



# TECHNICAL DATA

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## #9001 SUPREME 9000 RACING OIL SAE 5W-50 FULL SYNTHETIC ENGINE OIL API SM/CF

Supreme 9000 Racing Oil SAE 5W-50 is a premium quality, high zinc, heavy-duty, multi-grade, full synthetic engine oil that is specially formulated to reduce friction and wear, increase engine efficiency, provide fuel economy benefits and extend engine life in all types of gasoline engines and diesel powered passenger cars including those that are turbocharged or supercharged. Supreme 9000 Racing Oil 5W-50 provides extra zinc to protect engines with flat tappet cams.

Supreme 9000 SAE 5W-50 is blended from a unique combination of severely hydrofinished polyalphaolefin (PAO) synthetic base fluids and severely hydrocracked synthetic base fluids which provide the following advantages:

1. Superior cold cranking and oil pumpability at low temperatures.
2. Exceptional oxidative stability and resistance to thermal degradation.
3. Exceptional low volatility characteristics to provide oil consumption and deposit control.
4. A high viscosity index with an enhanced film strength at high operating temperatures
5. Low coefficients of traction, which result in improved fuel economy benefits.
6. Extended oil drain capability and intervals

Blended into the synthetic base stocks is a highly advanced, performance additive package and a highly shear stable viscosity index improver which provide the following performance benefits:

1. **Extra zinc anti-wear additives to protect flat-tappet cams from excessive wear.**
2. **Outstanding protection from the formation of high temperature deposits.**
3. **Exceptional protection from thermal breakdown during high operating temperatures.**
4. **Rapid circulation and excellent pumpability.**
5. **Excellent resistance to thinning at high temperatures.**
6. **Excellent shear stability for stay in grade performance.**
7. **Substantially reduced oil consumption.**
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. **High detergency and dispersency to suppress the formation of deposits, sludge and varnish.**
10. **Reduced oil ageing allowing for increased drain intervals.**
11. **A substantial reduction in ring and cylinder wear.**
12. **Reduced bearing wear and increased bearing life.**
13. **Excellent rust and bearing corrosion protection.**
14. **Enhanced vehicle emissions control system compatibility and increased system life.**
15. **Increased engine cleanliness.**
16. **Increased fuel economy benefits and retention for improved gas mileage during the oil's entire oil drain interval.**
17. **Superior valve train-wear protection.**
18. **Increased engine life.**
19. **Excellent anti-foaming properties.**

TD-9001 (04/2016)

Further blended into these synthetic 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®. Once plated, these two proven frictional modifiers form a long lasting, slippery, tenacious lubricant film, which prevents metal surfaces from coming into contact with each other and helps prevent damaging frictional wear, reduce wear and provide:

- \* **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 9000 Racing Oil SAE 5W-50 is recommended for use in most 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 9000 Racing Oil SAE 5W-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 9000 Racing Oil SAE 5W-50 in applications that specify JASO MA or MB oil can cause slippage and improper engagement of the clutch mechanisms. Supreme 9000 Racing Oil SAE 5W-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 9000 Racing Oil SAE 5W-50 meets and exceeds the following specifications and manufacturers' requirements: MIL-PRF- 46152E, CID A-A-52039B, API Service Classification SM/CF, Ford M2C153-G, ESR-M2C127-B, ESR-M2C179A, SSM 29011-A, WWS-M2C929A; General Motors specification 6049M and 4718M, ACEA A1/B1, Chrysler MS9767, MS 6395; JASO JIS K2215 and VTW.

#### TYPICAL PROPERTIES

SAE Grade	5W-50
Viscosity @ 40°C, cSt (ASTM D-445)	146.87
Specific Gravity (ASTM D-1298)	0.85
Viscosity @ 100°C, cSt (ASTM D-445)	20.24
Viscosity Index (ASTM D-2270)	158
High Temperature/High Shear Viscosity 302°F/150°C, cP (ASTM D-4683)	5.08
Cold Cranking Viscosity(ASTM D-5293) @-30°C, cP	6,005
Mini Rotary Viscosity TP-1 @ -35°, cP (ASTM D-4683)	25,000
Flash Point °F/°C (ASTM D-92)	440°/226.67°
Stable Pour Point °F/°C (FTM 7916 Method 203)	<-41°/<-42°
Total Base Number (ASTM D-2896)	7.1
Sulfated Ash Content % wt (ASTM D-874)	1.1
Shear Stability (ASTM D-3945 Procedure A) % Viscosity Loss	14%
Copper Strip Corrosion Test (ASTM D-130)	1a
NOACK Volatility %Evaporation Loss (ASTM D-5800)	8.92%
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