

## TRANS-TECH Transmission Fluid TO-4 SAE 40

### Product Description

**TRANS-TECH TO-4 SAE 40** is a robust monograde mineral transmission oil formulated with carefully balanced additives for wear protection, friction control, and thermal stability. It delivers optimized clutch engagement, minimized brake chatter, and long fluid and equipment life.

#### Designed to:

- Meet Caterpillar's TO-4 specifications
- Prevent gear and bearing wear under heavy loads
- Provide superior film strength and resistance to viscosity breakdown in hot climates
- Ensure noise-free brake and transmission operation

### Product Features & Benefits

- **TO-4 Approved Friction Performance:** Delivers proper clutch engagement and gear shifting in powershift and manual transmissions.
- **Anti-Wear Protection:** Safeguards against gear pitting and bearing wear in final drives and transmission systems.
- **Brake Noise Reduction:** Controls wet brake chatter and ensures smooth, quiet braking.
- **Thermal & Oxidation Stability:** Maintains performance under high-load, high-temperature operation.
- **Hydraulic System Compatibility:** Provides reliable performance in combined transmission-hydraulic systems.

### Application

Suitable for:

- Caterpillar, Komatsu, and other OEMs requiring SAE 40 TO-4 fluid

Ideal for:

- Powershift and direct drive transmissions
- Final drives and gearboxes
- Wet disc brakes
- Hydraulic systems in off-highway and earthmoving equipment

Not recommended as engine oil

### Approvals & Specifications

- Caterpillar TO-4
- Komatsu KES 07.868.1
- Allison C-4 (off-highway only)
- May also be used where TO-2 was previously specified

### Storage & Handling

- Store in cool, dry areas below 45°C
- Keep containers sealed and avoid contamination
- Do not mix with other oils unless approved
- Refer to SDS for full safety and handling instructions

### Typical Properties

Property	Method	Value
Appearance	Visual	Bright & Clear
Density @ 15°C	ASTM D4052	0.892 g/cm <sup>3</sup>
Kinematic Viscosity @ 40°C	ASTM D445	145-160 mm <sup>2</sup> /s
Kinematic Viscosity @ 100°C	ASTM D445	14.5-16.0 mm <sup>2</sup> /s
Viscosity Index	ASTM D2270	≥95
Flash Point (COC)	ASTM D92	≥245°C
Pour Point	ASTM D97	-18°C
FZG Load Stage	DIN 51354	Pass (Stage ≥12)
Copper Corrosion	ASTM D130	1b
Foam Sequence I/II/III	ASTM D892	Pass

- Values above are typical and may vary slightly depending on production batch.

