



PRISTA® TO-4

10W ■ 30 ■ 50

PRISTA OIL

■ DESCRIPTION

PRISTA® TO-4 oils are designated for the lubrication of powershift transmissions, drive trains, wet disk brakes and final drives of the off-highway machines and equipment. They are also suitable for use in all automatic transmissions as well as unsynchronized manual transmissions of off-highway equipment.

PRISTA® TO-4 oils contain special antiwear additives ensuring enhanced bearing protection against micro-pitting and metal fatigue. **PRISTA® TO-4** oils offer full compatibility with seal metals and material, excellent oxidation stability, low foaming tendency and stable and consistent lubricating film.

PRISTA® TO-4 oils are recommended for use in the utility vehicles and caterpillar tractors used in the construction and mining industries.

■ BENEFITS

- provide excellent friction control
- less brake noise
- reduced gear wear,
- good elastomer compatibility
- oxidation stability
- prolong life of brakes and transmissions

■ APPLICATION

PRISTA TO-4 oils meet the requirements of Caterpillar TO-4, Allison C-4 and Komatsu Micro-Clutch. These lubricants can be used successfully in several types of transmissions such as those requiring the following levels of performance: ZF TE-ML 01, 03, and Eaton Fuller. In addition, the additive package used for formulation gives passing results in Mack transmission and CRC L-60-1 tests required in the API MT-1 specification.

PRISTA TO-4 lubricants demonstrate API CF performance.

AUTOMOTIVE GEAR OILS



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■ SPECIFICATIONS

Caterpillar TO-4
Allison C-4
Komatsu Micro Clutch
ZF TE –ML 03C (SAE 10W SAE 30)
ZF TE-ML 01 (SAE 30, SAE 50)
API CF, CF-2
DANA Powershift transmissions (SAE 10W SAE 30)
Tremec/TTC (SAE 50)
Eaton (SAE 50)

■ TYPICAL CHARACTERISTICS

№	PARAMETER	TEST METHOD	TYPICAL VALUES		
			10W	30	50
1.	Density at 20°C, g/cm ³	EN ISO 3675	0.891	0.893	0.900
2.	Kinematic Viscosity at 100°C, mm ² /s	EN ISO 3104	6.3	10.5	18.6
3.	Viscosity Index	ISO 2909	90		
4.	Brookfield Viscosity - at -35°C, cP - at -25°C, cP - at -15°C, cP	ASTM D-2983	35 000 - -	- 70 000 -	- - 90 000
5.	Flash point, COC, °C	EN ISO 2592	218	240	256
6.	Pour point, °C	ISO 3016	-33	-26	-20
7.	Foaming, ml(Tendency/Stability) - Seq I, at 24°C - Seq II, at 93.5°C - Seq III, at 24°C	ISO 6247	0/0 20/0 0/0		
8.	Copper Strip Corrosion, rating	ISO 2160	1a		

Remark: 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.