



PowerDrive® Synthetic Arctic TO-4 Fluid

Phillips 66® PowerDrive Synthetic Arctic TO-4 Fluid is a premium quality, synthetic, multigrade fluid specially developed for use in off-highway equipment operating in arctic climates where a fluid meeting Caterpillar TO-4 performance requirements is specified. It is a multi-functional fluid for use in transmissions, final drives, hydraulic systems and wet brakes. It is not for use in engines.

PowerDrive Synthetic Arctic TO-4 Fluid is formulated with synthetic polyalphaolefin (PAO) base stocks and state-of-the-art additive technology that reduces deposits on critical parts, provides improved yellow metal protection, and increases load-carrying capacity for enhanced performance and more reliable operation. Its carefully optimized frictional properties prevent clutch slippage for smoother, more consistent transmission operation and also provide improved wet brake performance. The synthetic base stocks provide improved low-temperature performance for easier starting in frigid climates and better thermal stability at high temperatures for extended lubricant life under severe operating conditions.

Applications

- Powershift transmissions, hydrostatic transmissions, torque converters, final drives and hydraulic systems of Caterpillar, Euclid, Komatsu and other off-highway construction and mining equipment operating in arctic climates

CAUTION: Refer to the OEM recommendations for recommended temperature ranges.

PowerDrive Synthetic Arctic TO-4 Fluid meets or exceeds the requirements of:

- Caterpillar TO-4

**Synthetic
Multigrade
Caterpillar TO-4
Fluid for Arctic
Climates**

**KEEPING THE
WORLD
RUNNING
SMOOTHLY.**





Features/Benefits

- Synthetic formulation for enhanced performance in arctic temperatures
- Well-balanced frictional properties for smooth and efficient clutch operation
- Outstanding oxidation resistance and thermal stability for long fluid life
- High load-carrying capacity for protection of final drive gear sets
- Excellent deposit control and wear protection
- Protects yellow metals against corrosion
- High shear stability
- Compatible with a wide variety of seals and friction materials
- Excellent low-temperature properties for easier starting at low ambient temperatures
- Good foam resistance

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Typical Properties	
SAE Grade	0W-20
Specific Gravity @ 60°F	0.851
Density, lbs/gal @ 60°F	7.09
Color, ASTM D1500	2.0
Flash Point (COC), °C (°F)	260 (500)
Pour Point, °C (°F)	-53 (-63)
Viscosity, Brookfield	
cP @ -40°C	12,700
Viscosity, Kinematic	
cSt @ 40°C	40.5
cSt @ 100°C	7.9
Viscosity Index	171
Total Base Number (TBN), ASTM D2896	7.6
Zinc, wt %	0.110

Health & Safety Information

For recommendations on safe handling and use of this product, please refer to the Safety Data Sheet via <http://www.phillips66.com/EN/products/Pages/MSDS.aspx>.

09-14-2016

Typical properties are average values only and do not constitute a specification. Minor variations that do not affect product performance are to be expected during normal manufacture, and at different blending locations. Product formulations are subject to change without notification.

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