

Penzstar Supreme Marine

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

Product Description

Penzstar Supreme Marine series is a trunk piston engine oil designed for use in medium speed (230 – 750 rpm) 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 40 viscosity grades with a TBN (Total Base Number) ranging from 12 to 15. Each grade has got a suffix of 3 digits in which the first digit indicates the SAE grade (e.g. 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. Penzstar Supreme Marine series is designed to meet the requirement of Wartsila, Yanmar, and Daihatsu Marine engine.

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
- Penzstar Supreme Marine 3012 & 4012 having a TBN of 12 is suitable for engines operating on residual fuels having sulphur content up to 1 %
- Penzstar Supreme Marine 3015 & 4015 having a TBN of 15 is suitable for engines operating on residual fuels having sulphur content up to 1.5 %
- Also recommended for general lubrication of shipboard equipment where specialised lubricants are not required or use of API CF quality oils are adequate

Specification & Typical Properties

Typical Properties	Typical Values		Typical Values	
	3012	3015	4012	4015
Penzstar Supreme Marine				
Viscosity, Kinematic				
at 40 °C, cSt	105.95	106.87	145.36	148
at 100 °C, cSt	12.35	12.41	14.47	14.57
Viscosity Index	107	107	105	100
Pour Point, °C	-15	-15	-15	-15
Flash Point, COC, °C	230	230	238	238
Sulphated Ash, wt%	1.5	1.5	1.5	1.5
Base Number (mgKOH/g)	12	15	12	15
Specific Gravity 15/15 °C	0.873	0.873	0.881	0.8853