

Bio-SynXtra™ HD SHP Plus Racing Motor Oils

High-Performance Racing Motor Oils for Turbocharged, Supercharged, and Extreme Load Engines

Bio-SynXtra™ HD SHP Plus Racing Motor Oils are specially engineered for competition-grade turbocharged and supercharged engines operating under extreme stress conditions. Developed using patented Stabilized™ HOBS (High Oleic Base Stocks) technology, these oils deliver superior viscosity stability, wear resistance, and low volatility; exceeding synthetic and petroleum-based lubricants in performance. They provide the energy-conserving characteristics of a multi-grade formulation while replacing single-viscosity oils in motorsports environments.

Benefits

- Formulated for high RPM, high-stress motorsport and racing applications
- Superior thermal and mechanical shear stability
- Outstanding anti-wear and extreme pressure performance
- Enhanced sealing between rings and cylinder walls increases power output
- Lower volatility reduces oil consumption and carbon buildup
- Improved lubricity and startup protection from HOBS' polarity clinging to metal
- Compatible with all fuel types including alcohol-based
- Maintains stable oil pressure and lower operating temps
- Excellent resistance to sludge, varnish, and oxidation
- Proven in IHRA 3000 HP dragsters, endurance racing, IMSA, and Formula Drift

Application / New Filling

Recommended for use in:

- High-performance turbocharged and supercharged gasoline engines
- Competitive motorsport engines operating under extreme heat and RPM
- Vehicles requiring heavy viscosity grades not covered by standard licenses
- Rotary, overhead cam, and conventional valve train engine designs
- Custom engine builds where standard PCMO oils are insufficient

OEM Specifications and Compatibility:

- Exceeds physical performance properties of API SH, SJ, SL, SM, SM+, CD, and CF
- SAE 10W60 formulation meets ACEA A3/B4 (BMW M Series and similar specs)
- While not API licensed, exceeds key chemical and physical requirements
- Custom formulations and viscosities available upon request



Specifications and Approvals

• Stabilized™ HOBS Technology

U.S. Patents: 5,990,055; 6,383,992; 6,534,454Canada Patents: 2,498,812; 2,538,768; 2,609,756

• Mexico Patents: 275,334; 308,832

In service with:

• National and world racing champions

• Mark Thomas Racing, Formula Drift competitors

• Endurance racing teams and alcohol-fueled dragsters

• International Motor Sport Association (IMSA)

Typical Specifications

| | | SAE | <u>SAE</u> | <u>SAE</u> | <u>SAE</u> | <u>SAE</u> | SAE | <u>SAE</u> | <u>SAE</u> |
|------------------------|-------------|--------------|--------------|--------------|--------------|-------------|-------------|-------------|--------------|
| | METHOD | <u>20W50</u> | <u>10W60</u> | <u>20W60</u> | <u>20W70</u> | <u>0W40</u> | <u>0W20</u> | <u>5W30</u> | <u>10W30</u> |
| 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 |