



## ISO 8217 2012 FUEL STANDARD FOR MARINE DISTILLATE FUELS

### MARINE DISTILLATE FUELS

Limit	Parameter	DMX	DMA	DMZ	DMB
Max.	Kinematic Viscosity at 40°C (mm <sup>2</sup> /s)	5.500	6.000	6.000	11.000
Min.	Kinematic Viscosity at 40°C (mm <sup>2</sup> /s)	1.400	2.000	3.000	2.000
Max.	Density at 15°C (kg/m <sup>3</sup> )	-	890.0	890.0	900.0
Min.	Calculated cetane index	45	40	40	35
Max.	Sulphur (% m/m)	1.00	1.50	1.50	2.00
Min.	Flash point (°C)	43	60	60	60
Max.	Hydrogen sulphide (mg/kg)	2.00	2.00	2.00	2.00
Max.	Acid number (mg KOH/g)	0.5	0.5	0.5	0.5
Max.	Total sediment by hot filtration (% m/m)	-	-	-	0.10
Max.	Oxidation stability (g/m <sup>3</sup> )	25	25	25	25
Max.	Micro Carbon Residue at 10% Residue (% m/m)	0.30	0.30	0.30	-
Max.	Micro Carbon Residue (% m/m)	-	-	-	0.30
Max.	Cloud point (°C)	-16	-	-	-
Max.	Pour point in Summer (upper quality, °C)	-	0	0	6
Max.	Pour point in Winter (upper quality, °C)	-	-6	-6	0
Max.	Water (Volume %)	-	-	-	0.30
Max.	Ash (% m/m)	0.010	0.010	0.010	0.010
Max.	Lubricity, corrected wear scar diameter (wsd 1.4) at 60 °C (um)	520	520	520	520
Max.	Appearance	Clear and bright			-

The above is a service for informational purposes only. Rotarec assumes no responsibility for any errors or omissions.



## ISO 8217 2012 FUEL STANDARD FOR MARINE RESIDUAL FUELS

### MARINE RESIDUAL FUELS

Limit	Parameter	RMA	RMB	RMD	RME	RMG				RMK			
		10	30	80	180	180	380	500	700	380	500	700	
Max.	Kinematic Viscosity at 50°C (mm <sup>2</sup> /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 <sup>3</sup> )	920.0	960.0	975.0	991.0	991.0				1010.0			
Max.	CCAI	850	860			870							
Max.	Sulphur (% m/m)	Statutory requirements											
Min.	Flash point (°C)	60.0											
Max.	Hydrogen sulphide (mg/kg)	2.00											
Max.	Acid Number (mgKOH/g)	2.5											
Max.	Total Sediment. aged (% m/m)	0.10											
Max.	Micro Carbon Residue (% m/m)	2.50	10.00	14.00	15.00	18.00				20.00			
Max.	Pour point (upper) in Summer (°C)	6			30								
Max.	Pour point (upper) in Winter (°C)	0			30								
Max.	Water (% V/V)	0.30	0.50										
Max.	Ash (% m/m)	0.040	0.070			0.100				0.150			
Max.	Vanadium (mg/kg)	50	150			350				450			
Max.	Sodium (mg/kg)	50	100	50	100				100				
Max.	Aluminium plus silicon (mg/kg)	25	40	50	60								
	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											

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