



## **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>

### **8007 ADVANCED EUROPEAN PERFORMANCE FULL SAPS SAE 5W-30 ACEA A3/B4-12 and API SL/CL**

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:

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 to prevent the formation of high temperature engine deposits
4. Exceptional low volatility characteristics, to provide enhanced oil consumption control and prevent deposit formation on critical engine parts.
5. A high viscosity index.
6. Enhanced film strength at high operating temperatures
7. Low coefficients of traction to provide improved fuel economy benefits.
8. 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:

1. Outstanding protection against the formation of high temperature deposits
2. High detergency and dispersancy to suppress the formation of deposits, sludge and varnish buildup which helps maintain engine performance, fuel economy and emissions
3. Active cleaning agents for increased and enhanced engine cleanliness
4. Exceptional piston and piston ring 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. Superior performance protection against oxidative thickening
8. Excellent low temperature flow characteristics and pumpability that provides rapid circulation and pumpability in order to minimize wear during cold weather start-up
9. Excellent viscosity control and resistance to thinning at high engine operating temperatures
10. Excellent shear stability to resist viscosity shear down and breakdown

Continued on Next Page

TD-8007 (07/2015)

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. Outstanding rust and corrosion protection
13. Substantial reductions in ring, cylinder liner, bearing and valve-train wear to increase engine life
14. Reduced oil consumption that ensures maximum potential is available from the engine oil throughout the drain interval
15. Excellent light duty diesel engine performance for modern direct injection engines without diesel particulate filters
16. 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 meets and exceeds and is suitable for use for following specifications: ACEA A3/B4-12; ACEA A3/B3-12; API Service Classification SL/CF; VW 502.00/505.00, Mercedes Benz MB 229.3; Renault RNO700/0710; Opel GM-LL-A/B-025, BMW Long Life-01; JASO MA2 (T903-2011)

### TYPICAL PROPERTIES

<b>SAE Grade</b>	<b>5W-30</b>
Specific Gravity (ASTM D-1298)	0.855
Viscosity @ 40°C, cSt (ASTM D-445)	66.46
Viscosity @ 100°C, cSt (ASTM D-445)	11.14
Viscosity Index (ASTM D-2270)	166
High Temperature/High Shear Viscosity 302°F/150°C, cP (ASTM D-4683)	3.5
Cold Cranking Viscosity (ASTM D-5293) @ -30°C, cP	5,784
Flash Point °F/°C (ASTM D-92)	435°/224°
Pour Point °F/°C (ASTM D-97)	-49°/-45°
Total Base Number (ASTM D-2896)	10
Total Base Number (ASTM D-4739)	7.7
Total Acid Number (ASTM D-664)	3.3
Sulfated Ash Content % wt. (ASTM D-874)	1.25%
Noack Volatility % Evaporative Loss (ASTM D-5800)	10.1%
Zinc, ppm ICP	1060 - 1100
Phosphorus, ppm ICP	920 - 1050