

## ISO 8217: 2017 FUEL STANDARD FOR MARINE DISTILLATE FUELS

PARAMETER	UNIT	LIMIT	DMX	DMA	DFA	DMZ	DFZ	DMB	DFB
Kinematic Viscosity at 40°C	mm <sup>2</sup> /S	Max	5,500	6,000		6,000		11,00	
		Min	1,400	2,000		3,000		2,000	
Density at 15°C	kg/m <sup>3</sup>	Max		890,0		890,0		900,0	
Calculated cetane index		Min	45	40		40		35	
Sulphur	Mass %	Max	1,00	1,00		1,00		1,50	
Flash point	°C	Min	43	60		60		60	
Hydrogen sulphide	mg/kg	Max	2,00	2,00		2,00		2,00	
Acid number	mg KOH/g	Max	0,5	0,5		0,5		0,5	
Total sediment by hot filtration	Mass %	Max						0,10	
Oxidation stability	g/m <sup>3</sup>	Max	25	25		25		25	
Micro Carbon Residue at 10% Residue (% m/m)	Mass %	Max	0,30	0,30		0,30			
Micro Carbon Residue (% m/m)	Mass %	Max						0,30	
Cloud point in Summer (upper quality)	°C	Max	-16						
Cloud point in Winter (upper quality)	°C	Max	-16	Report		Report			
Pour point in Summer (upper quality)	°C	Max		0		0		6	
Pour point in Winter (upper quality)	°C	Max		-6		-6		0	
Cold filter plugging point in Summer (upper quality)	°C	Max							
Cold filter plugging point in Winter (upper quality)	°C	Max		Report		Report			
Water	Volume %	Max						0,30	
Ash	Mass %	Max	0,010	0,010		0,010		0,010	
Fatty acid methyl ester (FAME)	Volume %	Max			0,7		0,7		0,7
Lubricity, corrected wear scar diameter (wsd 1,4 at 60 °C)	um	Max	520	520		520		520	
Appearance			Clear and bright						

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### CONTACT INFORMATION

Please contact Unioil Supply for more information about ISO specifications at:

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# ISO 8217: 2017 FUEL STANDARD FOR MARINE RESIDUAL FUELS

PARAMETER	UNIT	LI-MIT	RMA	RMB	RMD	RME	RMG			RMK			
			10	30	80	180	180	380	500	700	380	500	700
Kinematic Viscosity at 50°C	mm <sup>2</sup> /S	Max	10,00	30,00	80,00	180,0	180,0	380,0	500,0	700,0	380,0	500,0	700,0
Density at 15°C	kg/m <sup>3</sup>	Max	920,0	960,0	975,0	991,0	991,0			1.010,0			
CCAI		Max	850	860		870							
Sulphur	Mass %	Max	Statutory requirements										
Flash point	°C	Min				60,0							
Hydrogen sulphide	mg/kg	Max				2,00							
Acid number	mg KOH/g	Max				2,5							
Total sediment aged	Mass %	Max				0,10							
Micro Carbon Residue (% m/m)	Mass %	Max	2,50	10,00	14,00	15,00	18,00			20,00			
Pour point in Summer (upper quality)	°C	Max	6			30							
Pour point in Winter (upper quality)	°C	Max	0			30							
Water	Volume %	Max	0,30			0,50							
Ash	Mass %	Max	0,040		0,070		0,100				0,150		
Vanadium	mg/kg	Max	50		150		350				450		
Sodium	mg/kg	Max	50		100		50		100		100		
Aluminium plus silicon	mg/kg	Max	25		40		50		60				
Used lubricating oil (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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