TECHNICAL DATA SHEET



CD 50 Synthetic Transmission Fluid

Bel-Ray® CD 50 Synthetic Transmission Fluid is a premium, full-synthetic transmission fluid specifically designed for use in heavy-duty manual transmissions in over-the-road trucks, buses and off-road equipment operating under severe conditions, extreme ambient temperatures, and utilizing extended service intervals. Formulated with proprietary synthetic base stocks and advanced additive technology, Bel-Ray CD 50 boasts outstanding thermal and oxidation stability to support extended drain intervals as defined by Eaton Roadranger and Dana Transmission 500,000-mile line-haul service. Bel-Ray CD 50 Synthetic Transmission Fluid meets and exceeds the performance requirements of API GL-1/MT-1.

APPLICATIONS

Bel-Ray CD 50 Synthetic Transmission Fluid is recommended for the following heavy-duty manual transmission requirements:

- U.S. Military MIL-2104D & MIL-L-46152B
- Eaton Roadranger (Eaton Fuller) PS-164 (E500), PS-081 (E250) & REV 7
- Dana Spicer
- ArvinMeritor O-81
- International TMS 6816
- Mack TO-A Plus
- ZF Freedomline

PRODUCT FEATURES

- Formulated with premium base stocks for maximum resistance to thermal breakdown
- · Provides active anti-wear agents to protect critical transmission components, including synchronizers
- Delivers maximum resistance to fluid oxidation in severe operating conditions, including stop-and-go driving
- Advanced friction modifiers provide smooth shifting performance

BENEFITS

- Extended service wear protection for critical transmission components
- Excellent frictional properties and low-temp performance for smooth shifting
- · Optimum performance under heavy load
- Maximum protection against transmission varnish and sludge formation
- Superior thermal stability and oxidation resistance to support extended service intervals
- Optimizes fuel economy when compared to conventional manual transmission fluids
- · Maximizes manual transmission's operational life

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Typical Physical Properties		
Property	Test Method	
Density@15°C, g/cm3	ASTM D4052	0.845
API Gravity @ 60°F	ASTM D4052	35.97
Viscosity @ 40°C, cSt	ASTM D445	127
Viscosity @ 100°C, cSt	ASTM D445	20.4
Viscosity Index	ASTM D2270	185
Flash Point, °C (°F)	ASTM D92	208 (406)
Pour Point, °C (°F)	ASTM D97	-45 (-49)
Brookfield Visc. @ -40°C, cP	ASTM D2983	9,258
Copper Corrosion @ 100°C	ASTM D130	1B
Foam Stability	ASTM D892	0/0
Zinc, wt%	ASTM D6481	<0.001