

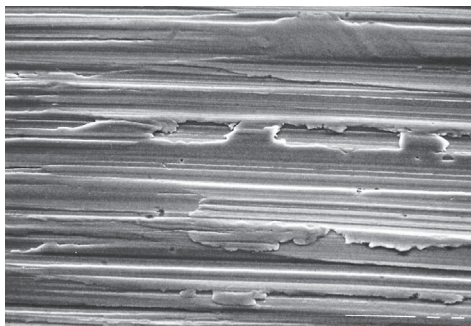


MAX-TUFF

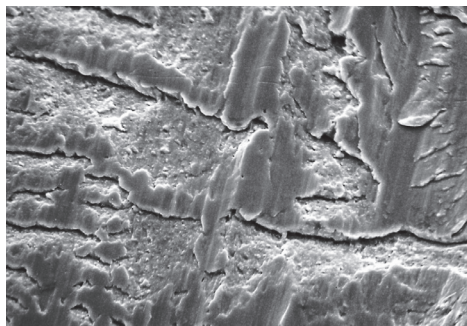
HIGH-PERFORMANCE SYNTHETIC ASSEMBLY LUBRICANT

Royal Purple® Max-Tuff® is an ultra-tough, synthetic assembly lubricant. It's designed for use in the build or repair of any mechanical component that needs immediate lubrication and protection from the first use. Max-Tuff utilizes unique, synthetic molecules that adhere to metal surfaces to create a formidable, load-bearing physical barrier between surfaces. This minimizes the metal-to-metal contact and wear in boundary lubrication conditions. It also provides excellent protection against rust and corrosion of both ferrous and nonferrous metals. Initial lubrication of recently built or rebuilt components is critical to equipment life, and Max-Tuff provides that critical protection until the service lubricant gets to the lubricated components.

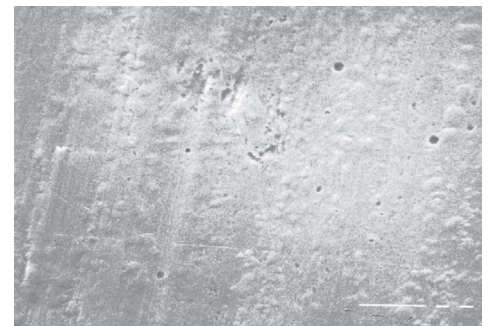
Royal Purple's advanced and proprietary Synerlec® technology provides an exceptional film strength increase compared to any other comparable lubricant. The protection provided by Synerlec® dramatically reduces metal-to-metal contact and frictional wear, helping to extend bearing and gear life, life and reducing parasitic power loss through the equipment. Synerlec® also provides the lubricant with outstanding oxidation resistance to increase lubricant useful life and safely extend oil drains. The ionic attraction of Synerlec® to metal components provides unmatched wear protection, even before the oil is fully circulating.



New bearing*



After leading synthetic*



New Royal Purple with Synthetic*

* Same bearing shell from same engine, magnified 1500x

PERFORMANCE ADVANTAGES

GREATER WEAR PROTECTION - Prevents wear of hydraulic and steering system components beyond OEM spec. requirements

REDUCED TEMPERATURES - Superior separation of metal surfaces and greater lubricity reduces friction and heat generation

EXCELLENT ANTI-FOAMING - Advanced chemistry helps prevent foam generation and quickly reduce any foam that is created

SUPERIOR CORROSION PROTECTION - No rust observed in standard industry testing

OUTSTANDING HIGH TEMPERATURE PERFORMANCE - Maintains viscosity and long fluid life even under severe operating conditions, like off-road operation and heavily loaded vehicles

INCREDIBLE LOW TEMPERATURE FLOW - With a Pour Point below -40 degrees, power steering will operate properly even on the coldest days



MAX-TUFF

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TECHNICAL DATA

Property	Test Method	
Viscosity @ 40°C, cSt	ASTM D445	641
Viscosity @ 100°C, cSt	ASTM D445	51.1
Viscosity Index	ASTM D2270	136
Flash Point, °C (°F)	ASTM D92	236 (456)
Pour Point, °C (°F)	ASTM D97	-36 (-33)
Rust Prevention, Dist. Water	ASTM D665A	PASS
Rust Prevention, Sea Water	ASTM D665B	PASS
Copper Corrosion @ 100 °C	ASTM D130	1B
4-Ball EP, Load Wear Index	ASTM D2783	59.2
4-Ball EP, Weld Load, kg	ASTM D2783	250
4-Ball Wear, Scar, mm	ASTM D4172	0.5

2/5/2021