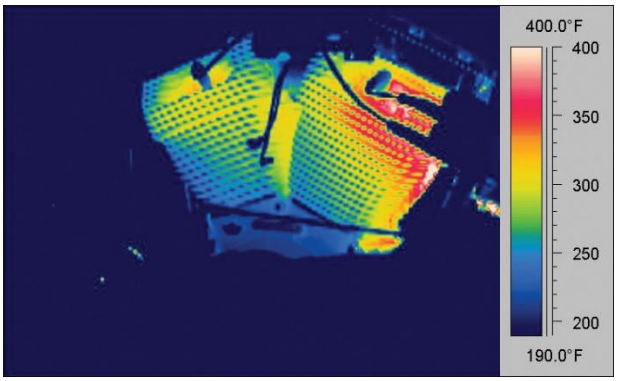
TECHNICAL DATA SHEET

Max-Cycle®

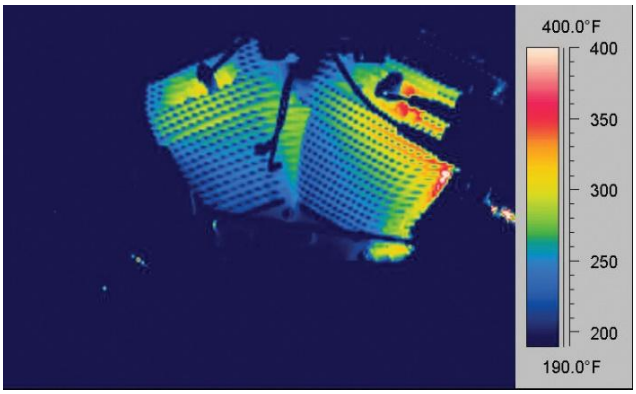
HIGH-PERFORMANCE MOTORCYCLE & ATV ENGINE OIL

Royal Purple® Max-Cycle® is specifically formulated to exceed the demands of highly stressed engines and transmissions. It is recommended for use in both air-cooled and liquid-cooled 4-cycle engines. Formulated with select synthetic base oils and Royal Purple's proprietary Synerlec® additive technology, Max-Cycle provides improved film strength when compared to the leading synthetic and mineral oil. Its shear stability and oxidation resistance promote greater performance and protection.

Royal Purple's advanced and proprietary Synerlec technology provides an exceptional film strength increase compared to other engine oils. The protection provided by Synerlec dramatically reduces metal-to-metal contact and frictional wear, helping to reduce engine operating temperatures and restore lost engine performance. Synerlec also provides outstanding oxidation resistance to safely extend oil drains, and an ionic attraction to metal components providing unmatched cold-start wear protection.



Thermal image of engine using OEM branded engine oil.



Thermal image of engine after change to Max-Cycle SAE 20W-50.

PERFORMANCE ADVANTAGES

- GREATEST WEAR PROTECTION – Protection against engine wear that is unmatched by any commercially available engine oil
- SUPERIOR HIGH-TEMP. PERFORMANCE - Premium synthetic base oils and Synerlec technology resist thermal degradation
- LOWER CYLINDER TEMPERATURES – Reduced metal-to-metal contact and friction resulting in observed 25°F to 44°F temperature reduction measured at the cylinder

Distributed By:
Calumet Branded Products, LLC
1060 N Capitol Ave
Suite 6-401
Indianapolis, IN 46204
Technical Services: 888-382-6300
www.royalpurple.com

9/17/2025

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Typical Physical Properties			
Property	Test Method	10W-40	20W-50
Viscosity @ 40°C, cSt	ASTM D445	92.1	165
Viscosity @ 100°C, cSt	ASTM D445	14.0	20.1
Viscosity Index	ASTM D2270	155	141
Cold Crank Simulator, cP	ASTM D5293	5,341 @-25°C	4,491 @-15°C
HTHS, @150°C, cP	ASTM D5481	3.9	5.1
Flash Point, °C (°F)	ASTM D92	204 (400)	213 (415)
Pour Point, °C (°F)	ASTM D97	-49 (-56)	-26 (-15)
TBN, mg KOH	ASTM D2896	9.6	9.5

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