

Marine distillate fuels

Test	Unit	Test method			Limits	Grade			
		ASTM	IP	ISO		DMX	DMA	DMZ	DMB
Viscosity at 40°C	mm ² /s (cSt)	D445	71	3104	max. min.	5.500 1.400	6.000 2.000	6.000 3.000	11.00 2.000
Density at 15°C	kg/m ³	D1298	160	3675 or 12185	max.	-	890.0	890.0	900.0
Cetane index	-	4737	380	4264	min.	45	40	40	35
Sulfur	mass %	D4294	336	8754, 14596	max.	1.00	1.50	1.50	2.00
Flash point	°C	D93	34	2719	min.	43	60	60	60
Hydrogen sulfide	mg/kg	-	570	-	max.	2.00	2.00	2.00	2.00
Acid number	mg KOH/g	D664	-	-	max.	0.5	0.5	0.5	0.5
Total sediment hot filtration	mass %	-	375	10307-1	max.	-	-	-	0.10
Oxidation stability	g/m ³	-	388	12205	max.	25	25	25	25 [^]
Carbon residue, micro	mass %	D4530	398	10370	max.	0.30	0.30	0.30	0.30
Cloud point	°C	-	219	3015	max.	-16	-	-	-
Pour point Winter quality	°C	D97	15	3016	max.	-6	-6	-6	0
Summer quality	°C	D97	15	3016	max.	0	0	0	6
Appearance	-	-	-	-	-	Clear and bright			
Water	volume %	D95	74	3733	max.	-	-	-	0.30
Ash	mass %	D482	4	6245	max.	0.010	0.010	0.010	0.010
Lubricity*	µm	-	-	12156-1	max.	520	520	520	520 [^]

[^] If the sample is not clear and bright, the test cannot be undertaken and the limit shall not apply.

* This requirement is applicable to fuels with a sulfur content below 0.05%

