



NATIONAL | Premium TO-4 Fluids

Product Description

NATIONAL Premium TO-4 Fluids are a multipurpose fluid designed to meet the demanding requirements of modern transmissions, final drive, oil immersed brake and hydraulic systems on heavy-duty off-road equipment.

NATIONAL Premium TO-4 Fluids are manufactured using highly refined base oils and premium additives. These multifunctional fluids are designed for use in Off-road applications, where a high degree of static friction is required and can be used throughout the drivetrain and hydraulics, in a wide range of machinery. Our SAE 10W grade is designed to provide enhanced protection for light duty automatic transmissions while our SAE 30 and 50 grades meet specifications for off-road power shift transmission fluids.

Industry and OEM specifications ¹

- ◆ Caterpillar TO-4, TO-2 (obsolete)
- ◆ Komatsu KES 07.868.1
- ◆ Allison C-4 (off-road) and TES-439 ²
- ◆ Vickers M-2950-S
- ◆ API GL-4 and CF (obsolete)
- ◆ Suitable for use in ZF
- ◆ Euclid Equipment
- ◆ Sperry Vickers/Eaton I-280-S
- ◆ Also meets the requirements ³ for:
 - Eaton Fuller
 - Dana
 - Tremac/ TTC

Features

- ✓ Antiwear protection
- ✓ Suppresses brake chatter
- ✓ Clutches lock up smoothly and strongly
- ✓ Resist foaming
- ✓ Good low temperature fluidity for trouble free cold weather performance
- ✓ Broad performance qualifications enable use in transmissions, hydraulics and gear cases, reducing inventories
- ✓ Available in three SAE viscosity grades²
- ✓ Outstanding oxidation stability

The product described above is designed for a specific use and may not be valid for other uses not specified in our specification sheet or in applications not requiring this specific product. Pinnacle Oil believes the information presented in this specification is accurate at the time written and is based upon internally generated information and information as presented by its vendors. No representation, warranty, or guarantee is made as to its accuracy or completeness. We do not accept any liability for any loss or damage that may occur from the use of this information.



Technical Data

SAE Grade		10W	30	50
Product Number		07-512010	07-510030	07-510050
SDS Number		S165		
Viscosity @ 40°C, cSt	D445	29.83	99.91	214.5
Viscosity @ 100°C, cSt	D445	5.531	11.75	19.36
Viscosity Index	D2770	125	106	102
Specific Gravity	D4052	0.8584	0.8756	0.8894
Pour Point, °C	D5950	-45	-33	-21
Color ASTM	D1500	L2.0	L2.0	L4.0
Foam characteristics (Seq. I 25/0, Seq. II 50/0, Seq. III 25/0)	D892	Pass	Pass	Pass
Flash Point, °C	D92	224	264	260

- 1) *Always consult your owner's manual regarding its suitability for use in equipment from other OEMs. Formal approvals are not issued for Komatsu or Caterpillar TO-4, but our additive supplier certifies that following full testing, these fluids exceeded the requirements of these specifications.*
- 2) *Allison TES-439 (only supported in SAE 30 grade formulation)*
- 3) *Where TO-4 is called for*

The recommended shelf life for these oils is typically 48 months from manufacturing date when stored properly in the original sealed containers.

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Pinnacle Oil Toll Free: 1-800-829-8899 | Tel: 1-317-875-9465 |

www.PinnacleOil.com