

TECHNICAL DATA SHEET

Amatran Powershift TO-4 Fluids

(July 2021 edition)

AMALIE Amatran Powershift Fluids exceed Caterpillar's newest heavy duty TO-4 requirements, providing greater extended durability over the previous TO-2 fluid. In the market place, this fluid is referred to as a "TDTO" fluid. The **Amatran Powershift fluids** may also be used as a diesel crankcase oil meeting the API CF and CF-2 performance classifications and wherever Allison C-4 fluid is recommended. **AMALIE Amatran Powershift Fluids** are offered in three SAE grades: 10W, 30 and 50.

AMALIE Amatran Powershift Fluids may be used in applications such as differentials, final drives, hydraulic systems, hydrostatic and powershift transmissions, torque converters, and wet brake systems requiring the use of Caterpillar TO-4 or Allison C4 fluids. They provide excellent anti-wear protection and shear stability while protecting clutch materials from slipping and glazing.

Benefits

Provides improved friction and anti-wear performance compared to TO-2 fluids

- > Enhanced Oxidation Stability Increasing Fluid Life
- Improved Sludge Control
- Passes Eaton Vickers 35VQ-25 Vane Test
- Excellent Protection for Metal Components from Rust and Corrosion
- > Enhanced Foam Suppression Characteristics

TYPICAL INSPECTION DATA

Amatran Powershift Fluid	API Gravity	Flash Point, °C.	Viscosity, cSt @100C	Viscosity, cSt @40C	VI	Brookfield Viscosity	Pour Point, °C
10	30.0	210	7.0	48.0	100	<150K@-35	-39
30	27.5	220	11.4	105.0	100	<150K@-25	-30
50	26.5	240	18.35	200.0	100	<150K@-15	-18

PERFORMANCE APPLICATION CHART

SPECIFICATION	Amatran Powershift Fluids	SPECIFICATION	Amatran Powershift Fluids
Allison C-4	$\sqrt{}$	Komatsu KES 07.868.1	$\sqrt{}$
Caterpillar TO-4, TO-2	$\sqrt{}$	Tremec/TTC	$\sqrt{}$
Dana Powershift	$\sqrt{}$	Voith G607	$\sqrt{}$
Denison HF-0/1/2	$\sqrt{}$	ZF TE-ML 03C & 07F	$\sqrt{}$
Eaton-Fuller	√*		
Komatsu Dresser	\checkmark		

*Where TO-2 fluids are recommended.