E**‰onMobi**l

Marine distillate fuels ISO 8217:2012

Test	Unit		Test method		Limits		Grade		
		ASTM	IP	ISO		DMX	DMA	DMZ	DMB
Viscosity at 40°C	mm²/s (cSt)	D445	71	3104	max. min.	5.500 1.400	6.000 2.000	6.000 3.000	11.00 2.000
Density at 15°C	kg/m³	D1298	160	3675 or 12185	max.	-	890.0	890.0	900.0
Cetane index	-	4737	380	4264	min.	45	40	40	35
Sulfur	mass %	D4294	336	8754, 14596	max.	1.00	1.50	1.50	2.00
Flash point	°C	D93	34	2719	min.	43	60	60	60
Hydrogen sulfide	mg/kg	-	570	-	max.	2.00	2.00	2.00	2.00
Acid number	mg KOH/g	D664	-	-	max.	0.5	0.5	0.5	0.5
Total sediment hot filtration	mass %	-	375	10307-1	max.	-	-	-	0.10
Oxidation stability	g/m³	-	388	12205	max.	25	25	25	25†
Carbon residue, micro	mass %	D4530	398	10370	max.	0.30	0.30	0.30	0.30
Cloud point	°C	-	219	3015	max.	-16	-	-	-
Pour point Winter quality Summer quality	℃ ℃	D97 D97	15 15	3016 3016	max. max.	-	-6 0	-6 0	0 6
Appearance	-	-	-	-	-	Clear and bright			
Water	volume %	D95	74	3733	max.	-	-	-	0.30
Ash	mass %	D482	4	6245	max.	0.010	0.010	0.010	0.010
Lubricity*	μm	-	-	12156-1	max.	520	520	520	520†

* This requirement is applicable to fuels with a sulfur content below 0.05%.

† If the sample is not clear and bright, the test cannot be undertaken and the limit shall not apply.

ExxonMobil Marine Fuels specifications

Exxon Mobil Corporation and affiliated companies (ExxonMobil) supply marine fuels against the attached specifications, which apply to fuels manufactured by ExxonMobil and those purchased or exchanged or unless otherwise agreed. These specifications are regularly reviewed to encompass both equipment-builder and industry requirements, including standard setting organisations such as ASTM and ISO. These specifications comply with ISO 8217:2012. Therefore, please note that these specifications are subject to change without notice. In addition, local conditions may require deviation from published specifications or may offer a higher quality, but without guarantee. Please contact your ExxonMobil Marine Fuels representative regarding current typical qualities at your nominated bunker port. Final product quality specifications are subject to order confirmation details.

This document is supplied for information only and is not part of any contract for the supply of marine fuels. Any warranties as to the quality of marine fuels supplied will be set out separately in a contract with the relevant ExxonMobil Marine Fuels entity.

Test methods

The test methods indicated are used by ExxonMobil's laboratories worldwide. The methods are similar, but not necessarily identical to those in the ISO specifications.

Density

All densities are in units of kg/m3 at 15° C. To convert these units to kg/L divide by 1000.

Viscosity

Local practice may dictate viscosity measurement at other temperatures with conversion to 50°C. In case of dispute, the same method will be used to confirm the original measurement. Note: original measurement temperature will be used in the case of dispute.

Calculated values

Properties of interest to operators may be approximated by calculation from measured specification properties. These include calculated energy content and CCAI. ExxonMobil does not calculate these values and does not recognize calculated energy content as a specification.

Sampling and delivery

ExxonMobil employs continuous drip samplers as the preferred method for obtaining representative samples of a marine fuel oil delivery. Samples are drawn following the procedures set out in the ExxonMobil Sampling Policy. Purchasers may wish to use the services of an independent survey at delivery.

Quantity measurement is according to the terms of the most current version of ExxonMobil Marine Fuels General Conditions of Contract. ExxonMobil uses certified calibrations of barges and tanks to determine quantities delivered.

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