



# POWER TO 410, 430, 450

## Application

The EnviroLube PowerTO Series are premium heavy duty transmission fluids for off-highway equipment. They are primarily designed for powershift transmissions and final drives where a CAT TO-4, Allison C4 or Komatsu fluid is specified. They may also be suitable in certain hydrostatic transmissions, mobile hydraulic systems and wet brakes where API CF type fluids are required.

The correct choice of viscosity grade depends on the ambient temperature and operating severity. Consult your equipment application guide or see the service notes section of this product data sheet.

## Availability

Packs 20L, 205L, (1000L on request)

## Features

The EnviroLube PowerTO Series is formulated with double refined base oils to provide superior thermal stability in high power rated applications, on or off road. The Power TO Series offers the highest levels of protection from wear, varnish, sludge, deposits and corrosion. Broad performance qualifications enable use in a wide range of transmissions, hydraulics and gear cases, reducing inventory to a minimum.

## Benefits

- ✓ Outstanding thermal and oxidative stability for extended product life and reduced varnish & sludge formation under severe operating conditions
- ✓ Durable friction properties ensure smooth and consistent shift patterns, prolonged clutch life and reduced brake noise
- ✓ Excellent low temperature flow properties ensure smooth cold weather shifting performance
- ✓ An inhibitor additive system protects components from corrosion and rusting
- ✓ Double refined base stocks conserve vital petroleum resources



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## Safety

Your safety is important to EnviroLube. This material is classified as non-hazardous according to Worksafe Australia. However, it is recommended that the handling instructions in the Material Safety Data Sheet be followed to avoid risk of injury or irritation from exposure.

## Specifications

The EnviroLube PowerTO Series fluids meet the performance requirements of

- Caterpillar TO-4 or TO-2
- Allison C4, C3 or C2 (SAE 10W and SAE 30 versions only)
- ZF TE ML-03
- Komatsu (All Komatsu powershift transmissions)
- API GL-3
- Eaton Fuller/Roadranger
- Meritor (Rockwell)

## Typical Characteristics

Characteristic	Method	Units	410	430	450	Benefit
SAE Viscosity Grade	SAE		10W/20	30	50	Covers a broad range of operating conditions
Density @ 15.6C	IP160	g/cm3	0.88	0.88	0.89	
Kinematic Viscosity @ 40°C	ASTM D445	cSt	43	90	176	
Kinematic Viscosity @100°C	ASTM D445	cSt	7.5	11.5	18.5	
Viscosity Index	ASTM D2270					Easily passes limits for protection of all metal components under thermal load
Sulphated Ash	ASTM D874	Wt%	1.24	1.24	1.24	
Pour Point	ASTM D97	°C	-27	-24	-20	Maintains low temperature performance

Values provided are typical and do not constitute a specification



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## Service Notes

1. Always consult your equipment application guide as the primary reference for fluid types , duty cycles and viscosity profile recommendations
2. Power TO 450 is too viscous for Automatic Transmissions
3. Power TO fluids meet API CF but are not suitable for engine operation
4. Allison C4 approval is base oil, grade and formulation specific. Not all grades are approved
5. PowerTO fluids are not compatible with industrial antiwear hydraulic fluids

	PowerTO 410	PowerTO 430	PowerTO 450
CAT Hydrostatic Transmissions	-15°C to 40°C	10°C to 50°C	Not recommended
CAT Manual Transmissions	-15°C to 15°C	0°C to 35°C	10°C to 50°C
CAT Hydraulic Systems	-15°C to 45°C	10°C to 50°C	
CAT Torque Converter, Hoist, Brakes (Off Highway)	-15°C to 50°C		
Komatsu Manual Transmissions	-20°C to 10°C	0°C to 40°C	
Komatsu Hydrostatic Transmission	-20°C to 40°C		
Komatsu Final Drive		-40°C to 40°C	
Clark Transmissions	-20°C to 30°C	0°C to 40°C	
Allison Transmissions*	-15°C to 35°C	10°C to 50	Not recommended
Eaton/Roadranger, Volvo, Spicer, Dana Manual	-15°C to 25°C <2,500 Nm	-5°C to 40°C <2,500 Nm	0°C to 50°C <2,500 Nm

\* Except 500 and WT series Allison Transmissions