

ISO 8217 : 2005 E

Characteristic	Units	Limits	RMA30	RMB30	RMD80	RME180	RMF180	RMG380	RMH380	RMK380	RMH700	RMK700	ISO
Density at 15°C	kg/m ³	max	960.0	975.0	980.0	991.0	991.0	991.0	991.0	1010.0	991.0	1010.0	3675 or 12185
Kinematic Viscosity at 50°C	mm ² /s a	max	30.0	30.0	80.0	180.0	180.0	380.0	380.0	380.0	700.0	700.0	3104
Flash Point	°C	min	60	60	60	60	60	60	60	60	60	60	2719
Pour Point (upper) b													
- Winter Quality	°C	max	0	24	30	30	30	30	30	30	30	30	3016
- Summer Quality	°C	max	6	24	30	30	30	30	30	30	30	30	3016
Carbon residue	%(m/m)	max	10	10	14	15	20	18	22	22	22	22	10370
Ash	%(m/m)	max	0.10	0.10	0.10	0.10	0.15	0.15	0.15	0.15	0.15	0.15	6245
Water	%(V/V)	max	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	3733
Sulfur c	%(m/m)	max	3.50	3.50	4.00	4.50	4.50	4.50	4.50	4.50	4.50	4.50	8754 or 14596
Vanadium	mg/kg	max	150	150	350	200	500	300	600	600	600	600	14597, IP 501 or IP 470
Total sediment potential	%(m/m)	max	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	10307-2
Aluminium plus silicon	mg/kg	max	80	80	80	80	80	80	80	80	80	80	10478, IP 501 or IP 470
Used lubricating oil (ULO)			***** The fuel shall be free of ULO (d) *****										
- Zinc	mg/kg	max	15	15	15	15	15	15	15	15	15	15	IP 501 or IP 470
- Phosphorus	mg/kg	max	15	15	15	15	15	15	15	15	15	15	IP 501 or IP 500
- Calcium	mg/kg	max	30	30	30	30	30	30	30	30	30	30	IP 501 or IP 470

a. Annex C gives a brief viscosity/temperature table, for information purposes only. 1 mm²/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 SO_x 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 used lubricating oils (ULO's) 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.