



**Product Name:** GITRÖL SAE 50 GL-4

**Application:** Oil for manual transmissions and differentials

**API Service:** GL-4

**Viscosity Grade:** SAE 50

**Quality:** Fully synthetic

**Recommended for:** Caterpillar TO-4, Komatsu power shift transmissions, ZF torque converter transmissions and Allison C-4 automatic transmission. It is also used for heavy duty manual transmissions, gear boxes, final drives and hydraulic systems used in off highway equipment.

**Drain Interval:** 500-1,000 operational hours

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## Product Overview

**GITRÖL SAE 50 GL-4** is a high-performance, fully synthetic manual transmission lubricant designed to meet the most demanding requirements of modern heavy-duty transmissions. Engineered with advanced additive technology, it ensures maximum protection, exceptional thermal stability, and extended drain intervals for light to severe-duty on- and off-highway applications.

This gear oil provides significant advantages over conventional sulphur-phosphorus gear oils, including superior high-temperature performance, oxidation resistance, wear protection, and corrosion control. Its high viscosity index delivers robust film strength at elevated temperatures, while maintaining excellent low-temperature fluidity for smooth operation even in freezing conditions.

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## Application

**GITRÖL SAE 50 GL-4** is recommended for:

- Heavy-duty manual transmissions requiring extended service intervals.
- On-highway vehicles such as trucks, buses, and vans.
- Off-highway equipment in construction, mining, agriculture, and logging.
- Industrial torque converters and hydraulic systems requiring API GL-4 specifications.

**Note:** Not suitable for hypoid gear applications in differentials and final drives requiring API GL-5 or MIL-PRF-2105E

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## Performance Benefits

- **Superior Wear Protection:** Extends transmission life and reduces operational costs.
- **Outstanding Oxidation Stability:** Prolongs oil life and reduces sludge formation.
- **Exceptional Low-Temperature Fluidity:** Ensures smooth shifts and quicker start-ups in cold conditions.
- **Extended Drain Intervals:** Reduces downtime and maintenance costs.
- **Friction Optimization:** Improves fuel economy and enhances performance.
- **Corrosion Control:** Protects copper alloys and synchronizers, ensuring longer component life.
- **Shear Stability:** Maintains viscosity and performance under severe operating conditions.

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## Meets and Approvals

**Meets:**





- API MT-1
- API GL-4
- API CF

#### Approvals :

- Caterpillar TO-4
- TMS-6816
- Allison TES 439
- Allison C-4
- Komatsu KES 07.868.1
- Mack TO-A Plus
- ZF TE-ML-03C

### Typical Properties

Property	Method	Unit	Typical Value
Grade	-	SAE 50	-
Density @ 15.6°C	ASTM D4052	g/ml	0.86
Flash Point	ASTM D92	°C	221
Kinematic Viscosity @ 100°C	ASTM D445	mm <sup>2</sup> /s	17.5
Kinematic Viscosity @ 40°C	ASTM D445	mm <sup>2</sup> /s	132
Pour Point	ASTM D97	°C	-45
Viscosity Index	ASTM D2270	-	146

### 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

