



## **Specifications of Marine Fuels**

## Marine Residual Fuels - IFO 380

Parameter	Unit	Limit	RMG 380
Density at 15 °C	kg/m³	Max	991.0
Viscosity at 50 ° C	mm²/s	Max	380.0
Water	% V/V	Max	0.5
Micro Carbon Residue	% m/m	Max	18
Sulfur *	% m/m	Max	4.50
Ash	% m/m	Max	0.15
Vanadium	mg/kg	Max	300
Flash point	°C	Min	60
Pour point, Summer	°C	Max	30
Pour point, Winter	°C	Max	30
Aluminium + Silicon	mg/kg	Max	80
Total Sediment Potential	% m/m	Max	0.10
Zinc **	mg/kg	Max	15
Phosphorus **	mg/kg	Max	15
Calcium **	mg/kg	Max	30

<sup>\*</sup> 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.

<sup>\*\*</sup> 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.