



**Mobiltrans™ AST**  
Mobil Commercial Vehicle Lube , United States  
Extra High Performance Drivetrain Lubricant

Product Description

Mobiltrans AST (All Season Transmission) is an extra high performance drivetrain lubricant engineered to meet or exceeds the requirements of Caterpillar's new TO-4M performance specifications for off-highway transmissions, drive trains, and hydraulic systems. This advanced technology lubricant provides clutch and brake compatibility and extended life that has not been possible with previous formulations. Mobiltrans AST incorporates a blend of semi-synthetic base oils with an advanced additive system. The product is recommended for all-season lubrication all drivetrain components in light to severe duty off-highway equipment operating in a wide range of environments.

Features and Benefits

Today's technology has vastly improved the performance capabilities of heavy-duty off-highway equipment in terms of load, speed, control, and performance through innovative drivetrain designs. These designs have increased the requirements of drivetrain fluids to deliver higher performance, increased productivity, and reduced operating costs. For heavy-duty transmissions, friction control, wear protection, thermal stability, shear stability, rust and corrosion protection, and seal compatibility are features that must be optimally balanced to provide extended gear and synchroniser life, smooth shift control, fuel economy, and high load capability over a wide range of applications. Mobiltrans AST delivers exceptional performance in today's power train components including haul truck final drives with year-round application. The key benefits include:

| Features   | Advantages and Potential Benefits  |
|--|--|
| Excellent frictional properties                            | Optimum clutch friction retention and slippage control, excellent anti-chatter brake performance, and extended clutch/brake life |
| Excellent load carrying, anti-wear, and EP performance     | Greater wear protection, extended component life, and reduced cost of operation  |
| Outstanding protection against deposit formation           | Longer seal life, extended drain, and service intervals  |
| Maximum protection from corrosion of copper and its alloys | Protects and extends the life of synchronizers   |
| Optimized thermal and oxidation protection                 | Extended transmissions and drive train life  |
| Exceptional shear stability                                | Maintains effective viscosity and film strength during severe operation  |
| Outstanding low-temperature fluidity and pumpability       | Smoother shifting with quicker starts and reduced wear   |
| All-season capability                                      | Extended drain and service intervals with lower operating costs and higher productivity  |

Applications

- Recommended by ExxonMobil for use in:
- Heavy-duty transmissions, drivetrains, final drives and gear cases used in off-highway equipment

Specifications and Approvals

|   |
|---|
| <b>This product is recommended by ExxonMobil for use in applications requiring:</b> |
| Allison C-4   |
| KOMATSU KES 07.868.1  |
| DANA SPICER POWERSHIFT TRANSMISSION   |

|   |
|---|
| <b>This product meets or exceeds the requirements of:</b> |
| CATERPILLAR TO-4M   |

Properties and Specifications

| Property                                      |       |
|---|-------|
| Density @ 15 C, kg/l, ASTM D4052              | 0.882 |
| Flash Point, Cleveland Open Cup, °C, ASTM D92 | 222   |
| Kinematic Viscosity @ 100 C, mm2/s, ASTM D445 | 14.2  |
| Kinematic Viscosity @ 40 C, mm2/s, ASTM D445  | 107   |
| Pour Point, °C, ASTM D97                      | -39   |
| Viscosity Index, ASTM D2270                   | 134   |

Health and safety

Health and Safety recommendations for this product can be found on the Material Safety Data Sheet (MSDS) @ <http://www.msds.exxonmobil.com/psims/psims.aspx>

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**Exxon Mobil Corporation**  
22777 Springwoods Village Parkway  
Spring TX 77389  
1-800-ASK MOBIL (275-6624)

Typical Properties are typical of those obtained with normal production tolerance and do not constitute a specification. Variations that do not affect product performance are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice. All products may not be available locally. For more information, contact your local ExxonMobil contact or visit [www.exxonmobil.com](http://www.exxonmobil.com)

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