## PennGrade 1<sup>®</sup> Multi-Purpose 'Classic' Gear Oil GL-4 SAE 80W-90



## **Product Description**

PennGrade 1<sup>®</sup> Multi-Purpose 'Classic' Gear Oil GL-4 SAE 80W-90 is a specially blended using high quality premium mineral base stocks and select additive technologies. It is designed to be used with "yellow" metallurgy (brass, bronze, copper) and other 'soft' metals used in synchronizers, bushings, thrust washers and other components typically found in classic manual transmissions and transaxles. In applications specifying API GL-4 quality lubricants, use of API GL-5 lubricants with higher extreme pressure additive activity/concentration can damage these 'soft' metal components. It is not intended for use in 'limited slip' applications and does not contain friction modifiers which can interfere with proper synchronizer performance. PennGrade 1<sup>®</sup> Multi-Purpose 'Classic' Gear Oil GL-4 SAE 80W-90 is recommended for use in such time-honored traditional manual transmissions as those made by Muncie, Rockwell, NVG/New Process, Borg-Warner, Saginaw and Ford as well as those used in many imports. It is suitable for use in Nissan UD trucks, Mitsubishi Fuso trucks, Volvo trucks and Mercedes Benz truck manual transmissions as well as the transmissions /transaxles on Nissan cars and SUV's, Mitsubishi vehicles and Suzuki vehicles calling for an API GL-4 level lubricant. Not for use in applications requiring API GL-5 quality extreme pressure (EP) lubricants or where OEM specialized fluids are mandated. Always consult the equipment owner's manual for proper fluid selection.

## **Typical Properties**

SAE Viscosity Grade	Test Method	80W-90
Viscosity @ 100°C, cSt @ 40°C, cSt	ASTM D445 ASTM D445	15 138.3
Viscosity Index	ASTM D2270	102
Pour Point, °F (°C)	ASTM D97	-27 (-33)
Flash Point, °F (°C) (min)	ASTM D92	450 (232)
API Gravity	ASTM D4052	28.4
Density, lbs/gal	Calculated	7.385

