



Renewable Lubricants, Inc.
476 Griggy Rd., P.O. Box 474
Hartville, Ohio 44632-0474

Bio-SynXtra™ SHP SAE 10W40 PCMO Motor Oil (Low Ash)

Biobased High-Performance Motor Oil for Turbocharged and High-Mileage Engines

Bio-SynXtra™ SHP SAE 10W40 PCMO is a patented biobased synthetic motor oil engineered for high-output, turbocharged, and supercharged gasoline engines in modern passenger vehicles. Utilizing Stabilized™ technology, this formulation delivers a super high viscosity index, enhanced oxidation stability, reduced volatility, and excellent low-temperature performance. It is ideal for both new and high-mileage engines requiring enhanced antiwear and seal-conditioning additives.

Benefits

- Exceeds API SN/SM performance (unlicensed formula)
- Enhanced EP and antiwear protection with booster additives
- High viscosity index (~166) minimizes wear and viscosity breakdown
- Excellent low-temperature pumpability and cold start protection
- Reduced fuel dilution and oil consumption
- Extended engine life for high-mileage or out-of-warranty vehicles
- Low volatility for reduced tailpipe emissions
- Inherently biodegradable and USDA BioPreferredSM listed
- Proven under high-load (3000 HP) and racing conditions
- Compatible with catalytic converters and low-emission systems

Application / New Filling

Recommended for use in:

- Passenger cars, SUVs, vans, and light trucks requiring SAE 10W40
- Turbocharged, supercharged, or naturally aspirated gasoline engines
- Older vehicles or equipment with high mileage
- Engines experiencing fuel dilution or requiring extended drain performance
- OEM applications demanding SN/SM performance with energy conservation

OEM Specifications and Compatibility:

- Meets physical properties of SAE J300
- API SN/SM and ILSAC GF-5 compatible (unlicensed formula)
- GM dexos1-equivalent performance
- Passed base oil interchange for API and ILSAC testing

STABILIZED™
by Renewable Lubricants

Specifications and Approvals

- Stabilized™ HOBS Technology
 - U.S. Patents: 5,990,055; 6,383,992; 6,534,454
 - Canada Patents: 2,498,812; 2,538,768; 2,609,756
 - Mexico Patents: 275,334; 308,832
- In use by:
 - USDA Facilities, U.S. Army, U.S. Coast Guard, NASA, NOAA
 - Cape Cod & Point Reyes National Seashores
 - Pictured Rocks National Lakeshore

TYPICAL SPECIFICATIONS		
Viscosity @ 100°C	ASTM D-445	15.5
Viscosity @ 40°C	ASTM D-445	99.0
Viscosity Index	ASTM D-2270	166
Flash Point (COC)	ASTM D-92	235°C
Pour Point	ASTM D-97	-35°C
CCS @ -25°C, cp	ASTM-D-5293	Max – 7,000
MRV-TP1 @ -30°C, cP	ASTM-D-4684	25,000
Yield Stress, Pa		None
HTHS @ 150° C, Apparent Viscosity, cP	ASTM-D-4683	>2.9
NOACK Volatility %		11.5
Energy Conserving		YES