



Kixx Geartec TO-4

Top Performance Off-road Transmission and Hydraulic Fluid

CATERPILLAR TO-4, ZF TE-ML 03C, 07F

DESCRIPTION

Kixx Geartec TO-4 is specially formulated heavy duty transmission fluid for off-highway power-shift transmission device and hydrodynamic power shift, modern engineering machineries meeting the performance requirements of Caterpillar TO-4, Allison C-4 and other off-road equipment specification.

APPLICATIONS

Kixx Geartec TO-4 is recommended for heavy duty off-highway equipment. It meets performance requirements and can be used in applications where manufactures recommend the use of Caterpillar TO-4 and Allison C-4 automatic or power-shift Transmission.

- Off-Road Transmission and associated equipment
- Automotive manual transmissions and gearboxes
- Hydraulic systems
- Enclosed oil immersed (wet) brakes

PERFORMANCE STANDARDS

- Caterpillar TO-4
- Allison C-4(off-road), TES-439
- API GL-4
- Eaton I-280-S
- ZF TE-ML 03C, 07F Approved
- Komatsu KES 07.868.1
- Caterpillar TO-2
- Vickers M-2950-S

CUSTOMER BENEFITS

Maximizes transmission life

Extremely shear stable formulation maintains film thickness under severe transmission and hydraulic system operation, protecting vital components against scuffing and wear. Effective anti-wear additive also reduces wear by forming a protective layer on metal surfaces under high load conditions.

Longer oil life

Very high oxidation stability protects against the formation of gums and varnishes, reducing oil thickening and increasing oil life.

Saves on maintenance

Highly refined base oils and effective oxidation inhibitors provide

excellent thermal and oxidation stability, providing superior resistance to the formation of lacquer, deposits and corrosive oil degradation by-products. Excellent viscosity characteristics at low temperatures ensure rapid oil circulation on start-up, preventing wear which contributes to power loss.

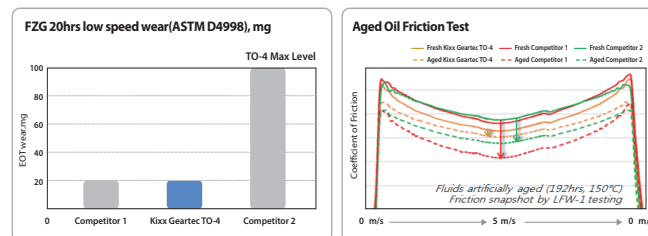
Smooth and quiet operation

Special friction modifier component allows smooth action of the wet brakes and power take off clutches minimizing chatter, stick slip and squawk and ensures maximum brake efficiency.

KEY PROPERTIES

SAE Viscosity	10W	30	50
Density, kg/L @15°C	0.865	0.874	0.879
Kinematic Viscosity, mm ² /s @ 40°C	40.4	90	192
Kinematic Viscosity, mm ² /s @ 100°C	6.5	11.1	18.7
Viscosity Index	113	108	107
Pour Point °C	-41	-37	-31
Flash Point °C	232	266	270
Viscosity, CCS, cP @ -20°C	2,420	9,645	32,099
Package (Liters)	200	200	200

UNIQUE FEATURES



- Kixx Geartec TO-4 demonstrates excellent performance in FZG low speed wear testing for wear under low speed, high load conditions
- Low speed, high load is common in construction and mining machinery
- Outstanding friction performance from fill to drain
- Little variation in aged-fluid friction with Kixx Geartec TO-4, compared to competitor fluids