

Renewable Lubricants, Inc.

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Bio-SynXtraTM HD SHP Plus Racing Motor Oils





"Biobased Lubricants that Perform Like Synthetics"

Bio-SynXtraTM HD Super High Performance (SHP) Plus Racing Motor Oils are specially formulated for high performance turbocharged and supercharged competition engines and/or engines that require heavier viscosity oils that don't break down under high stress conditions. Incorporating the super high viscosity index of the Stabilized* High Oleic Base Stocks (HOBS) into the formula, increases the viscosity index past synthetic levels (Energy Conserving Formulas) improving starting conditions of high performance engines. Although they provide the energy conserving properties of a multi-grade formulation, they also provide excellent thermal and mechanical shear stability and can directly replace single viscosity grade motor oils in competitive motor sport competition. This superior viscosity stability combination allows the engine to run for longer intervals at higher RPM with greater fluid protection and will provide more power output, increasing the seal between the ring and cylinder area.

Stabilized HOBS produces an oily, polar effect on the metal surface that enhances pressure absorption at lower temperatures, improving lubricity, and reducing start up friction. The natural oiliness of the base oil is enhanced with the best Extreme Pressure chemistry to produce optimum anti-wear and extreme pressure performance, providing excellent engine durability. Independent, standardized, bench studies have shown that this technology has more than doubled the extreme pressure performance over conventional motor oil formulas. According to NOACK (International Standardized test for Volatility), the HOBS have significantly less volatility. This means the Stabilized HOBS lubricant will perform at higher temperatures with less evaporation than mineral and synthetic based stocks. This reduces oil volatility and consumption in top cylinder areas, reducing carbon buildup.

Since 1993, these unique, first of their kind, Bio-Super High Performance Motor Oils have proven exceptional performance in the racing world, and they are the lubricants of choice for top performing world and national champions. These biobased, high performance racing oils have exceeded the performance of conventional petroleum based products and have shown performance equal to and better than synthetic formulas. Excellent performance has also been experienced from the heavy loads (3000 HP @ >9000 RPM) of IHRA Seven Time World Champion alcohol fueled dragster to the high-temperature, long-term endurance, championship, road racing, to high performance Formula Drift rotary engines. These specially formulated racing oils have been designed and tested to run in extreme conditions that would be expected with the motor sport, high performance engines.

RLI's patented chemistry is blended into the highest quality biobased and synthetic base stocks and provides extended engine life relative to other conventional oils without this proven chemistry. This premium quality patented additive technology has documented records of **excellent performance** in terms of:

- Superior wear protection in both conventional valve train, overhead cams, turbocharged and rotary engines
- Outstanding high temperature shear stability
- Maintains stable oil pressure and lower temperatures versus conventional racing oils
- Excellent anti-oxidation properties
- Superb protection from sludge and varnish formation
- Enhanced mechanical shear stability
- · Superior anti-rust protection and bearing corrosion protection, especially with high alcohol fuels
- Compatible with all fuel types
- Custom viscosities and formulations can be manufactured upon request





STABILIZED by Renewable Lubricants TM is RLI's trademark on their proprietary and patented anti-oxidant, anti-wear, and cold flow technology. High Oleic Base Stocks (HOBS) are biobased oils. This Stabilized technology allows the HOBS to perform as a high performance formula in high and low temperature applications, reducing oil thickening and deposits. US 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 with additional pending and Foreign Patents. TM Trademark of Renewable Lubricants, Inc. Copyright 1999 Renewable Lubricants, Inc.

Availability F.O.B.: Hartville, Ohio, USA Quart 1 Gallon 5 Gallon Pail Drum Totes Bulk

Bio-SynXtraTM Heavy Duty Super High Performance motor oils contain the most advanced chemical technology available for high performance, heavy-duty turbocharged and supercharged engines designed to achieve API Service SH, SJ, SL, SM, CD, and CF. We have a Bio-SynXtra SAE 10W60 that is formulated for use in gasoline and diesel engines where the manufacture recommends API SM/CF, ACEA A3/B4, which includes specifications for BMW M Series. While no formal engine oil license for these heavy viscosity formulations are implied, the key chemical and physical properties are exceeded for their intended high performance use. (See data sheets on additional Bio-SynXtra Motor Oil SAE viscosities to meet OEM recommendations and API service).

TYPICAL SPECIFICAT IONS	METHOD	<u>SAE</u> 20W50	<u>SAE</u> 10W60	SAE 20W60	<u>SAE</u> 20W70	<u>SAE</u> <u>0W40</u>	<u>SAE</u> <u>0W20</u>	<u>SAE</u> <u>5W30</u>	SAE 10W30
Viscosity @ 100°C	ASTM D-445	18	23.2	24.0	30.0	14	6.9	10.9	11
Viscosity @ 40°C	ASTM D-445	111.5	148.0	172.0	225.0	76.9	37.3	58.5	67
Viscosity Index	ASTM D-2270	179	187	170	174	190	146	183	156
Flash Point (COC)	ASTM D-92	250°C	255°C	260°C	262°C	230	227	230	233
Pour Point	ASTM D-97	-30	-42	-30	-30	45	-46	-40	-37
RLI Product Item #		85370	85400	85410	85420	85450	85460	85470	85480