

Classification ISO 8217 (2005)

Category ISO-F- /TOTAL Marine Fuels specifications			ISO RMA30	ISO RMA 30	ISO RMD 80	ISO RME 180	ISO RMF 180	ISO RMG 380	ISO RMH 380	ISO RMK 380	ISO RMH 700	ISO RMK 700	Test method reference
Caractéristique	Dim	Limit											
Density at 15°C	kg/m3	max	960,0	975,0	980,0	991,0		991,0		1010,0	991,0	1010,0	ISO 3675 or ISO 12185
Kinematic Viscosity at 50°C	mm²/s (a)	max	30		80	180		380			700		ISO 3104
Flash point	°C	min	60		60	60		60			60		ISO 2719
Pour point (b)	°C	winter max	0	24	30	30		30			30		ISO 3016
		summer max	6	24	30	30		30			30		ISO 3016
Carbon residue	%(m/m)	max	10		14	15	20	18	22		22		ISO 10370
Ash	%(m/m)	max	0,10		0,10	0,10	0,15	0,15			0,15		ISO 6245
Water	%(V/V)	max	0,5		0,5	0,5		0,5			0,5		ISO 3733
Sulphur ^(c)	%(m/m)	max	3,5		4,0	4,5		4,5			4,5		ISO 8754 ou ISO 14596
Vanadium	mg/kg	max	150		350	200	500	300	600		600		ISO 14597 ou IP 501 ou IP 470
Aluminium plus silicon	mg/kg	max	80		80	80		80			80		ISO 10478 ou IP 501 ou IP 470
Total sediment, potential	%(m/m)	max	0,10		0,10	0,10		0,10			0,10		ISO 10307-2

Used lubricating oil (ULO)			The fuel shall be free of ULO ^(d)						
Calcium	mg/kg	max	30	30	30	30	30	30	ou IP 501 ou IP 470
Phosphore	mg/kg	max	15	15	15	15	15	15	ou IP 501 ou IP 470
Zinc	mg/kg	max	15	15	15	15	15	15	ou IP 501 ou IP 470

a) Annex C gives a brief viscosity/temperature table, for information purposes only. 1 m²/s = 1 cSt

b) Purchasers should ensure that this pour point is suitable for the equipment on board, especially if the vessel operates in both the northern and southern hemispheres.

c) A sulfur 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) A fuel shall be considered to be free of ULO if one or more of the elements zinc, phosphorus and calcium are below or at the specified limits. All three elements shall exceed the same limits before a fuel shall be deemed to contain ULO.