



Renewable Lubricants, Inc.
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Bio-SynXtra™ HD SHP SAE 40 Motor Oil (Low Ash)

Biobased, Heavy-Duty Single-Grade Engine Oil

Bio-SynXtra™ HD SHP SAE 40 is a super high-performance, single-grade engine oil formulated for both older and high-performance modern diesel and gasoline engines. Made with Stabilized™ biobased technology and premium additive chemistry, this low-ash motor oil offers extended service life, enhanced thermal stability, and excellent lubrication in extreme conditions. Ideal for naturally aspirated, turbocharged, or supercharged engines, this formulation is suited for stationary, marine, off-road, and on-road equipment.

Benefits

- Shear-stable formulation delivers reliable SAE 40 viscosity under high stress
- Excellent oxidation control and sludge resistance
- Enhanced wear protection for both conventional and overhead cam engines
- Extended drain capabilities with reserve alkalinity (10.3 TBN)
- Exceptional low- and high-temperature performance
- Provides transmission performance for CAT TO-2, Allison C-3, and API GL-3
- Compatible with SAE 10W40, 15W40, 20W40, and 25W40 use cases
- Energy-conserving formula with reduced volatility and emissions
- Performs under extreme motorsport demands (proven in racing applications)

Application / New Filling

Recommended for:

- High-performance and heavy-duty diesel or gasoline engines
- Stationary, marine, off-road equipment, and industrial machinery
- Older vehicles or high-hour equipment requiring SAE 40
- Manual transmissions and final drives requiring API GL-3 or CAT TO-2 / Allison C-3

OEM Compatibility:

- API SJ, SL, SM / CF, CF-2, CD, CDII, CE
- API GL-3, CAT TO-2, Allison C-3 (transmission service)
- Meets SAE J300 and passed tests for API/ILSAC base oil interchange (unlicensed formulation)

Specifications and Approvals

- Formulated using Stabilized™ HOBS biobased technology



- U.S. Patents: 5,990,055; 6,383,992; 6,534,454
- Canada: 2,498,812; 2,538,768; 2,609,756
- Mexico: 275,334; 308,832
- Inherently biodegradable
- Proven field performance in Caterpillar, Cummins, Detroit Diesel, Mack, Volvo, and Mercedes-Benz engines
- Used by U.S. Coast Guard, NASA, USDA facilities, and national parks

TYPICAL SPECIFICATIONS		
Viscosity @ 100°C	ASTM D-445	14.9
Viscosity @ 40°C	ASTM D-445	100.3
Viscosity Index	ASTM D-2270	156
Flash Point (COC)	ASTM D-92	252°C
Pour Point	ASTM D-97	-38°C
HTHS @ 150° C, Apparent Viscosity, cP	ASTM-D-4683	>3.7
NOACK Volatility % max 1h at 250°C	NOACK	6
Total Base Number	ASTM D-2896	10.3
Sulfated Ash, % max	ASTM D-874	1.0
Item #		85280