



Mobiltrans™ AST Series

Mobil Commercial Vehicle Lube , United States

High performance semi-synthetic drive train/ hydraulic fluids engineered for all season performance

Product Description

Mobiltrans™ AST series are high performing, semi-synthetic multigrade drive train and hydraulic lubricants engineered to meet the extreme performance requirements in heavy-duty off-highway equipment. With three different viscosity grades available, each grade offers a wide operating temperature range suited for use in many climates, covering the viscosity requirements of multiple components including powershift transmissions, gearboxes, clutches , final drives, wet bakes and hydraulic systems. Mobiltrans AST series lubricants combine selected high quality base oils and an advanced additive system to deliver the precise performance parameters needed to help maximize the productivity of construction, logging, mining and agriculture equipment operating in severe conditions.

These advanced technology lubricants are formulated for safe start-up at low temperatures while providing protection at elevated operating temperatures. They are especially designed for machines with electronic controls and to ensure long life and excellent performance for gears, bearings, seals and friction disc materials. Mobiltrans AST series lubricants are formulated for excellent thermal and oxidation stability, and are designed to protect against deposit formation allowing them to last beyond typical OEM drain interval recommendations.

Features and Benefits

Today's technology has vastly improved the performance capabilities of heavy-duty off-highway equipment in terms of load, speed, control, reliability and performance through innovative drive train designs. These designs have increased the requirements of drive train fluids to deliver higher performance, increased productivity and reduced operating costs. Friction control, wear protection, thermal stability, shear stability, rust and corrosion protection and seal compatibility are features of the drive train fluid that must be optimally balanced to provide extended clutch, gear and synchronizer life, smooth shift control and high load capability over a wide range of applications and operating conditions. Mobiltrans AST series deliver exceptional performance in today's drive train components and hydraulic systems. The key benefits include:

Features	Advantages and Potential Benefits
Wide operating temperature performance	<ul style="list-style-type: none"> -Helps extend drain and service intervals over multiple seasons to lower operating costs and increase productivity -Excellent performance and responsiveness from critical components and reduce wear associated with cold start ups
Consolidate the number of fluids on your equipment	<ul style="list-style-type: none"> -Potential to use one fluid in multiple components to reduce the risks of mis-application and simplify your lubricant program -Multigrade performance reduces the number of viscosity grades required for use in different seasons, allowing you to extend drain intervals
Excellent frictional properties	<ul style="list-style-type: none"> -Outstanding clutch friction retention & slippage control & brake life -Excellent anti-chatter brake performance -Great hydraulic responsiveness
Exceptional shear stability	Maintains effective viscosity and film strength during severe operation
Excellent load carrying, anti-wear and EP performance	Great wear protection to help extend component life and reduce cost of operation
Compatible with clutch materials and elastomers	Long clutch component & seal life, reduced oil leakage
Protection from corrosion of copper and its alloys	Protects and extends the life of synchronizers

Features	Advantages and Potential Benefits
Formulated to ensure seal compatibility with most common seal materials used in off-highway equipment.	Allows for longer seal life and compatibility with a variety of seal arrangements & materials
Outstanding protection against deposit formation	Help extend seal life, drain & service intervals
Superior thermal and oxidation stability	Long oil life, help reduce wear, extended equipment life
Excellent foam control protection	Excellent performance in wet brakes, hydraulic system

Applications

Mobiltrans AST series are recommended for use in heavy-duty transmissions, gear boxes, differentials, final drives, wet brakes and hydraulic systems. Mobiltrans AST series are suitable for use in equipment requiring Caterpillar TO-4 and TO-4M fluids and Komatsu equipment, requiring good micro-clutch performance.

Specifications and Approvals

This product is recommended for use in applications requiring:	MOBILTRANS AST 40	MOBILTRANS AST 20
Allison C-4	X	
Caterpillar TO-4		X

This product meets or exceeds the requirements of:	MOBILTRANS AST 40	MOBILTRANS AST 20
Caterpillar TO-4M	X	

Properties and Specifications

Property	MOBILTRANS AST 20	MOBILTRANS AST 30	MOBILTRANS AST 40
Grade	SAE 0W-20	SAE 5W-30	
Brookfield Viscosity @ -30 C, mPa.s, ASTM D2983			45000
Brookfield Viscosity @ -35 C, mPa.s, ASTM D2983		14000	
Brookfield Viscosity @ -40 C, mPa.s, ASTM D2983	5800		
Density @ 15.6 C, g/ml, ASTM D4052	0.855	0.866	
Flash Point, Cleveland Open Cup, °C, ASTM D92	190	190	222
Kinematic Viscosity @ 100 C, mm ² /s, ASTM D445	7.36	10.5	14.2
Kinematic Viscosity @ 40 C, mm ² /s, ASTM D445	30.7	57.6	107
Pour Point, °C, ASTM D97	-54	-45	-39
Viscosity Index, ASTM D2270	221	173	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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11-2021

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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

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