

### **TECHNICAL DATA SHEET**

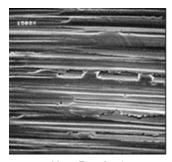
# **Synchromax**

#### **MANUAL TRANSMISSION & TRANSFER CASE FLUID**

Royal Purple® Synchromax is a synthetic, high-performance, long-life manual transmission and transfer case fluid. Recommended as a performance upgrade fluid for drive train components that specify the use of an automatic transmission fluid and other light-viscosity lubricant. Synchromax is also an excellent choice for off-road motorcycle and ATV transmissions that use a separate transmission fluid, apart from the engine oil.

Synchromax is fully compatible with all types of friction materials and offers excellent corrosion and oxidation protection. The premium performance lubricant is also formulated to protect soft yellow metals (like brass and bronze) commonly found in manual transmission synchronizers and bushings. Its low coefficient of friction and high film strength help to dramatically reduce heat and wear.

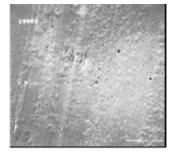
Royal Purple's advanced and proprietary Synerlec® technology provides an exceptional film strength increase compared to other engine oils. The protection provided by Synerlec® dramatically reduces metal-to-metal contact and frictional wear, helping to extended transmission life and reduce parasitic power loss through the vehicle drive train. 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\*



After Royal Purple w/ Synerlec\*

#### PERFORMANCE ADVANTAGES

- BETTER WEAR PROTECTION Prevents wear of gears and bearings beyond OEM specification requirements
- IMPROVED SHIFTING Lowered friction and improved metal surfaces provide smoother and more consistent shift performance
- INCREASED EFFICIENCY Increased fuel economy and power benefits due to reduced parasitic loss through the drive train
- REDUCED TEMPERATURES Superior separation of metal surfaces and greater lubricity reduces friction and heat generation
- SUPERIOR CORROSION PROTECTION No rust observed in standard industry testing



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Typical Physical Properties		
Property	<b>Test Method</b>	
Viscosity @ 40°C, cSt	ASTM D445	39
Viscosity @ 100°C, cSt	ASTM D445	7.5
Viscosity Index	ASTM D2270	162
Flash Point, °C (°F)	ASTM D92	207 (405)
Pour Point, °C (°F)	ASTM D97	-51 (-60)
Brookfield Visc. @ -40°C, cP	ASTM D2983	11,145
Copper Corrosion @ 100°C	ASTM D130	1A
Copper Corrosion @ 150°C	ASTM D130	1B
Foam Stability	ASTM D892	0/0/0
4-Ball Wear, Scar, mm	ASTM D4172	0.34