SINCE 1839 Schaeffer MANUFACTURING COMPANY

ISO 9001 CERTIFIED

TECHNICAL DATA

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#9003 SUPREME 9000 SAE 5W-30
FULL SYNTHETIC ENGINE OIL
API SN, RESOURCE CONSERVING, ILSAC GF-5

Supreme 9000 SAE 5W-30 is a premium quality full synthetic, multi-grade engine oil that is specifically formulated to protect critical engine parts from damaging friction and wear, provide enhanced protection against the formation of sludge and deposits, provide increased engine efficiency and fuel economy benefits and extend engine life in all gasoline fueled automobile and light duty truck engines including those that are turbocharged and supercharged.

Supreme 9000 SAE 5W-30 is blended from a unique combination of select synthetic base fluids. This unique combination provides the Supreme 9000 SAE 5W-30 with the following advantages:

1. Superior Cold Cranking and Oil Pumpability at Low Temperatures.
2. Exceptional Oxidative Stability Especially at High Engine Operating Temperatures.
3. Exceptional Resistance to Thermal Degradation.
4. Exceptional Low Volatility Characteristics That Provides Exceptional Oil Consumption Control and Prevention of the Formation of Deposits on Critical Engine Parts.
5. A High Viscosity Index.
6. Enhanced Film Strength at High Operating Temperatures
7. Low Coefficients of Traction, Which Result in Improved Fuel Economy Benefits.
8. Extended Oil Drain Capability and Intervals

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Blended into the synthetic base stocks is a highly advanced proprietary performance additive package and a highly shear stable viscosity index improver. This combination provides the Supreme 9000 SAE 5W-30 with the following performance benefits:

1. **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**
2. **Outstanding protection against the formation of high temperature deposits**
3. **High detergency and dispercency to suppress the formation of deposits, sludge and varnish**
4. **Active cleaning agents for increased and enhanced engine cleanliness**
5. **Exceptional protection against the formation of coking deposits on turbochargers**
6. **Exceptional protection against thermal breakdown during high engine oil operating temperature conditions**
7. **Rapid circulation and excellent pumpability**
8. **Excellent low temperature flow characteristics and pumpability to provide rapid circulation and minimize wear during start-up**
9. **Excellent resistance to thinning at high temperatures**
10. **Excellent shear stability to resist viscosity shear down and breakdown**
11. **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**
12. **Enhanced lubrication to maintain maximum horsepower and acceleration**
13. **Hydro-Ethanol inhibitors that significantly reduce the problems that can result from the use of ethanol blended fuels**
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. **Enhanced vehicle emissions control system compatibility**
22. **Extended vehicle emissions control system life**
23. **Increased fuel economy benefits and retention for improved gas mileage during the oil's entire oil drain interval**
24. **Superior valve train-wear protection**
25. **Increased engine life**
26. **Excellent anti-foaming properties**

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® . 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**
*** Increased engine durability**
*** Increased engine life**
*** Less down-time**
*** Reduced maintenance costs**

Supreme 9000 SAE 5W-30 is also recommended for use all 4-cycle ATV engines especially those that have a common sump for the engine and transmission

Supreme 9000 SAE 5W-30 meets and exceeds the following specifications and manufacturers' requirements: MIL-PRF-46152E, CID A-A-52039B, API Service Classification SN, Resource Conserving, ILSAC GF-5, Ford WSS-M2C945A (SAE 5W-20), Ford WSS-M2C946-A (SAE 5W-30), Ford WSS-M2C930-A (SAE 5W-20), Ford WSS-M2C929A (SAE 5W-30), General Motors 6094M, Chrysler MS-6395, Chrysler MS-9214.

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TYPICAL PROPERTIES

SAE Grade	5W-30
Specific Gravity (ASTM D-1298)	0.86
Viscosity @ 40°C, Cst (ASTM D-445)	58.00 -73.00
Viscosity @ 100°C, Cst (ASTM D-445)	10.00 -12.00
Viscosity Index (ASTM D-2270)	160
High Temperature/High Shear Viscosity 302°F/150°C, cP (ASTM D-4683)	3.2
Cold Cranking Viscosity (ASTM D-5293)	
@-30°C, cP	6,000
Mini Rotary Viscosity TP-1 @ -35°, cP (ASTM D-4683)	19,500
Flash Point °F/°C (ASTM D-92)	445°/229.44°
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)	0.84%
Shear Stability (ASTM D-3945 Procedure A)	
% Viscosity Loss	5%
Copper Strip Corrosion Test (ASTM D-130)	1a
NOACK Volatility %Evaporation Loss (ASTM D-5800)	10.5%
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	10
TEOST 33C ASTM D-6335)	
Deposit Weight, mg	12.4
Engine Rusting Ball and Rust Test (ASTM D-6557)	
Average Gray Value	133
Sequence IIIG	
% Viscosity increase @ 40°C	130%
Average Cam & Lifter Wear, µm	9.8
% Phosphorous (ASTM D-4951	0.076