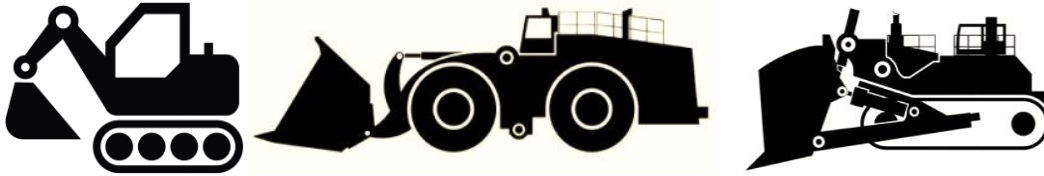


TRANSMISSION OIL 10W *(Commercial Automotive Transmission Oil)*



DESCRIPTION

PATROL TRANSMISSION OILs are extra high performance transmission and drive-train lubricants engineered to meet the rigorous specifications required by Caterpillar TO-4. This product line is uniquely designed to optimize the performance of power shift transmissions, gearboxes and final drives. In hydraulic applications, they provide maximum protection even in high-pressure systems.

This technology combines selected base oils and an advanced additive system to deliver the precise performance parameters needed to maximize the productivity of construction, quarrying and mining equipment operating in severe conditions. These products offer a clear performance advantage over the use of mixed fleet engine oils and previously used lubricants meeting Caterpillar TO-2.

APPLICATIONS

PATROL TRANSMISSION OILs are recommended for the following most demanding transmissions;

- Heavy duty transmissions, gear boxes, final drives and hydraulic systems used in off-highway applications
- Off-highway industries including: mining, construction, quarrying, and agriculture
- Manual, power shift and automatic transmissions where Allison C-4 fluids (SAE 10W and 30 grades) are called for including Twin Disc and transmissions calling for Type F fluids
- Suitable for most mobile equipment hydraulic applications

PROPERTIES

PATROL TRANSMISSION OILs are formulated to provide outstanding oxidation stability, elastomer compatibility, corrosion and rust control, and maximum protection against foaming. The SAE 10W grade has very good low temperature pumpability and a low pour point.

PRODUCT BENEFITS

- Optimized clutch-friction retention and slippage control
- Significantly improved clutch life compared to the best API CD / Cat TO-2 engine oils
- Top performance in wet brakes, excellent control of brake chatter
- Excellent pitting control
- Excellent foam control protection
- Excellent thermal and oxidation stability

- Greatly improved control of gear wear in transmissions, gear boxes and drive trains
- Excellent hydraulic oil stability and protection against high pressure pump wear
- Outstanding FZG load-carrying capability and FZG gear wear protection
- Very good low temperature pump ability
- Balanced static and dynamic friction coefficients

RECOMMENDATIONS / SPECIFICATIONS

Caterpillar TO-4, **ZF** TE-ML-03, **Vickers** 35 VQ 25 pump test, **Allison** C-4(HD 10W & HD 30)

TYPICAL TECHNICAL PROPERTIES

| | |
|---|-------|
| Density at 15°C, g/ml, ASTM D4052 | 0.873 |
| ISO Viscosity Grade | 32 |
| Kinematic Viscosity at 40°C, mm ² /s, ASTM D445 | 42 |
| Kinematic Viscosity at 100°C, mm ² /s, ASTM D445 | 6.3 |
| Viscosity Index, ASTM D2270 | 96 |
| Flash Point(COC), °C, ASTM D92 | 202 |
| Pour Point, °C, ASTM D97 | -36 |

Note: These characteristics are typical of current production. While future production will conform to PATROL's specification, variations in these characteristics may occur.

Health and Safety: Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet (MSDS) are followed. MSDS's are available upon request. This product should not be used for purposes other than its intended use. If disposing off used product, take care to protect the environment.

