



# PRODUCT DATA SHEET

## GulfSea Power MDO Series

Trunk piston engine oil for medium speed diesel engines operating on distillate fuels

### Product Description

**GulfSea Power MDO** series are trunk piston engine oil designed for use in medium speed diesel engines operating on distillate fuels. The modern additive technology used in this oil provides superior engine cleanliness & protection. This oil is available in SAE 30 & SAE 40 viscosity grades with a BN (Base Number) of 12 to 20. These oils exhibit a high degree of water tolerance and meet the performance requirements of API CF.

### Features & Benefits

- Superior detergency ensures piston and crankcase cleanliness.
- Improved anti-wear property minimises engine wear and reduces maintenance costs.
- Excellent thermo-oxidative stability retards oil degradation and controls its viscosity.
- Reserve BN ensures protection of engine parts against corrosive combustion products.
- Better demulsibility characteristics ensure water separation leading to trouble free operation.
- Special rust & corrosion inhibitors prevent corrosion of engine parts in severe salt water environment.

### Applications

- Recommended for medium speed engines used in marine, power generation and industrial applications operating on distillate fuels having sulphur contents up to 1.5 %. This product is also suitable for older engines where liner-lacquer is not a potential problem.
- Oils of appropriate BN to be chosen based on the sulphur content of fuel used. Follow manufacturers' recommendation for selection of suitable BN level/ viscosity grade.
- Also recommended for general lubrication of shipboard equipment where specialised lubricants are not required or use of API CF quality oils are adequate.

### Typical Properties

GulfSea Power MDO		3012	4012	3015	4015	3020	4020
Typical properties	SAE Grade	30	40	30	40	30	40
	BN	12		15		20	
API CF		X	X	X	X	X	X
Test Parameters	ASTM Method	Typical Values					
Viscosity @ 100°C, cSt	D 445	11.1	14.5	11.1	14.5	11.1	14.5
Viscosity @ 40 °C, cSt	D 445	96.8	145.6	96.0	144.5	94.7	142.8
Viscosity Index	D 2270	97	95	97	95	97	95
Flash Point, °C	D 92	>215	>215	>215	>215	>215	>215
Pour Point, °C	D 97	-18	-18	-18	-18	-18	-18
BN, mg KOH/g	D 2896	12	12	15	15	20	20
Density @ 15 °C, kg/l	D 1298	0.897	0.899	0.899	0.901	0.902	0.903

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