

ISO 8217 Fuel Standard, Third Edition 2005

For marine distillate fuels and for marine residual fuels.

MARINE DISTILLATE FUELS

Parameter	Unit	Limit	DMX	DMA	DMB	DMC
Density at 15 °C	kg/m ³	Max	-	890.0	900.0	920.0
Viscosity at 40 °C	mm ² /s	Max	5.5	6.0	11.0	14.0
Viscosity at 40 °C	mm ² /s	Min	1.4	1.5	-	-
Micro Carbon Residue at 10% Residue	% m/m	Max	0.30	0.30	-	-
Micro Carbon Residue	% m/m	Max	-	-	0.30	2.50
Water	% V/V	Max	-	-	0.3	0.3
Sulphur ^c	% (m/m)	Max	1.0	1.5	2.0	2.0
Total Sediment Existent	% m/m	Max	-	-	0.10	0.10
Ash	% m/m	Max	0.01	0.01	0.01	0.05
Vanadium	mg/kg	Max	-	-	-	100
Aluminium + Silicon	mg/kg	Max	-	-	-	25
Flash point	°C	Min	43	60	60	60
Pour point, Summer	°C	Max	-	0	6	6
Pour point, Winter	°C	Max	-	-6	0	0
Cloud point	°C	Max	-16	-	-	-
Calculated Cetane Index		Min	45	40	35	-
Appearance			Clear & Bright		-	-
Zinc ^d	mg/kg	Max	-	-	-	15
Phosphorus ^d	mg/kg	Max	-	-	-	15
Calcium ^d	mg/kg	Max	-	-	-	30
^c	A sulphur limit of 1.5% m/m will apply in SOx Emission Control Areas designated by the International Maritime Organization, when its relevant Protocol comes into force. There may be local variations					
^d	The Fuel shall be free of ULO. A Fuel is considered to be free of ULO if one or more of the elements are below the limits. All three elements shall exceed the limits before deemed to contain ULO.					

MARINE RESIDUAL FUELS

Parameter	Unit	Limit	RMA 30	RMB 30	RMD 80	RME 180	RMF 180	RMG 380	RMH 380	RMK 380	RMH 700	RMK 700
Density at 15 °C	kg/m ³	Max	960.0	975.0	980.0	991.0		991.0		1010.0	991.0	1010.0
Viscosity at 50 °C	mm ² /s	Max	30.0		80.0	180.0		380.0			700	
Water	% V/V	Max	0.5		0.5	0.5		0.5			0.5	
Micro Carbon Residue	% m/m	Max	10		14	15	20	18	22		22	
Sulphur ^c	% m/m	Max	3.5		4.00	4.50		4.50			4.50	
Ash	% m/m	Max	0.10		0.10	0.10	0.15	0.15	0.15		0.15	
Vanadium	mg/kg	Max	150		350	200	500	300	600		600	
Flash point	°C	Min	60		60	60		60			60	
Pour point, Summer	°C	Max	6	24	30	30		30			30	
Pour point, Winter	°C	Max	0	24	30	30		30			30	
Aluminium + Silicon	mg/kg	Max	80		80	80		80			80	
Total Sediment, Potential	% m/m	Max	0.10		0.10	0.10		0.10			0.10	
Zinc ^d	mg/kg	Max						15				
Phosphorus ^d	mg/kg	Max						15				
Calcium ^d	mg/kg	Max						30				
^c	A sulphur limit of 1.5% m/m will apply in SOx Emission Control Areas designated by the International Maritime Organization, when its relevant Protocol comes into force. There may be local variations.											
^d	The Fuel shall be free of ULO. A Fuel is considered to be free of ULO if one or more of the elements are below the limits. All three elements shall exceed the limits before deemed to contain ULO.											

Source: ISO 8217 Third Edition 2005 -11-01
Petroleum products - Fuels (class F) - Specifications of marine fuels