Helmsman Supply Limited
We Create, We Serve

HELMSMAN SUPPLY LIMITED

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MARINE DISTILLATE FUELS *(ISO 8217 2010 Fuel Standard for marine residual fuels)*

Limit	Parameter	DMX	DMA	DMZ	DMB
Max.	Viscosity at 40°C (mm^2/s)	5.500	6.000	6.000	11.00
Min.	Viscosity at 40°C (mm^2/s)	1.400	2.000	3.000	2.000
Max.	Micro Carbon Residue at 10% Residue (% m/m)	0.30	0.30	0.30	-
Max.	Density at 15°C (kg/m3)	-	890.0	890.0	900.0
Max.	Micro Carbon Residue (% m/m)	-	-	-	0.30
Max.	Sulphur (% m/m)	1.00	1.50	1.50	2.00
Max.	Water (% V/V)	-	-	-	0.30
Max.	Total sediment by hot filtration (% m/m)	-	-	-	0.10
Max.	Ash (% m/m)	0.010	0.010	0.010	0.010
Min.	Flash point (0°C)	43.0	60.0	60.0	60.0
Max.	Pour point in Summer (0°C)	-	0	0	6
Max.	Pour point in Winter (°C)	-	-6	-6	0
Max.	Cloud point (°C)	-16	-	-	-
Min.	Calculated Cetane Index	45	40	40	35
Max.	Acid Number (mgKOH/g)	0.5	0.5	0.5	0.5
Max.	Oxidation stability (g/m^3)	25	25	25	25
Max.	Lubricity, corrected wear scar diameter (wsd 1.4 at 60°C) (um)	520	520	520	520
Max.	Hydrogen sulphide (mg/kg)	2.00	2.00	2.00	2.00
	Appearance	Clear & Bright			-

MARINE RESIDUAL FUELS

Limit	Parameter	RMA 10	RMB 30	RMD 80	RME 180	RMG 180	RMG 380	RMG 500	RMG 700	RMK 380	RMK 500	RMK 700
Max.	Viscosity at 50°C (mm^2/s)	10.00	30.00	80.00	180.0	180.0	380.0	500.0	700.0	380.0	500.0	700.0
Max.	Density at 15°C (kg/m^3)	920.0	960.0	975.0	991.0	991.0				1010.0		
Max.	Micro Carbon Residue (% m/m)	2.50	10.00	14.00	15.00	18.00				20.00		
Max.	Aluminium + Silicon (mg/kg)	25	40		50	60						
Max.	Sodium (mg/kg)	50	100		50	100						
Max.	Ash (% m/m)	0.040	0.070			0.100				0.150		
Max.	Vanadium (mg/kg)	50	150			350				450		
Max.	CCAI	850	860			870						
Max.	Water (% V/V)	0.30	0.50									
Max.	Pour point (upper) in Summer (°C)	6	30									
Max.	Pour point (upper) in Winter (°C)	0	30									
Min.	Flash point (°C)	60.0										
Max.	Sulphur (% m/m)	Statutory requirements										
Max.	Total Sediment, aged (% m/m)	0.10										
Max.	Acid Number (mgKOH/g)	2.5										
	Used lubricating oils (ULO): Calcium and Zinc; or Calcium and Phosphorus (mg/kg)	The fuel shall be free from ULO, and shall be considered to contain ULO when either one of the following conditions is met: Calcium > 30 and zinc > 15; or Calcium > 30 and phosphorus > 15.										
Max.	Hydrogen sulphide (mg/kg)	2.00										