



Product Data

Castrol Trans C 50

TO-4 Transmission Fluid

Description

Castrol Trans C, Transmission Drive Train Oil, meets the stringent Caterpillar TO-4 Fluid requirements, particularly where paper and elastomer disc materials are utilized and friction retention must be optimized for extended clutch life and slippage control under severe high load operations. While commercial engine oil technology excelled in the previous Caterpillar required CD/TO-2 specification where the bronze clutches prevailed, Castrol Trans C provides field-tested technology to ensure durability under today's strenuous operating conditions and where significant clutch material changes have taken place.

Castrol Trans C will also provide Detroit Diesel Allison C-4 performance. **CASTROL TRANS C** excels in many on and off-highway hydraulic oil applications.

Castrol Heavy Duty's traditional quality approach prevails in our "Trans C Fluid" by having premium base oil selection (high viscosity indexes) coupled with select additives for noted oxidation stability, rust and corrosion protection, foaming inhibition, anti-wear protection, mild "EP" and assured excellent pumpability in the "SAE 50" or ISO 220 grade.

Advantages

- Designed specifically for transmission, wet disc brakes and final drives.
- Substantially improved friction and anti-wear performance compared to CD/TO-2 fluids.
- Longer equipment life and reduced risk of field failure.
- Formulated to provide controlled friction performance with several different friction modifiers (both metallic and non-metallic).
- Eliminate field failure problems experienced with CD/TO-2 fluids such as excessive brake noise, weakening of the binder in paper materials and embrittlement of elastomeric materials for trouble free equipment life.
- Stable frictional performance over vehicle life.
- No degradation of frictional performance or clutch slippage, even under high loads on an incline.
- Excellent oxidative stability control as shown by performance in Allison C- 4/Dexron II Oxidation Test (THOT).
- Sludge control prevents deposits from blocking lubricating passages.
- Excellent final drive protection for gears. Margin of safety for severe service.
- Excellent protection in hydraulic systems to include high pressure systems.
- Versatility of fluid for consolidation in on and off-highway equipment.
- Protection against copper corrosion and rust.
- Equipment parts run "clean" for trouble free operation.
- Maximum foam protection.
- Ensures no fluid loss to foaming, even with water contamination.
- Protection against fluid overflow and fire hazards for worker safety.
- Excellent low temperature fluidity
- Easier starts with less wear at cold temperatures for longer transmission life and increased worker productivity.

Warranty and Protection Requirements:

- Exceeds all manufacturer's warranty requirements for applications requiring a transmission fluid meeting the Caterpillar TO-4 specification.

Typical Characteristics

Name	Method	Units	Trans C 50
Specific Gravity @60F	ASTM D1298	g/ml	0.897
Viscosity, Kinematic 100C	ASTM D445	mm²/s	18.6
Viscosity, Kinematic 40C	ASTM D445	mm²/s	213
Viscosity Index	ASTM D2270	None	100
Flash Point, COC	ASTM D92	°C (°F)	256 (493)
Pour Point	ASTM D97	°C (°F)	-27 (-17)

Product Performance Claims

CAT TO-4

Storage

All packages should be stored under cover. Where outside storage is unavoidable drums should be laid horizontally to avoid the possible ingress of water and damage to drum markings. Products should not be stored above 60C, exposed to hot sun or freezing conditions.

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