



Torque Fluid 454

Proven performance heavy-duty transmission and drive train fluid

Product Data Sheet

Product description

Torque Fluid 454 is a proven performance heavy-duty transmission and drive train fluid designed for powershift transmissions and final drives which require Caterpillar TO-4 fluid performance.

Torque Fluid 454 is formulated with mineral base oils and a non-friction modified additive system.

Customer benefits

- Optimum friction level for fast shifting and maximum transmission power throughput
- Proven anti-wear protection
- Oxidation stability prevents oil thickening and the formation of harmful sludge, lacquer and deposits
- Low temperature fluidity ensures rapid circulation at cold start-up, reducing wear
- Viscosity improver-free formulation prevents viscosity drop due to in-service shearing
- Fully compatible with elastomers in Caterpillar and related equipment, preventing fluid loss through seal damage
- Foam suppression system minimises foam formation and enables rapid entrained air release, ensuring smooth shifting

Applications

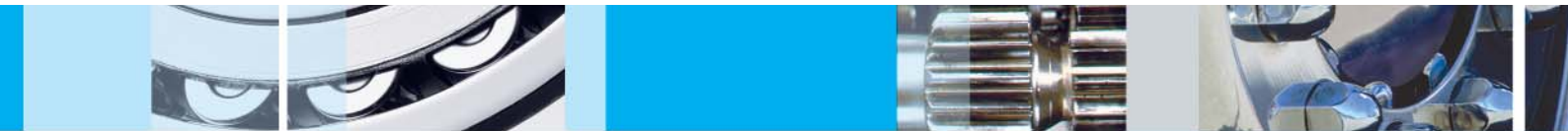
- Torque Fluid 454 is designed for use in Caterpillar powershift transmissions, final drives and marine transmissions. It is also suitable for use in other heavy-duty applications that require a TO-4 fluid, including Komatsu powershift transmissions
- Torque Fluid 454 is an SAE 50 viscosity grade product, and is suitable for use in ambient temperatures up to 50°C

Product highlights:

- Optimum friction level for fast shifting
- Maximum transmission power throughput
- Wear and oxidation resistant
- Selected specification standards include:
 - Caterpillar
 - Eaton
 - Komatsu
 - Meritor Rockwell
 - Volvo

A Chevron company product

Global Lubricants



- Torque Fluid 454 may also be used in heavy-duty manual transmissions and final drives for which heavy-duty engine oils are specified. It should not be used in applications that require an EP-type gear oil - for these applications, select a suitable product from the Caltex Thuban GL4 or Thuban GL5 EP ranges
- Although it is not intended for use in engines, Torque Fluid 454 has API CF-2 capability, offering protection against accidental misuse in diesel engines provided that drain intervals are shortened
- Due to the fact that Torque Fluid 454 is not friction modified, it is not recommended for use in systems with wet brakes - for these applications, use Caltex Super Tractor 15W-40

Approvals and performance specifications

Performance specifications

• Caterpillar	TO-4	Meets requirements ^[1]
• Eaton	Fuller/Roadranger manual transmissions	Suitable for application ^[2]
• Meritor Rockwell	Transmissions	Suitable for application
• Volvo	97305-90	Meets requirements

Approvals

• Komatsu	KES 07.868.1	Approved
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^[1] Caterpillar does not operate a formal approval system - each supplier is responsible for the performance of their own product.

^[2] Where the torque capacity does not exceed 2500 Nm.



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continued

Typical test data

TORQUE FLUID 454		
TEST	TEST METHODS	RESULTS
Product Code		510064.7
Viscosity, Kinematic, 100 °C, mm ² /s	ASTM D445	19.1
Viscosity, Kinematic, 40 °C, mm ² /s	ASTM D445	224
Viscosity Index	ASTM D2270	96
Viscosity, Brookfield, -15 °C, mPa.s	ASTM D2983	40,000
Density, 15 °C, kg/l	ASTM D4053	0.904
Flash Point COC, °C	ASTM D92	258
Pour Point, °C	ASTM D97	-18
Copper Corrosion, 2 hr, 100 °C	ASTM D130	1a

The information given in the typical data does not constitute a specification but is an indication based on current production and can be affected by allowable production tolerances. The right to make modifications is reserved. This supersedes all previous editions and information contained in them.

Disclaimer Chevron accepts no liability for any loss or damage suffered as a result of using this product for any application other than applications specifically stated in any Product Data Sheet's.

Health, safety, storage and environmental Based on current available information, this product is not expected to produce adverse effects on health when used for the intended application and in accordance with the recommendations provided in the Material Safety Data Sheet (MSDS). MSDS's are available upon request through your local sales office, or via the Internet. This product should not be used for purposes other than its intended use. When disposing of used product, take care to protect the environment and follow local legislation.

For more information, go to www.chevronlubricants.com