

**CITGO TRANSGARD® HEAVY-DUTY  
TRANSMISSION FLUIDS**

Date 01/10

**DESCRIPTION:** CITGO TRANSGARD Heavy-Duty Transmission Fluid is a new generation Allison C-4 and CAT TO-4 transmission and drivetrain fluid. It is designed for heavy-duty construction equipment powershift transmissions, final drives and wet brakes. Compared to engine oil, TRANSGARD Heavy-Duty Transmission Fluid will improve transmission performance and power transfer under conditions of high horsepower output, increased loads, and higher transmission operating temperatures associated with heavy equipment. Base stocks and additives are carefully selected for compatibility with clutch face and seal materials.

Available Viscosity Grades: 10W, 30, 50 and 60.

**QUALITIES:** CITGO TRANSGARD Heavy-Duty Transmission Fluid will provide longer transmission life than heavy-duty engine oils.

In meeting Allison C-4 (SAE 10W and 30 grades), Komatsu Micro-Clutch and Caterpillar TO-4 requirements, CITGO TRANSGARD Heavy-Duty Transmission Fluid offers improved performance while allowing product consolidation. It is offered in four viscosity grades to meet summer and winter powershift requirements. CITGO TRANSGARD Heavy-Duty Transmission Fluid's compatibility with asbestos-free clutch materials offers extended clutch life. Due to its physical and chemical properties, TRANSGARD Heavy-Duty Transmission Fluid provides greater power transfer efficiency. This fluid is recommended for lubrication of winch, clutch plates, gears and bearings. It will help reduce brake chatter in wet brake applications.

**APPLICATIONS:** Formulated to meet the performance requirements of:

- Allison C-4 – SAE 10W and 30 grades
- Caterpillar TO-4, CD/TO-2 – all grades
- Komatsu Micro-Clutch – all grades

**BENEFITS:** Use of CITGO TRANSGARD Heavy-Duty Transmission Fluid will pay big dividends through reduced maintenance costs, longer equipment life, reduced downtime and higher production output. These are provided through reduced gear wear, improved friction control and greater rimpull. Rust and corrosion control will protect gear cases and drive trains under the most severe conditions. The SAE 60 grade provides the greatest fluid film thickness for wear protection during severe operation.

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Date 01/10 - (Continued)

**TYPICAL PROPERTIES:****CITGO TRANSGARD® HEAVY-DUTY TRANSMISSION FLUIDS**

<b>SAE Grade</b>	<b>10W</b>	<b>30</b>	<b>50</b>	<b>60</b>
Material Code	633321001	633323001	633325001	633326001
Gravity, ASTM D 4052, °API	29.9	28.2	26.4	25.2
Density, lbs./gallon	7.30	7.37	7.49	7.51
Flash Point, COC, ASTM D 92, °F (°C)	420 (216)	446 (230)	511 (266)	532 (278)
Viscosity, ASTM D 445, cSt at 40°C	38.1	96	209	330
cSt at 100°C	6.3	11.3	18.8	25.5
Viscosity Index, ASTM D 2270	112	104	100	100
Brookfield Apparent Viscosity, ASTM D 2983, cP, at Temp, °C	40,000 -35	80,000 -25	45,000 -15	139,500 -15
Pour Point, ASTM D 97, °F (°C)	-38 (-39)	-27 (-33)	+5 (-18)	0 (-18)
Color, ASTM D 1500	L3.0	L3.5	4.0	L7.0