

## 9005 SUPREME 9000™ FULL SYNTHETIC SAE 0W-20

Supreme 9000™ Full Synthetic SAE 0W-20 is a premium quality full synthetic, multi-grade engine oil that is specifically formulated to provide robust protection to critical engine parts from damaging friction and wear, enhanced protection against the formation of sludge and deposits, increased engine efficiency and fuel economy benefits along with extend engine life in all gasoline fueled automobile and light duty truck engines including those that are turbocharged and supercharged.

Supreme 9000™ Full Synthetic SAE 0W-20 is blended from a unique combination of select synthetic base fluids, advanced additive package and highly shear stable viscosity index improver to provide the following advantages:

- Superior cold cranking and oil pumpability at low temperatures
- Exceptional oxidative stability especially and resistance to thermal degradation
- Exceptional low volatility characteristics, that provides enhances oil consumption
- Enhanced film strength at high operating temperatures
- Low coefficients of traction, which result in improved fuel economy benefits.
- Extended oil drain capability and intervals
- A patented novel zinc anti-wear additive system with minimal volatility and chemical breakdown which provides maximum, long lasting anti-wear performance and robustness needed to protect the engine
- Superior engine protection, mitigating LSPI events and protection against timing chain wear
- Outstanding protection against the formation of high temperature deposits
- High detergency and dispersancy to suppress the formation of deposits, sludge and varnish buildup to help maintain engine performance, fuel economy and emissions
- Active cleaning agents for increased and enhanced engine cleanliness
- Exceptional protection against the formation of coking deposits on turbochargers
- Exceptional protection against thermal breakdown during high engine oil operating temperature conditions
- Improved protection against oxidative thickening
- Rapid circulation and excellent pumpability
- Excellent low temperature flow characteristics and pumpability to minimize wear during start-up
- Excellent shear stability to resist viscosity shear down and breakdown
- 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
- Enhanced lubrication to maintain maximum horsepower and acceleration
- Inhibitors that significantly reduce the problems that can result from the use of ethanol blended fuels
- Prevention of the formation of rust, white sludge and lubricant starvation that can occur with 20% or higher ethanol fuels
- Outstanding rust and corrosion protection
- Extra protection for hot running engines and cold running engines in stop-and-go service.
- Reduced oil ageing allowing for increased drain intervals
- Reduced ring, cylinder and bearing wear for increased bearing life
- Excellent rust and bearing corrosion protection
- Enhanced emission control system compatibility for extended emissions control system life
- Superior valve train-wear protection for increased engine life
- Excellent anti-foaming properties

Further blended into Supreme 9000 Full Synthetic Engine Oil SAE 0W-20 are two proven frictional modifiers, Micron Moly®, a liquid soluble type of moly, and Schaeffer Mfg.'s own proprietary additive Penetro®. Once plated, these frictional modifiers form a long lasting, slippery, tenacious lubricant film, which prevents metal-to-metal contact and damaging frictional wear which 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 with Reduced maintenance costs

Supreme 9000™ Full Synthetic SAE 0W-20 meets and exceeds the following specifications and manufacturers' requirements: MIL-PRF-46152E; CID A-A-52039B; API Service Classification SP, Resource Conserving; ILSAC GF-6A, Ford WSS-M2C945-A (suitable for use); Ford WSS-M2C946-A (suitable for use); Ford WSS-M2C947-A (suitable for use), Ford WSS-M2C947-B1, Ford WSS-M2C962-A1, General Motors dexos1®Gen2; General Motors 6094M; Chrysler MS-6395Q, MS-9214; Toyota and Honda Service Fill Specifications; Honda/Acura HTO-06.

## TYPICAL PROPERTIES

<b>SAE Grade</b>	<b>0W-20</b>
Specific Gravity (ASTM D1298)	0.848
Viscosity @ 40°C, cSt (ASTM D445)	42.37
Viscosity @ 100°C, cSt (ASTM D445)	8.37
Viscosity Index (ASTM D2270)	174
High Temperature/High Shear Viscosity 212°F/100°C, cP (ASTM D4683)	5.70
High Temperature/High Shear Viscosity 302°F/150°C, cP (ASTM D4683)	2.71
Cold Cranking Viscosity (ASTM D5293) @-35°C, cP	5,826
Mini Rotary Viscosity TP-1 @ -40°, cP (ASTM D4683)	20,194
Flash Point °F/°C (ASTM D92)	400°/204°
Pour Point °F/°C (ASTM D97)	-60°/-51°
Total Base Number (ASTM D2896)	7.84
Sulfated Ash Content % wt. (ASTM D874)	0.82%
Shear Stability 30 Passes (ASTM D6278) Viscosity, cSt @100°C	7.37
Copper Strip Corrosion Test (ASTM D130)	1a
NOACK Volatility %Evaporation Loss (ASTM D5800)	12.58%
Foam Test (ASTM D892)	
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 D7097) Deposit Weight, mg	29.4
Engine Rusting Ball and Rust Test (ASTM D6557) Average Gray Value	128
Sequence IIIG % Viscosity increase @ 40°C	130%
Average Cam & Lifter Wear, µm	9.8
% Phosphorous (ASTM D4951)	0.076