

High Performance Motor Oil

EUROPEAN FORMULA

Royal Purple® High Performance Motor Oil European Formula SAE 5W-30, 0W-40 and SAE 5W-40 are formulated exclusively with premium synthetic base stocks and advanced additive technology to deliver trusted engine protection and peak vehicle performance. The European Formula motor oils provide excellent resistance to sludge and varnish deposits during stop-and-go driving and other severe operating conditions. Recommended for use in European passenger car gasoline/petrol engines, and light-duty diesel engines including turbocharged and direct injection diesel engines with a diesel particulate filter (DPF) and selective catalysts. Premium synthetic formulation delivers excellent oxidation stability and low volatility properties, resulting in reduced oil consumption between services.

PERFORMANCE ADVANTAGES

- BETTER WEAR PROTECTION - Wear protection beyond the requirements of current API and ACEA specifications
- INCREASED FUEL EFFICIENCY - A low coefficient of friction results in optimized fuel efficiency
- SUPERIOR LOW-TEMPERATURE PERFORMANCE - Low-temperature flow ensures lubrication and protection for cold starts
- SUPERIOR CORROSION PROTECTION - No rust observed in standard industry testing
- EXCELLENT OXIDATION STABILITY - Long lubricant life; meets or exceeds the oil change intervals for most Euro passenger cars

OEM SPECIFICATIONS

- SAE 5W-30:** Licensed API SN, ACEA C3-12, 16, 21; BMW Longlife-04; MB 229.31 & 229.51, Porsche C30; VW 504.00 & 507.00
- SAE 0W-40:** Licensed API SP, ACEA A4/B4-21; BMW Longlife-01; Ford WSS-M2C937-AMB 226.5, 229.3 & 229.5, Porsche A40; RN0710; VW 502.00 & 505.00
- SAE 5W-40:** Licensed API SP, ACEA A4/B4-21; BMW Longlife-01; MB 226.5, 229.3 & 229.5, Porsche A40; RN0700 & RN0710; VW 502.00 & 505.00

Typical Physical Properties				
Property	Test Method	5W-30	0W-40	5W-40
API Service		SN	SP	SP
ACEA Service		C3-21	A3/B4-21	A3/B4-21
Viscosity @ 40°C, cSt	ASTM D445	67.9	64.4	77.8
Viscosity @ 100°C, cSt	ASTM D445	11.6	12.9	13.0
Viscosity Index	ASTM D2270	167	206	169
Flash Point, °C (°F)	ASTM D92	236 (456)	219 (426)	232 (450)
Pour Point, °C (°F)	ASTM D97	-45 (-49)	-48 (-54)	-45 (-49)
Cold Crank Simulator, cP	ASTM D5293	5,661 @-30°C	5,988 @-35°C	5,309 @-30°C
TBN, mg KOH	ASTM D2896	8.7	12.9	12.4
HTHS, @150°C, cP	ASTM D5481	3.8	4.0	3.8