

**DESCRIPTION**

**Longlife TO-4 Transmission Drivetrain Oils** are premium heavy-duty fluids specifically engineered to meet or exceed the Caterpillar TO-4 specification for powershift transmissions, final drives, wet brakes, differentials, hydraulic systems, and power steering units in off-highway equipment. These multi-functional oils utilize high-viscosity-index paraffinic base stocks combined with an advanced additive package to deliver superior detergency, anti-wear protection, and thermal-oxidative stability under severe operating conditions. The formulation ensures optimized friction performance for smooth, quiet operation of wet brakes and power-take-off clutches while effectively suppressing chatter and noise. Excellent rust and corrosion inhibition, along with robust anti-foam and filterability characteristics, provides comprehensive component protection and system cleanliness across a wide range of tractors, construction, and mining machinery. **Longlife TO-4 oils** support extended service life, reliable performance, and reduced maintenance in demanding heavy-duty drivetrain applications.

**APPLICATIONS**

Longlife TO-4 Transmission Drivetrain Oils, are recommended for:

- use in transmissions, final drives, wet brakes, and hydraulic systems of tractors and heavy equipment.

**SPECIFICATIONS & RECOMMENDATIONS**

- Allison C-4 – SAE 10W and 30 grades
- Caterpillar TO-4, CD/TO-2 – all grades
- Komatsu Micro-Clutch – all grades
- Vickers (Eaton) M-2950-S

**ADVANTAGES & BENEFITS**

- **Exceptional Component Longevity:** Advanced anti-wear and extreme-pressure additives, combined with shear-stable viscosity modifiers, minimize metal-to-metal contact and extend the service life of gears, bearings, clutches, and wet brake components under severe loads.
- **Optimized Friction Control:** Precisely balanced friction modifiers ensure smooth, consistent engagement of powershift clutches and wet brakes, effectively eliminating chatter, noise, and judder for enhanced operator comfort and reduced component stress.
- **Superior System Cleanliness:** High-performance detergent and dispersant technology maintains exceptional deposit control and prevents sludge formation, supporting long-term hydraulic and transmission system efficiency.
- **Robust Thermal and Oxidative Stability:** Premium base stocks and advanced antioxidant additives resist breakdown at high operating temperatures, maintaining fluid integrity and performance during prolonged heavy-duty cycles.
- **Comprehensive Corrosion and Rust Protection:** Effective inhibitor package safeguards internal metal surfaces against rust and corrosion, even in the presence of water ingress or extended idle periods.

**HEALTH & SAFETY**

This product is not anticipated to pose any adverse health risks when used as intended.

For additional details, refer to separate Safety Data Sheets, available upon request.


**LONGLIFE**  
 ULTIMATE PROTECTION FOR THE LONG HAUL

**TECHNICAL DATA/TECHNICAL PROPERTIES**

Properties	SAE Grade		
	10W	30	50
Viscosity @ 100 °C, cSt	6.3	11.5	18.0
Viscosity Index	105	102	100
Pour Point, °C(°F)	-37	-18	-15
Flash Point, °C(°F)	200	215	230
Product Code	LLTO4-10W	LLTO4-30 Wt	LLTO4-50 Wt

\*All properties are typical and may vary.

Always adhere to the manufacturer's guidelines for the correct equipment fluid. Lubchem Specialties is not liable for any misuse of the product or improper application.