

Fuel Standards					Classification of Fuel Oil														
					IFO 30			IFO 180		IFO 380					MDO	MGO			
ISO 8217:2005(E)					RMA 30	RMB 30	RMD 80	RME 180	RMF 180	RMG 380	RMH 380	RMK 380	RMH 700	RMK 700	DMC	DMB	DMA	DMX	
Characteristics	Unit	Limit	Test Method																
Density at 15 °C	kg/m <sup>3</sup>	max	D1298	ISO3675 or ISO12185	960	975	980	991	991	991	991	1010	991	1010	920	900	890		
Viscosity at 50 °C	mm <sup>2</sup> /s	max	D445	ISO 3104	30		80	180		380			700		-	-	-	-	
Viscosity at 40 °C	mm <sup>2</sup> /s	min	D445	ISO 3105				-	-	-	-	-			-	-	1.5	1.4	
		max	D445	ISO 3106				-	-	-	-	-			14	11	6	5.5	
Flash Point	°C	min	D93	ISO 2719	60										60	60	60	43	
Pour Point	winter quality	°C	max	D97	ISO 3016	0	24	30	30		30			30		0	0	-6	-
	(upper) summer quality	°C	max	D97	ISO 3017	6	24	30	30		30			30		6	6	0	-
Cetane Index		min	D976	ISO 4264				-	-	-	-	-			-	35	40	45	
Carbon Residue(Micro Method)	%(m/m)	max		ISO 10370											2.5	0.3	0.3	0.3	
on 10%(v/v) distillation																			
Carbon Residue	%(m/m)	max	D4530	ISO 10371	10	14	15	20	18	22		22		-	-	-	-		
Ash	%(m/m)	max	D482	ISO 6245	0.1	0.1	0.1	0.15	0.15			0.15		0.05	0.01	0.01	0.01		
Appearance	-	-													-	f	Clear and bright		
Water	%(v/v)	max	D95	ISO 3733	0.5	0.5	0.5		0.5			0.5		0.3	0.3	-	-		
Sulfur	%(m/m)	max	D4294	ISO 8754 or ISO 14596	3.5	4	4.5		4.5			4.5		2	2	1.5	1		
				ISO 14597	150	350	200	500	300	600		600		100					
Vanadium	mg/kg	max	D5708	ISO 14597	150	350	200	500	300	600		600		100					
Aluminium+Silicon	mg/kg	max	D5184	or IP501 or IP470	80		80	80		80			80		25	-	-	-	
Total Existing Sediment	%(m/m)	max	D473	ISO 10307-1											0.1	0.1	-	-	
Total Sediment Potential	%(m/m)	max	D4870	ISO 10307-2	0.1	0.1	0.1		0.1			0.1		-	-	-	-		