# TRANSMISSIONS TO-4 10W, 30 & 50



TRANSMISSIONS AND GEARBOXES

Lubricants

## **Description**

Lubricant oil specially formulated to meet the requirements of CATERPILLAR, ALLISON and KOMATSU specifications, applicable to power-shift transmissions, clutches and brakes, as well as end controls, crowns and differentials (depending on SAE grade). May also be used in some special hydraulic applications, as is the case with the SAE 10W grade.

#### **Properties**

- Prevents transmission slippage.
- Great capacity for supporting loads and anti-wear properties.
- Increased useful life of the clutch discs and smooth operating of the brakes.
- Enables greater dragging and start-up force in machines.
- · Compatibility with gaskets.
- Excellent anti-corrosive properties.
- · Cannot be used as motor oil.

#### **Quality levels**

- API GL-4 (SAE 30 and 50)
- API CF (SAE 30 and 50)
- ZF TE-ML 03C, Approval ZF003469 (SAE 10W)
- ZF TE-ML 03C, 07F, Approval ZF003472 (SAE 30)
- CATERPILLAR TO-4
- ALLISON C-4 (SAE 10W and 30)
- KOMATSU KES 07.868.1

### **Technical specifications**

	UNIT	METHOD		VALUE	
SAE Grade			10W	30	50
Density at 15 °C	g/mL	ASTM D 4052	0.87	0.89	0.90
Viscosity at 100 °C	cSt	ASTM D 445	6.5	11.3	18
Viscosity at 40 °C	cSt	ASTM D 445	37	111	208
Viscosity at -25 °C	сР	ASTM D 5293	7000 max.	-	-
Viscosity index	-	ASTM D 2270	115	100	97
Flash point, open cup	°C	ASTM D 92	200 min.	220 min.	220 min.
Pour point	°C	ASTM D 97	-42	-33	-18
T.B.N	mgKOH/g	ASTM D 2896	10	10	10

The above mentioned characteristics are typical values and should not be considered product specifications.

A safety information file is available on request.

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