



# ISO 8217 2010 FUEL STANDARD FOR MARINE DISTILLATE FUELS

## MARINE DISTILLATE FUELS

Limit	Parameter	DMX	DMA	DMZ	DMB
Max.	Viscosity at 40°C (mm <sup>2</sup> /s)	5.500	6.000	6.000	11.00
Min.	Viscosity at 40°C (mm <sup>2</sup> /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/m <sup>3</sup> )	-	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 <sup>3</sup> )	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			-

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

Dan-Bunkering has been leading in the bunker business for more than 3 decades, arranging bunker supplies; fuels, lubricants, and other related products and services for vessels all over the world. The head office is situated in Middelfart with offices in Copenhagen, Shanghai, Kaliningrad, Singapore, Monaco, Houston, Beijing, Dubai, Valparaiso, Stamford, and Sydney. More than 70 dedicated and service-minded bunker traders are ready to guide new and existing clients. Dan-Bunkering is part of a professional and financially strong group with interests in ship-owning and shipping activities.



# ISO 8217 2010 FUEL STANDARD FOR MARINE RESIDUAL FUELS

## MARINE RESIDUAL FUELS

Limit	Parameter	RMA	RMB	RMD	RME	RMG				380	RMK	700
		10	30	80	180	180	380	500	700		500	
Max.	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.	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										

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