



GARD HSD CI-4 15W-40

GARD HSD CI-4 15W-40 Extra High Performance Diesel Engine Oil

Product Description

GARD HSD CI-4 15W-40 is extra high performance diesel engine oil that provides excellent lubrication requirement of today's modern engines. This product meets and exceeds the specifications of almost all major European and American engine manufacturers.

GARD HSD CI-4 15W-40 formulation provides outstanding performance in both modern, demanding low emission diesel engines and older engines operating on low or high sulfur fuels. GARD HSD CI-4 15W-40 is blended with the high performance Group II base stocks having good oxidation stability with low evaporation losses, the advanced additive system provides superior control of corrosive wear tendencies, low and high temperature stability, soot handling properties, piston deposit control, valve train wear, oxidative thickening, foaming and viscosity loss due to shear. It is also formulated to counter the bad quality fuels having high contents of sulphur.

Features and Benefits

GARD HSD CI-4 15W-40 is formulated with high performance base oils and superior blended additive system to provide outstanding engine performance in modern diesel and gasoline engines demanding high performance lubricants as well as older models. The key benefits include

Features	Advantages & Potential Benefits
High thermal and oxidation stability	Reduce sludge build-up, deposits and viscosity increase
TBN reserves	Deposit control and acid neutralization
Advanced detergency/dispersancy	Clear engines and longer component life
Improved soot handling	Improved viscosity control and used oil pump ability
Excellent low temperature properties	Start-up wear protection
Component compatibility	Longer gasket and seal life
Meets demanding specifications of key OEMs	One engine oil for mixed fleet operation

Applications

- Naturally aspirated and turbo charged diesel powered equipment from leading Japanese, European and American manufacturers
- On-high way light and heavy duty trucking
- Off-high way industries including construction, mining, quarrying and agriculture
- Mixed fleet applications

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Specifications

GARD HSD 15W-40 meets the following industry and builders specifications:

ACEA E3-96#4 / E7-04 / E5-02	X
ACEA A3-02 / B3-98#2 / B4-02	X
API CI-4/CH-4/CG-4/CF-4/CF/CF-2/SL/SJ	X
MBp 228.3(PA)	X
MAN M3275	X
MTU Type 11 Volvo VDS-2	X
Volvo VDS-3	X
Mack EO-M/Mack EO-M Plus	X
Cummins 20071/ 76 / 78 Cummins 20072 / 77	X
Allison C4	X
Global DHD-1	X
VW501/5	X

Typical Properties

GARD HSD 15W-40	
SAE Grade	15W-40
Viscosity ASTM D 445	
Cst @ 40° C	107.1
Cst @ 100° C	14.66
Viscosity Index, ASTM D 2270	141
Sulphated Ash, Wt %, ASTM D 874	1.48
Total Base #, mg KOH/g, ASTM D2896	12.0
Pour Point, ° C, ASTM D 97	-27
Flash Point, °C ASTM D 92	234
Density @ 15°C Kg/l, ASTM D 4052	0.868

Health & Safety

Based on the available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet (MSDS) are followed. MSDS's are available upon request through your sales contract office. This product should not be used for purposes other than its intended use.

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