



PowerDrive™ Fluid

Conoco PowerDrive™ Fluid is a shear stable transmission and drive train fluid specially designed to meet and exceed the stringent performance requirements of the Caterpillar TO-4 specification. It provides improved friction and antiwear performance compared with older API CD/TO-2 quality fluids, resulting in longer equipment life and reduced risk of field failure. PowerDrive™ Fluid has excellent oxidation stability, outstanding seal and friction material compatibility, and superior rust and corrosion preventative properties. Its balanced frictional properties minimize brake noise, clutch slippage under heavy load, weakening of the binder in paper materials, and embrittlement of elastomeric materials. The SAE 10W and 30 viscosity grades also meet the performance requirements of Allison C-4.

Applications

PowerDrive™ Fluid is recommended for use in powershift transmissions, hydrostatic transmissions, torque converters, final drives, and hydraulic systems of Caterpillar and other off-highway equipment. It also is recommended for use in certain heavy-duty commercial automatic and manual transmissions where an Allison C-4 or TO-4 quality fluid is specified.

PowerDrive™ Fluid meets or exceeds the requirements of:

- Allison C-4 (SAE 10W, 30)
- Caterpillar TO-4, TO-2 (obsolete)
- Dana Spicer Transmissions (SAE 30, 50)
- Eaton Fuller Transmissions (SAE 30, 50)
- Euclid Equipment
- Komatsu Equipment
- Vickers M-2950-S
- ZF TE-ML 03C for Torque Converter Transmissions (SAE 10W, 30)

**Transmission And
Drive Train Fluid
For Caterpillar
TO-4 Applications**

**U.S. Technical
Services Hot line:
1-800-255-9556**

**U.S. Customer
Service:
1-800-640-1956**

**International:
+1-832-486-3363**

**Asia-Pacific:
tel: (65) 6536-0010
fax: (65) 6536-0012**

**E-mail address:
*conocolubricants@
conocophilips.com***

www.lubes.conoco.com

600 N. Dairy Ashford • 2W9000 • Houston, TX 77079



Outstanding Features

- Controlled frictional properties for smooth shifting and reduced brake chatter
- Outstanding oxidation resistance for long fluid life
- Excellent wear protection for clutches, gears and hydraulic pumps
- Excellent shear stability
- Superior rust and corrosion protection
- Outstanding compatibility with seals and friction materials
- Excellent low-temperature fluidity
- Good foam resistance

PowerDrive™ Fluid Typical Properties

SAE GRADE	10W	30	50	60
Density, g/cm ³ @ 15.6°C (60°F)	0.875	0.883	0.894	0.897
Color, ASTM D1500	2.0	2.0	4.0	5.5
Flash Point (COC), °C (°F)	213 (415)	233 (451)	242 (468)	281 (538)
Pour Point, °C (°F)	-36 (-33)	-30 (-22)	-21 (-6)	-12 (10)
Viscosity,				
cP @ -35°C (Brookfield)	36,000	—	—	—
cSt @ 40°C	43	98	227	318
cSt @ 100°C	6.6	11.5	19.1	23.8
SUS @ 100°F	221	510	1,202	1,694
SUS @ 210°F	48.3	65.8	97.3	118
Viscosity Index	105	97	94	95
Ash, Sulfated, ASTM D874, wt %	1.2	1.2	1.2	1.2
Total Base Number, ASTM D2896	8.0	8.0	8.0	8.0
Zinc, wt %	0.12	0.12	0.12	0.12

Due to continual product research and development, the information contained herein is subject to change without notification.

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