

8007 ADVANCED EUROPEAN PERFORMANCE FULL SAPS SAE 5W-30

Advanced European Performance Full SAPS SAE 5W-30 is a premium, Upper Mainline, multi-grade full synthetic engine oil specifically formulated to provide robust protection to critical engine parts from damaging friction and wear. Advanced European Performance Full SAPS also provides enhanced protection against the formation of sludge and deposits, increased engine efficiency and extended engine life. Advanced European Performance Full SAPS meets the needs of highly tuned, advanced four cylinder European gasoline engines with or without catalytic convertors, diesel passenger (except those equipped with diesel particulate filters) and light commercial vehicles that are naturally aspirated or turbocharged. Advanced European Performance Full SAPS is suitable for use in automotive gasoline or diesel engines where the OEM recommends an ACEA A3/B4 or API SL/CF or earlier SAE 5W-30 engine oil.

Advanced European Performance Full SAPS SAE 5W-30 is blended from a unique combination of select synthetic base fluids that provide the following performance advantages:

- Superior cold cranking and oil pumpability at low temperatures
- Exceptional oxidative stability especially at high engine operating temperatures
- Exceptional resistance to thermal degradation to prevent the formation of high temperature engine deposits
- Exceptional low volatility characteristics, to provide enhanced oil consumption control and prevent deposit formation on critical engine parts.
- A high viscosity index.
- Enhanced film strength at high operating temperatures
- Low coefficients of traction to provide improved fuel economy benefits.
- Extended oil drain capability and intervals

Blended into these synthetic base fluids is a highly Advanced European Performance additive system and a highly shear stable viscosity index improver that provides the following performance benefits and features:

- Outstanding protection against the formation of high temperature deposits
- High detergency and dispersancy to suppress the formation of deposits, sludge and varnish buildup which helps maintain engine performance, fuel economy and emissions
- Active cleaning agents for increased and enhanced engine cleanliness
- Exceptional piston and piston ring cleanliness
- Exceptional protection against the formation of coking deposits on turbochargers
- Exceptional protection against thermal breakdown during high engine oil operating temperature conditions
- Superior performance protection against oxidative thickening
- Excellent low temperature flow characteristics and pumpability that provides rapid circulation and pumpability in order to minimize wear during cold weather start-up
- Excellent viscosity control and resistance to thinning at high engine operating temperatures
- 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
- Outstanding rust and corrosion protection
- Substantial reductions in ring, cylinder liner, bearing and valve-train wear to increase engine life

- Reduced oil consumption that ensures maximum potential is available from the engine oil throughout the drain interval
- Excellent light duty diesel engine performance for modern direct injection engines without diesel particulate filters
- Unsurpassed levels of protection across a variety of driving conditions and temperatures thus providing maximum short and long term engine performance

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 and durability
- Increased engine life, less down-time which provides reduced maintenance costs

Advanced European Performance Full SAPS SAE 5W-30 is not recommended for use in those motorcycle and ATV applications that specify engine oil that meets JASO MA, MA-2 or MB. Use of Advanced European Performance Full SAPS SAE 5W-30 in applications that specify JASO MA, MA-2 or MB oil can cause slippage and improper engagement of the clutch mechanisms.

Advanced European Performance Full SAPS SAE 5W-30 meets and exceeds and is suitable for use for following specifications: ACEA A3/B4-16; ACEA A3/B3-16; API Service Classification SL/CF; Volkswagen 502.00, 505.00; Mercedes Benz MB 229.3; MB 229.5; Renault RN0700, RN0710; Opel GM-LL-A/B-025, BMW Long Life-01.

TYPICAL PROPERTIES

| SAE Grade | 5W-30 |
|--|--------------|
| Specific Gravity (ASTM D1298) | 0.855 |
| Viscosity @ 40°C, cSt (ASTM D445) | 66.46 |
| Viscosity @ 100°C, cSt (ASTM D445) | 11.14 |
| Viscosity Index (ASTM D2270) | 166 |
| High Temperature/High Shear Viscosity 302°F/150°C, cP (ASTM D4683) | 3.5 |
| Cold Cranking Viscosity (ASTM D5293) @-30°C, cP | 5,784 |
| Flash Point °F/°C (ASTM D92) | 435°/224° |
| Pour Point °F/°C (ASTM D97) | -49°/-45° |
| Total Base Number (ASTM D2896) | 10 |
| Total Base Number (ASTM D4739) | 7.7 |
| Total Acid Number (ASTM D664) | 3.3 |
| Sulfated Ash Content % wt. (ASTM D874) | 1.25% |
| Noack Volatility % Evaporative Loss (ASTM D5800) | 10.1% |
| Zinc, ppm ICP | 1060 - 1100 |
| Phosphorus, ppm ICP | 920 - 1050 |