



Lotus Lubes™ HD Multi-Grade Engine Oil 15W-40

PRODUCT DESCRIPTION

LOTUS Lubes™ HD Engine Oil is a premium heavy-duty motor oil formulated with select group II base stocks and an advanced additive system to exceed the requirements of a broad range of heavy-duty engine applications including; over-the-road trucking, off-road construction and agriculture equipment. **LOTUS Lubes™ HD Engine Oil** is backward compatible and may also be used in older vehicles with diesel or gasoline engines.

LOTUS Lubes™ HD Engine Oil provides outstanding wear and deposit control during cold engine start-up through maximum operating temperatures. Through advanced additive technology, it provides superior protection in all climates and driving conditions, from stop-and-go city driving to long-distance hauling.

FEATURE & BENEFITS

- * Superior engine wear protection
- * Maintains excellent soot control throughout oil life-cycle
- * Protects pistons from carbon deposits
- * Excellent TBN retention
- * Supports extended service intervals
- * Exceeds API performance standards CI-4 and SL
- * Active anti-wear additives protect critical engine parts for wear
- * Advanced dispersants keep soot in suspension and reduces “soot thickening” in extended intervals
- * Shear-stable viscosity modifiers provide “stay in grade” protection



TYPICAL PHYSICAL PROPERTIES

SAE Grade	15W-40
API Service	CI-4/SL
API Gravity	29.0
Flash Point, °C (°F)	230 (447)
Viscosity, cP @ -20°C (Cold Crank, CCS)	6,600
Viscosity, cSt @ 40°C	116.0
Viscosity, cSt @ 100°C	15.3
Viscosity Index	142
Total Base Number, D2896	10.5
Ash, Sulfated, wt. %	1.4
Zinc, wt. %	0.13
Phosphorus, wt. %	0.12
Minor variations in typical physical properties may occur from normal manufacturing processes	

APPLICATIONS

LOTUS Lubes™ HD Engine Oil is recommended for the following heavy-duty engine oil requirements:

- * Exceeds API Service CI-4, CH-4, CG-4, CF-4 & SL, SJ, SH
- * Exceeds ACEA E3-96 Issue 3, E5-99, & B3-98 performance standards
- * Exceeds Engine Manufacturer Performance Requirements for- Cummins CES 20078, 20077, 20076, 20071 & Mack EO-N, EO-M Plus, EO-M, EO-L Plus, EO-L & Detroit Diesel 92K214 & Mercedes Benz 228.1, Chrysler MS 6395-G & Ford ESE-M2C153-E & General Motors 6094-M & MIL-L-2104E, MIL-L- 46152E(obsolete) & Allison C4 & Caterpillar ECF-2 & TO-2 fluids, Department of Defense CID-a-a-52306A2, A-A-52039A3 & Volvo VDS