

PETRONAS POWERTRANS T4

High Performance Caterpillar TO-4 Transmission Fluid

Petronas Powertrans T4 series are high performance, advanced technology transmission drive train fluids primarily intended for use in powershift transmissions, drive trains and hydraulic system of off-highway equipment requiring the Caterpillar TO-4 fluids.

They are formulated from highly refined high viscosity index mineral oils and advanced additives system to provide outstanding oxidation resistance, compatibility with elastomers, excellent protection against rust and corrosion, and an extremely low foaming tendency. They have outstanding load-carrying capability and gear wear protection as measured by the FZG Gear Test and they provide excellent antiwear performance in powershift transmissions, gearboxes and final drives. In hydraulic applications, they provide maximum protection even in the highest pressure systems.

Applications

Petronas Powertrans T4 series are recommended for the lubrication of the most demanding transmissions, drives trains, clutches and hydraulic systems in Caterpillar, Case, Komatsu and other off-highway contractor, logging, mining and farming equipment. They can also be used in manual, powershift and automatic transmissions in on-highway and off-highway applications requiring Allison C-4 performance levels. They are suitable for most automotive hydraulic applications.

Specifications

- Caterpillar TO-4
- Allison C-4
- API CF/CF-2 Performance Level
- API MT-1 (CRC L-60-1 OxidationTest)
- Vickers 35VQ25 Pump Test

Customer Benefits

- Longer transmission and equipment life – specially designed for transmission, wet disc brakes and final drives which significantly improved clutch life, friction and anti-wear performance compared to the best CD/TO-2 engine oils.
- Superior frictional performance – no degradation of frictional performance or clutch slippage to consistently maximize equipment output, particularly when moving heavy loads on an incline.
- Excellent oxidation stability provided by highly refined base oils and oxidation inhibitor system resists lubricant breakdown under severe operating conditions, minimizing varnish and sludge formation.
- Outstanding hydraulic oil stability and protection against high pressure pump wear as shown by performance in Vickers 35VQ25 Pump Test.
- Lower maintenance and operating costs

Product Typicals

Characteristics	SAE 10W	SAE 30	SAE 50
Density @ 15 °C, kg/l	0.871	0.887	0.903
Pour Point, °C	-33	-30	-27
Flash Point, °C	218	240	260
Kinematic Viscosity, cSt			
@ 40 °C	40.3	93.1	233.7
@ 100 °C	6.65	10.90	19.49
Viscosity Index	119	101	95
Cold Cranking Simulator @ - 20 °C, cP	1,050	-	-
Total Base Number, mgKOH/g	11.9	12.0	12.1
Sulphated Ash, %wt	1.5	1.5	1.5

Customer Advice

For further assistance on product MSDS, recommendation or technical queries, please liaise with the regional technical services engineer or contact HQ technical engineers.