



# TECHNICAL DATA

102 Barton Street, St. Louis, Missouri 63104

In-State (314) 865-4100/Out of State 800-325-9962/Fax (314) 865-4107 <http://www.schaefferoil.com>

## 707 EXTREME V-TWIN SYNTHETIC PLUS RACING OIL SAE 20W-50

Extreme V-Twin Synthetic Plus Racing Oil is highly advanced, premium quality, multi-grade para-synthetic, high zinc containing, 4 stroke racing engine oil that is formulated to meet the lubrication demands of V-Twin engines.

Extreme V-Twin Synthetic Plus Racing Oil is blended from the finest quality, severely hydrotreated, polyalphaolefin (PAO) synthetic base fluids and severely hydroconverted and hydrocracked Group II+ base oils available. This unique combination provides Extreme V-Twin Synthetic Plus Racing Oil with the following advantages:

1. **Superior Cold Weather Startability and Operating Characteristics** - Resulting in less friction and lubricant drag in the engine and instant lubrication during cold weather start up.
2. **Superior Oxidative Stability and Excellent Resistance to Thermal Degradation.**
3. **Excellent Low Volatility Characteristics** - Resulting in reduced oil consumption and increased protection against the formation of deposits
4. **Lower Pour Point and Borderline Pumping Temperature.**
5. **High Viscosity Index.** A minimum change in viscosity, which provides adequate viscosity for the proper lubrication of the engine, regardless of temperature.
6. **Excellent Film Strength** - Provides increased protection against wear.
7. **Compatibility with All Types of Seals**
8. **Extended Oil Drain Capability and Intervals**

Blended into the para-synthetic base stocks is a highly advanced, robust, proprietary performance formula additive system and a highly shear stable viscosity index improver. This combination provides Extreme V-Twin Synthetic Plus Racing Oil with the following performance benefits:

1. **Outstanding protection against the formation of high temperature deposits**
2. **High detergency and dispersancy to suppress the formation of deposits, sludge and varnish.**
3. **Active cleaning agents for increased and enhanced engine cleanliness and minimized coking deposits on critical engine parts**
4. **Exceptional protection against thermal breakdown during high engine oil operating temperatures**
5. **Excellent resistance to oxidation**
6. **Excellent shear stability to resist viscosity shear down and breakdown in high performance engines and transmissions**
7. **Excellent resistance to thinning at high temperatures**
8. **Excellent high temperature/high shear performance to provide excellent oil film thickness and engine protection at high operating temperatures and shear rates, while minimizing lubricant frictional resistance**
9. **Extra zinc anti-wear additives to protect the engine from excessive wear**

Continued on Next Page

TD-707 (Rev. 07/2015)

10. A patented, novel, zinc anti-wear additive system that minimizes volatility and chemical breakdown of the zinc anti-wear additive in order to provide maximum and long lasting anti-wear performance and robustness needed to protect the engine and transmission
11. Enhanced lubrication to maintain maximum power and acceleration
12. Excellent low temperature flow characteristics and pumpability to provide rapid circulation and minimize wear during start-up
13. A substantial reduction in ring and cylinder wear
14. Reduced bearing wear and increased bearing life
15. Excellent rust and bearing corrosion protection
16. Superior valve train-wear protection
17. Increased oil seal compatibility
18. Excellent anti-foaming properties
19. Excellent protection of exhaust and catalyst systems
20. Reduced operating temperatures
21. Increased fuel economy benefits and retention for improved gas mileage during the oil's entire oil drain interval
22. Enhanced protection when using ethanol blended fuels
23. Reduced oil ageing allowing for increased drain intervals
24. Increased engine/transmission life

Further blended into these synthetic blend base fluids, the highly advanced proprietary performance additive package and shear stability viscosity index improver are two proven frictional modifiers, Micron Moly®, a liquid soluble type of Moly and Schaeffer Mfg's own proprietary additive Penetro® . These two proven frictional modifiers once plated, form a long lasting slippery tenacious lubricant film, which prevents the metal surfaces from coming into contact with each other. By preventing metal-to-metal contact, damaging frictional wear is prevented from occurring. This prevention of metal-to-metal contact and reduction in wear results

- \* A low coefficient of friction
- \* Significantly less bearing, ring, piston, cylinder, and valve-train wear
- \* Increased engine efficiency, durability and life
- \* Less down-time which reduces maintenance costs
- \* Increased fuel economy

***Extreme V-Twin Synthetic Plus Racing Oil is not recommended for use in those motorcycle and ATV applications that specify engine oil that meets JASO MA or MB. Use of Extreme V-Twin Synthetic Plus Racing Oil in applications that specify JASO MA or MB oil can cause slippage and improper engagement of the clutch mechanisms.***

***Extreme V-Twin Synthetic Plus Racing Oil is also not recommended for use in 4-cycle marine engines that specify the use of a NMMA FC or FC-W four cycle engine oil.***

Extreme V-Twin Synthetic Plus Racing Oil meets and exceeds the following specifications and manufacturers' requirements: API Service Classification SM, Harley-Davidson® V-Twin specifications and JASO (T903) MA-2 specifications

### TYPICAL PROPERTIES

SAE Grade	20W-50
Viscosity @ 40°C, cSt (ASTM D-445)	129.5-166.5
Viscosity @ 100°C, cSt (ASTM D-445)	16.5-20.00
Viscosity Index (ASTM D-2270)	140
High Temperature/High Shear Viscosity 302°F/150°C, cP (ASTM D-4683)	5.31
Cold Cranking Viscosity (ASTM D-5293) @-15°C, cP	3,506
Mini Rotary Viscosity TP-1 @ -20°, cP (ASTM D-4683)	23,400
Scanning Brookfield Gelation Index @ -11°F/-24°C	3.9
Flash Point °F/°C (ASTM D-92)	400.2°/204.56°
Fire Point °F/°C (ASTM D-92)	505°/262.78°
Stable Pour Point °F/°C (FTM 7916 Method 203)	<-41°/<-42°
Total Base Number (ASTM D-2896)	7 to 7.5
Sulfated Ash Content % wt (ASTM D-874)	0.9
Orban Shear Stability (ASTM D-7109) % Loss @ 30 Passes	5
% Loss @ 90 Passes	10.3
Copper Strip Corrosion Test (ASTM D-130)	1a
NOACK Volatility %Evaporation Loss (ASTM D-5800)	7.5%
Foam Test (ASTM D-892) Sequence I	0/0
Sequence II	0/0
Sequence III	0/0
Sequence IV	0/0
High Temperature Foam Test (ASTM D6082 Option A)	0/0
MHT-4 TEOST (ASTM 6335) Deposit Weight, mg	23.8
Engine Rusting Ball and Rust Test (ASTM D-6557) Average Gray Value	133
Zinc Content, ppm	1600-2000
Phosphorous, ppm	1300-1900