



ISO 8216-1

**Products from petroleum, synthetic
and renewable sources — Fuels
(class F) classification —**

**Part 1:
Categories of marine fuels**

*Produits d'origine pétrolière, synthétique ou renouvelable —
Classification des combustibles (classe F) —*

Partie 1: Catégories des combustibles pour la marine

**Sixth edition
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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*.

This sixth edition cancels and replaces the fifth edition (ISO 8216-1:2017), which has been technically revised.

The main changes are as follows:

- the maximum FAME content of ISO-F-DF grades has been increased to 100 % by mass;
- ISO-F-RM grades have been added in [Table 1](#) for residual fuels with a sulfur content at or below 0,50 % by mass or 0,10 % by mass;
- ISO-F-RF grades have been added in [Table 1](#) for residual fuels including FAME, the content of which is agreed between the buyer and the seller;
- the number of ISO-F-RM grades for residual fuels has been reduced. These grades are now for residual fuels with a sulfur content exceeding 0,50 % by mass.

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The classification in this document was prepared in cooperation with ship owners, ship operators, shipping associations, national standards bodies, classification societies, fuel testing services, engine designers, fuel treatment equipment manufacturers, marine fuel suppliers, fuel additive suppliers and the petroleum industry to meet the requirements for marine fuels supplied on a world-wide basis for consumption on board ships.

The increased focus on environmental concerns and legislation to address them are leading to a transition in the nature of marine fuels. There is a shift away from marine fuels supplied from traditional oil products derived from the processing of petroleum crude, and a shift towards oil products derived from renewable and/or alternative sources. The classification takes into consideration the diverse nature of these fuels and incorporates a number of categories of distillate and residual fuels, even though it is possible that not all categories are available in every supply location.

The subcategories (M) for middle distillate fuels and (H) for heavy distillate fuels of ISO-F-D originally described in ISO 8216-99 have not been used in this document, to avoid misunderstanding with M and H used in [Clause 4](#).

Specifications of marine fuel categories are given in ISO 8217.