



Product Name: GITRÖL SAE 90 GL-4

Application: Oil for manual transmissions and differentials

API Service: GL-4

Viscosity Grade: SAE 90

Quality: Mineral

Recommended for: Transmissions or manual gearboxes of some trucks and buses VOLVO, TERBERG, SEDDON ATKINSON, LEYLAND TRUCK-SCAMMEL, LEYLAND DAF and FORD

Drain Interval: between 40,000 to 80,000 km

Product Overview

GITRÖL SAE 90 GL-4 is a high-performance **mineral gear oil** formulated to provide reliable **EP protection**, wear resistance, and thermal stability for synchronized and non-synchronized gear systems. It is optimized to protect **yellow metals** such as brass, bronze, and copper alloys used in manual transmissions.

The formulation includes high-quality base stocks and selected additives to ensure:

- Smooth gear operation
- Enhanced protection under load
- Resistance to foaming and oxidation
- Extended equipment and lubricant life

Application

GITRÖL SAE 90 GL-4 is specially designed for use in **manual transmissions, differentials, final drives**, and other gear systems requiring **moderate EP (Extreme Pressure) protection**. It is suitable for a wide range of **passenger vehicles, light commercial vehicles, agricultural machinery, and construction equipment** operating under medium-speed and high-load conditions

Performance Benefits

- **API GL-4 Performance**
Provides balanced EP protection without harming synchronizers or soft metal components.
- **Wear Protection**
Reduces gear tooth scuffing and bearing wear under high-torque conditions.
- **Oxidation Stability**
Controls sludge formation and maintains oil life in long drain intervals.
- **Rust & Corrosion Inhibition**
Ensures long-term protection of metal surfaces from water and air exposure.
- **Compatibility with Yellow Metals**
Gentle additive package ensures safe use in synchronized transmissions

Meets and Approvals

Meets:

- API GL-4

May meet manufacturer requirements for:

- MAN 341 Typ Z1





- ZF TE-ML 02B, 16A
- MIL-L-2105 (obsolete reference)

Typical Properties

Property	Method	Typical Value
Appearance	Visual	Clear, light amber
Density @ 15°C	ASTM D4052	0.890 g/cm ³
Kinematic Viscosity @ 40°C	ASTM D445	180 – 200 mm ² /s
Kinematic Viscosity @ 100°C	ASTM D445	17.0 – 18.5 mm ² /s
Viscosity Index	ASTM D2270	≥95
Pour Point	ASTM D97	-18°C
Flash Point (COC)	ASTM D92	≥240°C
Copper Corrosion (3h @ 121°C)	ASTM D130	1b
Foaming (Seq I, II, III)	ASTM D892	Pass
Timken OK Load	ASTM D2782	≥60 lb
FZG Load Stage	DIN 51354	Pass (Stage 10–11)

Storage and Handling

- Store in a cool, dry place away from direct sunlight and temperatures above 60°C.
- Ensure containers are sealed to prevent contamination.
- Avoid mixing with other oils to maintain full performance

