



A brand of **TOTAL**

TRACTELF KTR 4 SAE 10W SAE 30 SAE 50



Lubricant for hydraulic systems and transmission components (axles or gearboxes) equipped with specific brake friction discs

APPLICATIONS

Hydraulic system

Powershift gearbox

Axle

Final drive

Mechanical gearbox

- Hydraulic systems, powershift gearboxes, axles and final drives for which the manufacturer recommends a fluid meeting CAT TO-4 or one of the hereunder mentioned specifications
- Recommended for Mining, Earthmoving and Construction machinery operating between -10°C and +40°C:
 - grade SAE 10W is used in hydraulic systems
 - grade SAE 30 is used in powershift gearboxes
 - grade SAE 50 is used in axles and final drives

TRACTELF KTR 4 SAE 10W and 30 can be used in place of **CATERPILLAR HYDO Advanced 10 and 30**, with a drain interval extension up to 3000 working hours and more, subjected to regular oil analysis.

PERFORMANCES

Meets the requirements of :

API GL-4
API CF
ALLISON : C4 (SAE 10W & SAE 30)
ALLISON : TES 439 (SAE 10W & SAE 30)
CATERPILLAR : TO-4
CATERPILLAR HYDO Advanced (SAE 10W & SAE 30)
KOMATSU : MICRO-CLUTCH
ZF : TE-ML 03C (SAE 10W & SAE 30)
ZF : TML-ML 07F (SAE 30)

Suitable for transmission systems of :

ALLISON, DANA, EATON FULLER, KOMATSU, ROCKWELL, ZF...

CUSTOMER BENEFITS

Consistent shifting

- Friction properties adapted to the types of CATERPILLAR, KOMATSU and other machinery friction materials

Long component life

- Excellent anti-wear and anticorrosion properties, increasing the durability of the lubricated organs

Good seal compatibility

- Controlled swelling, hardening and cracking of seals to avoid leakage

Reliable service life

- Formulated with selected base oils associated to a recently developed chemistry, giving superior oxidation resistance at high temperature and drain interval extension

Emulsifying properties

- Capability to keep contaminated condensation water in emulsion and avoid any pump breaks in Winter or rapid degradation in Summer

CHARACTERISTICS

Test Description	Method	Units	SAE 10W	SAE 30	SAE 50
Density at 15°C	ASTM D4052	Kg/m ³	870	886	898
Viscosity at 40°C	ASTM D445	mm ² /s	42	99	208
Viscosity at 100°C	ASTM D445	mm ² /s	6.7	11.2	18.4
Viscosity index	ASTM D2270	-	114	98	98
Pour point	ASTM D97	°C	-36	-30	-21
Flash point	ASTM D92	°C	230	235	235

The features mentioned above are average values obtained with some variability in production and do not constitute a specification.