



Gulfmar Select

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

Product Description

Gulfmar Select is a trunk piston engine oil designed for use in medium speed diesel engines operating on residual fuels in marine, power generation and industrial applications. The superior additive technology used in this oil provides excellent engine cleanliness & wear protection under different operating conditions. This oil is available in SAE 30 & 40 viscosity grades with a TBN (Total Base Number) ranging from 20 to 55. 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 exhibit a high degree of water tolerance and have better water separation and base retention properties. These oils meet the performance requirements of API CF.

Features & Benefits

- Excellent detergency reduces build-up of soot & black sludge and keeps the engine cleaner
- Acidic by-products are effectively neutralised and the engine is protected from corrosive wear
- Better demulsibility characteristics ensure water separation leading to trouble free operation
- Robust antiwear technology provides protection against piston & linear wear and good gear performance leading to reduction in maintenance costs
- Improved thermo-oxidative stability retards oil degradation facilitating extended oil life

Applications

- Recommended for medium speed diesel engines in marine, power generation and industrial applications operating on residual fuels. Specially recommended for older engines where oil consumption is relatively high
- **Gulfmar Select 455** having a TBN of 55 is specifically formulated for the engines fitted with operating on high sulphur residual fuels. These oils are also specially recommended for those engines where oil has to stay for a longer time and there is a need for less frequent top-up
- **Gulfmar Select 340 & 440** having a TBN of 40 are suitable for the engines operating on residual fuels having sulphur content in excess of 3.5%
- **Gulfmar Select 330 & 430** having a TBN of 30 are suitable for engines operating on residual fuels having sulphur content in excess of 2.5% and up to 3.5 %
- **Gulfmar Select 320 & 420** having a TBN of 20 are suitable for engines operating on residual fuels having sulphur content up to 2.5 %
- Also recommended for general lubrication of shipboard equipment where specialised lubricants are not required or use of API CF quality oils are adequate

Properties mentioned above are typical only and minor variations, which do not affect the product performances, are to be expected in normal manufacturing. The above information is based on past history of the grade only and must not be construed as a guarantee of performance. Follow equipment manufacturer's recommendations for performance level and viscosity grade. The Material Safety Data Sheet for this product is available from your nearest Gulf Distributor.

Gulf Oil International

The information contained herein is believed to be correct at time of publication. No warranty expressed or implied is given concerning the accuracy of the information or the suitability of the products. Gulf Oil International reserves the right to modify and change its products and specifications without prior notice.

www.gulfoilltd.com



Specifications, Approvals & Typical Properties

Gulfmar Select		320	420	330	430	340	440	455
Meets the following Specifications	SAE Grade	30	40	30	40	30	40	40
	TBN	20		30		40		55
API CF		X	X	X	X	X	X	X
Has the following Approvals								
SEMT Pielstick		X	X	X	X	X	X	X
NKK Plant Engineering Corp			X		X		X	
MWM Deutz					X			
Alstom				X	X		X	
Fuji Technical Services Pvt. Ltd.			X		X		X	
Typical Properties								
Test Parameters	ASTM Method	Typical Values						
Viscosity @ 100 °C, cSt	D445	11.2	14.2	11.1	14.2	11.3	14.3	14.2
Viscosity Index	D 2270	98	95	97	95	96	96	95
Flash Point, °C	D 92	232	242	228	244	234	246	242
Pour Point, °C	D 97	-18	-18	-18	-18	-18	-18	-18
TBN, mg KOH/g	D 2896	20	20	30	30	40	40	55
Density @ 15°C, Kg/l	D 1298	0.89	0.90	0.90	0.90	0.91	0.91	0.92
Sulphated Ash, %wt	D 874	2.7	2.7	3.9	3.9	5.2	5.2	7.1

September, 2006

Properties mentioned above are typical only and minor variations, which do not affect the product performances, are to be expected in normal manufacturing. The above information is based on past history of the grade only and must not be construed as a guarantee of performance. Follow equipment manufacturer's recommendations for performance level and viscosity grade. The Material Safety Data Sheet for this product is available from your nearest Gulf Distributor.

Gulf Oil International

The information contained herein is believed to be correct at time of publication. No warranty expressed or implied is given concerning the accuracy of the information or the suitability of the products. Gulf Oil International reserves the right to modify and change its products and specifications without prior notice.

www.gulfoilltd.com