



TEXACO TRANSMISSION AND DRIVE TRAIN TO-4 OILS

SAE 10W, 30, 50, 60

CUSTOMER BENEFITS

Texaco Transmission and Drive Train TO-4 Oils deliver value through:

- **Longer equipment life** — Special additives protect metal surfaces against scuffing and wear even under severe operating conditions of high temperature and high load.
- **Smoother operation** — Excellent frictional control prevents clutch slippage and assures quiet and efficient action of transmission and brakes while reducing wear.
- **Reduced downtime** — Good compatibility with seals, O rings, and packing materials maintains their good condition and keeps leakage at a minimum.
- **Longer oil life** — Outstanding ability of the base stock to withstand oxidation at high operating temperatures results in increased service life for the oil.
- **More reliable operation** — Formulation keeps metal parts clean and free of varnish and sludge deposits that could result in premature breakdown.
- **Minimizing weather and storage concerns** — Protects against rust and corrosion of highly finished precision parts when operating in humid conditions and during seasonal shutdown periods.

FEATURES

Texaco Transmission and Drive Train TO-4 Oils are high performance lubricants designed for use in transmissions, final drives, and hydraulic systems requiring a fluid meeting Caterpillar TO-4 or Allison C4 requirements.

They are manufactured using highly refined base oils, detergents, dispersants, oxidation and corrosion inhibitors, antiwear and extreme pressure agents, and a foam suppressant.

Texaco Transmission and Drive Train TO-4 Oils are designed for both newly developed and older model drive train components.

They offer excellent friction retention, wear control, seal compatibility, oxidation stability, and viscosity stability.

The frictional characteristics of the fluid are retained over the life of the lubricant.

Components are protected from wear, even in severe service and under high loads. They protect precision parts against wear under high load conditions by controlling the formation of corrosion, varnish, and sludge.

Texaco Transmission and Drive Train TO-4 Oils are compatible with new and traditional seal and clutch materials.

APPLICATIONS

Texaco Transmission and Drive Train TO-4 Oils are recommended for use in Caterpillar transmissions, final drives, wet brakes, Allison Powershift transmissions, torque converters, and hydraulic systems requiring a fluid meeting Allison C4 or Caterpillar TO-4 or TO-2 requirements.

Under normal ambient temperatures, hydraulic systems will use the SAE 10W viscosity grade. SAE 10W and 30 are recommended for mobile hydraulic systems where operating requirements are severe.

Transmissions will use the SAE 30 viscosity grade. Texaco Transmission and Drive Train TO-4 Oils are also recommended for heavy duty off highway automatic transmissions requiring an SAE 10W, 30, 50, or 60 fluid.

Final drives will use the SAE 50 viscosity grade at normal temperatures and the SAE 60 at high ambient temperatures.

Texaco Transmission and Drive Train TO-4 Oils are not recommended for use in combined farm tractor hydraulic and transmission systems where low brake chatter is a requirement.

Texaco Transmission and Drive Train TO-4 Oils meet:

- **service requirements of Caterpillar TO-4**
- **requirements of Allison C4 (SAE 10W, 30)**

Do not use in high pressure systems in the vicinity of flames, sparks and hot surfaces. Use only in well ventilated areas. Keep container closed.

TYPICAL TEST DATA

SAE Grade	10W	30	50	60
<i>Product Number</i>	221961	221954	221971	222040
<i>MSDS Number</i>	8678	8678	8678	6739
API Gravity	29.7	27.5	25.9	25.3
Viscosity, Kinematic cSt at 40°C cSt at 100 °C	40 6.4	92 10.8	191 17.7	305 25.0
Viscosity, Saybolt SUS at 100°F SUS at 210°F	206 48	478 63	1004 91	1615 124
Viscosity, Cold Crank, °C/Poise	-25/42	—	—	—
Viscosity Index	109	101	100	105
Flash Point, °C(°F)	225(437)	255(491)	255(491)	255(491)
Pour Point, °C(°F)	-30(-22)	-24(-11)	-15(+5)	-12(+10)

Typical test data are average values only. Minor variations which do not affect product performance are to be expected in normal manufacturing.