



NAVIGATOR TO-4

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, approvals and recommendations

- ZF TE-ML: 03C* (10W)
- ALLISON: C-4 (10W, 30)
- CATERPILLAR: CAT TO-4 (10W, 30, 50)
- ZF TE-ML: 03C, 07F* (30)
- API: CF, GL-4 (30, 50)
- KOMATSU: KES 07.868.1 (10W, 30, 50)

*Formal approval

Technical specifications

	UNIT	METHOD	VALUE		
SAE Grade			10W	30	50
Density at 15 °C	g/cm3	ASTM D4052	0.871	0.893	0.901
Kinematic viscosity at 100 °C	cSt	ASTM D445	6.5	11.3	18
Kinematic viscosity at 40 °C	cSt	ASTM D445	37	111	208
CCS Viscosity at -25 °C	cP	ASTM D5293	<7,000	-	-
Viscosity index	-	ASTM D2270	115	100	97
Flash point, open cup	°C	ASTM D92	<200	<220	<220
Pour point	°C	ASTM D97	-42	-33	-18
TBN	mg KOH/g	ASTM D2896	10	10	10

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