

Product Data Sheet

Sonora HP

Description and Applications

Saheli Sonora HP is high performance marine 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 Sonora HP 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 Sonora HP meets the requirements of most of the medium and high-speed marine diesel engines.

Saheli Sonora HP 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 controls deposits and viscosity increase 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

- Turbocharged and naturally aspirated 4-stroke medium and high speed marine diesel engines requiring oils meeting the specifications given in the table below.
- Transmissions requiring oil meeting the performance levels given below, more specifically Allison C-4 specifications.
- Heavy-duty diesel engines used in mining, construction, agriculture and other off-highway applications.
- General ship applications requiring oils meeting the below mentioned specifications.
- Rescue boats, lifeboats, fishing trawlers and coastal vessels.

Specifications

Meets

- **API CH-4, CG-4, CF, SL, SJ**
- ACEA E5, E3, A3/B3, A3/B4
- DaimlerChrysler MB 228.3, MAN M 3275, Volvo VDS-2, Global DHD-1
- Caterpillar ECF-1a, Allison C-4, Renault RLD, Mack EO-M Plus
- Cummins CES 20076, 20077, MTU Oil Category 2

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Test Parameters	Test Method	Typical Results
Sonora HP		15W40
Density @ 15°C gm/cm ³	ASTM D1298	0.895
Viscosity Index	ASTM D2270	142
Viscosity @ 100°C, mm ² /s	ASTM D445	14.80
Pour Point °C	ASTM D 97	-27
Flash Point (COC) °C	ASTM D 92	228
TBN, mgKOH/g	ASTM D 2896	9.85
Sulfated Ash, wt%	ASTM D 874	1.33

The information contained in this data sheet are indicative and correspond to the date of publication of this document. The above data are based on laboratory tests. It is the reader's interest to ensure whether the most recent version of the data sheet. A safety data sheet is available on request by our sales consultant. For more information, please contact the sales department.

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