



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>

#705 SUPREME 7000 SYNTHETIC PLUS™ RACING OIL SAE 20W-50 API SM

Supreme 7000 Synthetic Plus™ Racing Oil SAE 20W-50 is a premium quality high zinc, multi-grade para-synthetic engine oil that is specially formulated to reduce friction and wear, increase engine efficiency and extend engine life in all types of gasoline engines including those that contain flat tappet cams and those that are turbocharged or supercharged.

Supreme 7000 Synthetic Plus™ Racing Oil SAE 20W-50 is blended from the finest quality severely hydrotreated polyalphaolefin (PAO) synthetic base fluids and severely raffinate hydroconverted Group II Plus available. This unique combination provides Supreme 7000 Synthetic Plus™ Racing Oil SAE 20W-50 with the following advantages:

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

Blended into the para-synthetic base stocks is a highly advanced proprietary performance racing formula additive package and a highly shear stable viscosity index improver. This combination provides the Supreme 7000 Synthetic Plus Racing™ Oil SAE 20W-50 with the following performance benefits:

1. **Extra zinc anti-wear additives to protect flat-tappet cams from excessive wear**
2. **A 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**
3. **Outstanding protection against the formation of high temperature deposits**
4. **High detergency and dispersency to suppress the formation of deposits, sludge and varnish**
5. **Active cleaning agents for increased and enhanced engine cleanliness**
6. **Exceptional protection against the formation of coking deposits on turbochargers**
7. **Exceptional protection against thermal breakdown during high engine oil operating temperature conditions**
8. **Rapid circulation and excellent pumpability**
9. **Excellent low temperature flow characteristics and pumpability to provide rapid circulation and minimize wear during start-up**

10. Excellent resistance to thinning at high temperatures
11. Excellent shear stability to resist viscosity shear down and breakdown
12. 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
13. Enhanced lubrication to maintain maximum horsepower and acceleration
14. Substantially reduced oil consumption
15. Extra protection for hot running engines
16. Extra protection for cold running engines in stop-and-go service
17. Reduced oil ageing allowing for increased drain intervals
18. A substantial reduction in ring and cylinder wear
19. Reduced bearing wear and increased bearing life
20. Excellent rust and bearing corrosion protection
21. Increased engine cleanliness
22. Superior valve train-wear protection
23. Increased engine life
24. Excellent anti-foaming properties

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 in:

- * Increased fuel economy
- * 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

Supreme 7000 Synthetic Plus™ Racing Oil SAE 20W-50 can be used in most types of 4-cycle air-cooled or water-cooled motorcycle and ATV engines including those motorcycles that have a common sump for the engine and transmission (**non-metallic clutches only**).

Supreme 7000 Synthetic Plus™ Racing Oil SAE 20W-50 is not recommended for use in those motorcycle and ATV applications that specify engine oil that meets JASO MA or MB. Use of Supreme 7000 Synthetic Plus™ Racing Oil SAE 20W-50 in applications that specify JASO MA or MB oil can cause slippage and improper engagement of the clutch mechanisms. Supreme 7000 Synthetic Plus™ Racing Oil SAE 20W-50 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.

Supreme 7000 Synthetic Plus™ Racing Oil SAE 20W-50 meets and exceeds the following specifications and manufacturers' requirements: MIL-PRE- 46152E, CID A-A-52039B, API Service Classification SM, Ford ,General Motors, Chrysler; specifications and JASO JIS K2215 specifications.

Continued on Next Page

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°/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)	7.5
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