



Specifications of Marine Fuels

Marine Residual Fuels

Parameter	Unit	Limit	RMB 30	RMD 80	RME 180
Density at 15 °C	kg/m³	Max	975	980.0	991.0
Viscosity at 50 ° C	mm²/s	Max	30.0	80.0	180.0
Water	% V/V	Max	0.5	0.5	0.5
Micro Carbon Residue	% m/m	Max	10	14	15
Sulfur *	% m/m	Max	3.5	4.00	4.50
Ash	% m/m	Max	0.10	0.10	0.10
Vanadium	mg/kg	Max	150	350	200
Flash point	°C	Min	60	60	60
Pour point, Summer	°C	Max	24	30	30
Pour point, Winter	°C	Max	24	30	30
Aluminium + Silicon	mg/kg	Max	80	80	80
Total Sediment Potential	% m/m	Max	0.10	0.10	0.10
Zinc **	mg/kg	Max	15	15	15
Phosphorus **	mg/kg	Max	15	15	15
Calcium **	mg/kg	Max	30	30	30

^{*} 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.

^{**} The Fuel shall be free of Used Lubrication Oil (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.