



# **PATROL GEAR OIL**

## **SAE 80W-90 API GL-4**

### **PRODUCT DESCRIPTION**

Patrol Oil SAE 80W-90 API GL-4 is a high-quality multipurpose gear oil formulated for use in manual transmissions, transaxles, and moderate-duty axles where GL-4 performance is specified. It provides excellent gear protection, corrosion control, and smooth shifting performance.

### **APPLICATIONS**

- Manual transmissions and transaxles requiring API GL-4
- Light to medium-duty axles where GL-4 gear oil is recommended
- Passenger cars, commercial vehicles, and off-road equipment
- Suitable for synchronized gearboxes
- Not recommended for hypoid axles requiring API GL-5

### **FEATURES & BENEFITS**

- Balanced EP performance for synchronized transmissions
- Excellent wear protection for gears and bearings
- Good oxidation and thermal stability
- Corrosion protection for steel and non-ferrous metals
- Smooth gear shifting and reduced noise

### **PERFORMANCE STANDARDS / OEM REFERENCES**

- API GL-4
- ZF TE-ML 02B / 16A / 17A
- Mercedes-Benz MB 235.1
- MAN 341 Type Z2 / E1
- Volvo Manual Transmission Oil (where GL-4 is specified)
- Eaton / Fuller Manual Transmissions (where GL-4 is recommended)
- Ford M2C-105A / M2C-117
- GM Manual Transmission Specifications (older requirements)
- Toyota, Mitsubishi, Isuzu manual gearboxes where SAE 80W-90 GL-4 is required



## TYPICAL PROPERTIES

PROPERTY	METHOD	UNIT	TYPICAL VALUE
SAE Grade	SAE J306	-	80W-90
Kinematic Viscosity @ 40°C	ASTM D445	cSt	130-150
Kinematic Viscosity @ 100°C	ASTM D445	cSt	14.0-16.0
Viscosity Index	ASTM D2270	-	95-105
Flash Point (COC)	ASTM D92	°C	210-230
Pour Point	ASTM D97	°C	-27
Density @ 15°C	ASTM D4052	kg/m <sup>3</sup>	890-900

**Note:** These characteristics are typical of current production. While future production will conform to PATROL's specification, variations in these characteristics may occur.

**Health and Safety:** Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet (MSDS) are followed. MSDS's are available upon request. This product should not be used for purposes other than its intended use. If disposing off used product, take care to protect the environment

