 0,50 mass % S in 2020 and the range of marine fuels that will be placed on the market in response to the international statutory requirements to reduce exhaust gas emissions. It defines general requirements that apply to all 0,50 mass % sulfur (S) fuels and confirms the applicability of ISO 8217 for those fuels.

...

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 8217:2017, *Petroleum products — Fuels (class F) — Specifications of marine fuels*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org>

3.1

stability

stability of a residual fuel

resistance to the breakdown and precipitation of asphaltenic sludge despite being subjected to forces, such as thermal and ageing stresses, while handled and stored under normal operating conditions

3.2

cold filter plugging point

CFPP

highest temperature at which a given volume of distillate fuel fails to pass through a standardized filtration device in a specified time when cooled under standardized conditions

[SOURCE: [IP 309](#)]

3.3
cloud point
CP

temperature at which a cloud of wax crystals first appears in a transparent liquid when it is cooled under specified conditions

[SOURCE: [ISO 3015, 3.1](#), modified — In the definition, liquid has been specified to be “transparent”.]

3.4 Total sediment-aged

3.4.1 potential total sediment

TSP
total sediment, determined by [ISO 10307-1:2009](#), after ageing a sample of residual fuel for 24 h at 100 °C under prescribed conditions

[SOURCE: [ISO 10307-2:2009, 3.1](#)]

3.4.2 accelerated total sediment

TSA
total sediment, determined by [ISO 10307-1:2009](#), after dilution of a sample of residual fuel with hexadecane in the ratio of 1 ml per 10 g of sample under carefully controlled conditions, followed by storage for 1h at 100 °C

[SOURCE: [ISO 10307-2:2009, 3.2](#)]

3.5
microphone

transducer that converts sound into an electrical signal

[SOURCE: [ISO 22259:2019, 3.14](#)]

3.6
headphone

transducer that converts an electrical signal into sound, designed to be worn close to the ear

[SOURCE: [ISO 22259:2019, 3.17](#)]

3.7
headset

term headphones, **display** headphone **not resolved via ID** headphones combined with a *microphone* ([3.5](#))

[SOURCE: [ISO 20109:2016, 3.5](#)]

4 Main content

4.1 General

Here's where you place your main content.

4.2 Data models

The following data models are used by other data models specified in this document.

4.2.1 Basic data types

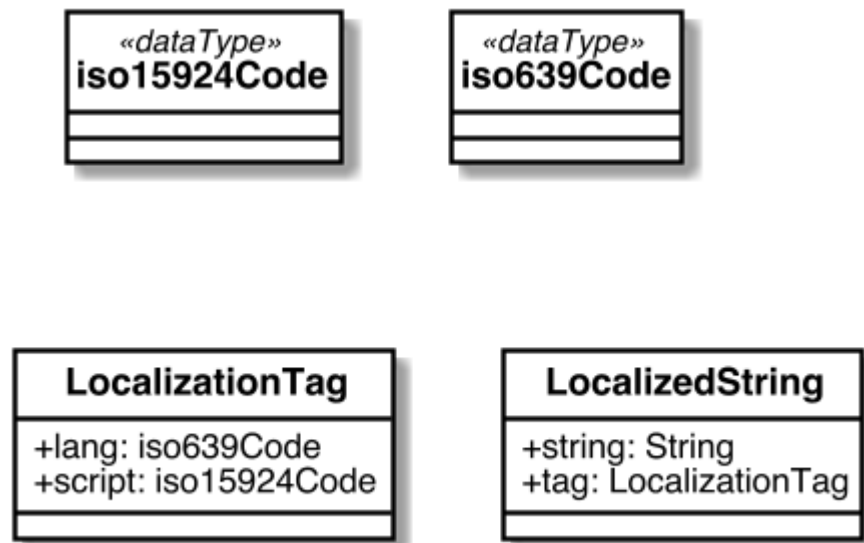


Figure 1

Annex A

(normative)

Annex One

This is a normative annex.

Annex B (informative)

Annex Two

This is an informative annex.

Bibliography

- [1] ISO 3015, *Petroleum and related products from natural or synthetic sources — Determination of cloud point*
- [2] ISO 3016, *Petroleum and related products from natural or synthetic sources — Determination of pour point*
- [3] ISO 10307-1:2009, *Petroleum products — Total sediment in residual fuel oils — Part 1: Determination by hot filtration*
- [4] ISO 10307-2:2009, *Petroleum products — Total sediment in residual fuel oils — Part 2: Determination using standard procedures for ageing*
- [5] ISO 20109:2016, *Simultaneous interpreting — Equipment — Requirements*
- [6] ISO 22259:2019, *Conference systems — Equipment — Requirements*
- [7] IP 309, *Diesel and domestic heating fuels — Determination of cold filter plugging point*
- [8] INTERNATIONAL MARITIME ORGANIZATION (IMO), Marine Pollution (MARPOL) Annex VI — as amended. IMO Protocol of 1997, as amended by resolution MEPC.176(58) in 2008, to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 related thereto

