

# Mobiltrans HD Series

## Heavy Duty Transmission and Drivetrain Lubricants

### Product Description

Mobiltrans HD 10W, 30, 50, and 60 are extra high performance, heavy duty transmission and drive-train lubricants engineered to meet the rigorous specifications required by Caterpillar TO-4. This product line is uniquely designed to optimise the performance of powershift 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 maximise 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.

### Features & Benefits

Today's technology has vastly improved the performance capabilities of heavy duty earth moving equipment in terms of load, speed, control, precision, and reliability through innovative power train designs. These designs have increased the requirements of power-train fluids to deliver higher level of performance, productivity and efficiency. Friction control, wear protection, thermal stability, shear stability, rust and corrosion protection, and pumpability are features that must be optimally balanced to provide extended clutch life, slippage control, maximum drawbar loading, and high load operation even on an inclined slope at extreme temperatures. Mobiltrans HD 10W, 30, 50, 60 deliver exceptional performance in today's power train transmissions, drive trains, and hydraulic systems. The key benefits include:

| Features  | Advantages and Potential Benefits   |
|---|---|
| Balanced static and dynamic friction coefficients             | Optimised clutch-friction retention and slippage control<br>Significantly improved clutch life compared to the best API CD/TO-2 engine oils |
| Compatible with modern clutch materials and elastomers        | Longer clutch life and higher performance   |
| Increased levels of anti-wear and load carrying capability    | Reduced gear wear and extended life in transmissions, gearboxes, and final drives<br>Greater productivity from reduced downtime             |
| Excellent foam control protection                             | Top performance in wet brakes; excellent control of brake chatter   |
| Excellent thermal and oxidation stability                     | Outstanding hydraulic oil stability and protection against high-pressure pump wear  |
| Lower viscosities offer very good low temperature pumpability | Reduced time from start-up to production  |



## Applications

- 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, powershift, and automatic transmissions where Allison C-4 fluids (SAE 10W & 30 grades) are called for including Twin Disc and transmissions calling for Type F fluids
- Suitable for most mobile equipment hydraulic applications

## Specifications & Approvals

| <b>Mobiltrans HD meets or exceeds the following industry and builder specification:</b> | <b>10W</b> | <b>30</b> | <b>50</b> | <b>60</b> |
|---|------------|-----------|-----------|-----------|
| Caterpillar TO-4  | X          | X         | X         | X         |

  

| <b>Mobiltrans HD is recommended for use in applications requiring:</b> | <b>10W</b> | <b>30</b> | <b>50</b> | <b>60</b> |
|--|------------|-----------|-----------|-----------|
| Allison C-4  | X          | X         |           |           |
| ZF-TE-ML 03C   | X          | X         |           |           |

## Typical Properties

| <b>Mobiltrans HD</b>             | <b>10W</b> | <b>30</b> | <b>50</b> | <b>60</b> |
|----------------------------------|------------|-----------|-----------|-----------|
| SAE Grade                        | 10W        | 30        | 50        | 60        |
| Viscosity, ASTM D 445            |            |           |           |           |
| cSt @ 40°C                       | 42         | 100       | 195       | 340       |
| cSt @ 100°C                      | 6.3        | 11.2      | 18.0      | 25.2      |
| Viscosity Index, ASTM D 2270     | 96         | 97        | 100       | 96        |
| Pour Point, °C, ASTM D 97        | -33        | -18       | -15       | -12       |
| Flash Point, °C, ASTM D 92       | 202        | 224       | 240       | 244       |
| Density @ 15°C kg/l, ASTM D 4052 | 0.89       | 0.89      | 0.91      | 0.91      |

## Health & 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 through your sales contract office, or via the Internet. This product should not be used for purposes other than its intended use. If disposing of used product, take care to protect the environment.

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