

Marine Diesel Fuel Oil

Reference ID

Synonyms: Distillate Marine Diesel
Marine Fuel Oil 30

Marine diesel is a heavy gas oil usually used for marine purposes only. Typically used by medium speed and medium/high speed marine diesel engines. Also used in the larger slow speed and medium speed propulsion engine which normally burn residual fuel.

Data from Burnett 85 are mean values for worldwide samples of commercial marine fuels.

Data from Shell 1999 were taken from MSDS Number 361-301.

Flash Point (°C)

Evaporation
(volume %)

0	64	Daling 91
	>62	Shell 99a
7	86	Daling 91
34	110	

Flammability Limits in Air (volume %)

0.5 to 5 Shell 99a

Ignition Temperature (°C)

220 Shell 99a

Density (g/mL)

Temperature
(°C)

15 <0.981 Shell 99a

Pour Point (°C)

Evaporation
(volume %)

0	<-30	Daling 91
7	-30	
34	-24	

Dynamic Viscosity (mPa·s or cP)

Evaporation
(volume %)

Temperature
(°C)

0	13	4	Daling 91
7		6	
34		11	

Kinematic Viscosity (mm²/s or cSt)

Temperature
(°C)

50 <30 Shell 99a

Chemical Dispersibility (volume %)

Relatively high dispersibility. Daling 91

Hydrocarbon Groups (weight %)

Evaporation
(volume %)

34	Saturates	68	Daling 91
	Aromatics	31	
	Resins	1	
	Asphaltenes	0	
	Waxes	0	

Marine Diesel Fuel Oil

Oil/Salt Water Interfacial Tension (mN/m or dynes/cm)			Reference ID
Evaporation (volume %)	Temperature (°C)		
0	13	20.0	Daling 91
7		17.0	
34		17.0	
Distillation (°C)			
	Total Distillate (volume %)	Boiling Point (°C)	
	7	200	Daling 91
	34	250	
Boiling Range (°C)		150 to 600	Shell 99a