

# **Gulfmar DPO Plus**

# Advanced trunk piston engine oil for modern medium speed diesel engines operating on distillate fuels

### **Product Description**

**Gulfmar DPO Plus** is premium quality trunk piston engine oil designed for use in the modern medium speed diesel engines operating on distillate fuels. The advanced additive technology used in this oil provides excellent engine cleanliness & protection under severe operating conditions. This oil is available in SAE 30 & SAE 40 viscosity grades with a TBN (Total Base Number) of 12 & 15. Each grade has got a suffix of 3 digits in which the first digit indicates the SAE grade (e.g. 3 indicates SAE 30 and 4 indicates SAE 40) and the last two digits indicate the TBN. These oils assist in controlling oil consumption in modern engines, where liner-lacquering is a potential problem and meet the performance requirements of API CF.

#### Features & Benefits

- Excellent detergency ensures piston and crankcase cleanliness which help in maintaining the efficiency of the engine
- Superior liner lacquer control helps in maintaining oil consumption at its normal level
- Improved anti-wear property protects against engine wear and reduces maintenance costs
- Exceptional thermo-oxidative stability retards oil degradation and extends its service life
- Reserve TBN ensures protection of engine parts against corrosive combustion products
- · Superior 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 modern medium speed engines used in marine, power generation and industrial applications operating on distillate fuels having sulphur contents up to 1%
- Oils of appropriate TBN to be chosen based on the sulphur content of fuel used. Follow manufacturers' recommendation for selection of suitable TBN 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

# Specifications, Approvals & Typical Properties

Gulfmar DPO Plus		312	412	315	415	
Meets the following Specifications	SAE Grade	30	40	30	40	
	TBN	1	12		15	
API CF	·	Х	Х	Х	Х	
Typical Properties						
Test Parameters	ASTM Method		Typical Values			
Viscosity @ 100 °C, cSt	D 445	11.5	14.2	11.7	14.3	
Viscosity Index	D 2270	97	95	100	96	
Flash Point, °C	D 92	232	240	234	240	
Pour Point, °C	D 97	-18	-18	-18	-18	
TBN, mg KOH/g	D 2896	12	12	15	15	
Density @ 15°C, Kg/l	D 1298	0.892	0.895	0.893	0.897	
Sulphated Ash, %wt	D 874	1.5	1.5	1.9	1.9	

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Properties mentioned are typical only and minor variations, which do not affect product performance, are expected to arise in normal manufacturing processes. Please follow equipment manufacturer's recommendations for performance level and viscosity grade. The Safety Data Sheet for this product is available from your nearest Gulf Distributor. Please consult our local representative if any further information is required.