

Product Data Sheet

Azura HPD 15W40

Description and Applications

Saheli Azura HPD, in SAE grade **15W40**, is a high performance marine diesel engine oil developed to meet the performance requirements of modern turbocharged and naturally aspirated marine diesel engines operating on distillate diesel fuel under severe conditions.

Saheli Azura HPD 15W40 is blended from highly refined base stocks and advanced additives to provide very good detergency, dispersancy and anti-wear protection with effective acid neutralization capability. **Saheli Azura HPD 15W40** meets the requirements of most of the medium and high-speed marine diesel engines.

Saheli Azura HPD 15W40 has successfully completed 5000 hours field trial on Caterpillar 3400 Series engines and is approved by Caterpillar/ Pon Power Nederland.

Features and Benefits

- Very good thermo-oxidative stability that controls deposits and viscosity increase thus facilitating longer drain intervals.
- Advanced detergency reduces deposits and enhances engine cleanliness and provides added protection against bore polishing.
- Better soot handling capability leads to control of soot induced oil thickening, wear and oil filter blockage.
- Very good TBN retention ensures effective acid neutralization.
- Excellent anti-wear properties protect critical engine components resulting in extended engine life and reduced maintenance costs.

Applications

- **Saheli Azura HPD 15W40** is recommended for turbocharged and naturally aspirated 4-stroke medium and high speed marine diesel engines requiring oils meeting the specifications given in the table below.
- **Saheli Azura HPD 15W40** is also recommended for rescue boats, lifeboats, fishing trawlers and coastal vessels, heavy duty diesel engines used in mining, construction, agriculture and other off-highway applications.
- **Saheli Azura HPD 15W40** can also be used in transmissions requiring oil meeting the performance levels given below, more specifically Allison C-4 specifications and for general ship applications requiring oils meeting the below mentioned specifications.

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Specifications

- API CH-4/CF
- MB 228.3
- ACEA E5
- MTU Type 2, MAN M3275, Volvo VDS-2
- Allison C-4, Caterpillar ECF-1
- Cummins 20076/20077

Test Parameters	Test Method	Typical Results
SAE Viscosity Grade	SAE (J300)	15W40
Density @ 15°C gm/cm ³	ASTM D4052	0.884
Viscosity Index	ASTM D2270	142
Viscosity @ 40°C, mm ² /s	ASTM D7042	108
Viscosity @ 100°C, mm ² /s	ASTM D7042	14.8
Viscosity CCS @ -20°C	ASTM D5293	6600mPa.s
Pour Point °C	ASTM D 97	-27
Flash Point (COC) °C	ASTM D 92	228
TBN, mgKOH/g	ASTM D 2896	11.40
Sulfated Ash, wt%	ASTM D 874	1.5