DATA BULLETIN

Synthetic 10W-30/SAE 30 Heavy Duty Diesel Oil

Outperforms Conventional Diesel Oils

AMSOIL Synthetic 10W-30/SAE 30 Heavy Duty Diesel Oil (ACD) is formulated with premium synthetic base oils that exceed both 10W-30 multi-grade and SAE 30 straight-grade viscosity requirements for outstanding performance in modern and older diesel engines. Unlike conventional SAE 30 motor oils, AMSOIL Heavy Duty Diesel Oil has a naturally high viscosity index and does not contain paraffin (wax). It has a -33°F pour point and qualifies for SAE 10W, making it an all-season multi-grade lubricant with a wide operating temperature range. AMSOIL Heavy Duty Diesel Oil is formulated without viscosity index (VI) improvers. This shear-stable formulation is designed to stop viscosity loss and associated bearing and cylinder bore wear. AMSOIL Synthetic 10W-30/SAE 30 Heavy Duty Diesel Oil contains premium additives with a high 12 TBN to neutralize acids from blow-by, exhaust gas recirculation (EGR) and high-sulfur diesel fuels. It protects against damaging piston deposits, ring sticking and sludge.

AMSOIL, the leader in automotive synthetic lubrication, produced the world's first API-qualified synthetic motor oil back in 1972. Trust the extensive experience of AMSOIL, The First in Synthetics,® to do the best job protecting your equipment.

Performance

Where these viscosity grades are specified, AMSOIL Synthetic 10W-30/SAE 30 Diesel Oil provides outstanding performance as a straight-grade SAE 30 for older two- and four-stroke diesels and as a multi-grade SAE 10W-30 in modern four-stroke diesel and gasoline engines. AMSOIL Synthetic Heavy Duty Diesel Oil is ideal for use in a wide variety of light- and heavy-duty applications, including agriculture, off-road construction, trucking, mining, industrial (pumps and generators) and personal automotive or commercial transportation. It is recommended for use with low- or high-sulfur diesel fuels in standard, turbocharged or supercharged engines; all off-road engines and pre-2007 on-road engines.

- SAE 10W-30 performance without VI improvers
- Cost-effective replacement for conventional oils
- Excellent shear stability
- Outstanding wear protection
- Superior protection over a broad range of operating temperatures
- Extended service life

TYPICAL TECHNICAL PROPERTIES

Synthetic 10W-30/SAE 30 Diesel Oil (ACD)

Kinematic Viscosity @ 100°C, cSt (ASTM D-445)	10.5
Kinematic Viscosity @ 40°C, cSt (ASTM D-445)	66.3
Viscosity Index (ASTM D-2270)	141
Cold Crank Simulator Apparent Viscosity @ -25°C, cP (ASTM D-5293)	5917
Pour Point °C (°F) (ASTM D-97)	-36 (-33)
Flash Point °C (°F) (ASTM D-92)	230 (446)
Fire Point °C (°F) (ASTM D-92)	248 (478)
NOACK Volatility, % weight loss (g/100g) (ASTM D-5800)	6.7
High-Temperature/High-Shear Viscosity @150°C, 1.4 x $10^6 s^{-1}$, cP (ASTM D-5481)	3.4
Four-Ball Wear Test (ASTM D-4172 @ 40 kg pressure, 75°C, 1200 rpm, 1 hr), Scar, mm	0.40
Total Base Number	12.0

APPLICATIONS

AMSOIL Synthetic 10W-30/SAE 30 Heavy Duty Diesel Oil is recommended for diesel engines, gasoline engines and other applications that require any of the following worldwide specifications:

• API CI-4+/CH-4/SL, CF, CF-2 • Global DHD-1 • ACEA A3/B3, E3, E5 • JASO DH-1 • Mack EO-M+, EO-N Premium Plus '03 • Detroit Diesel Power Guard 93K214 • Caterpillar ECF-1a, ECF-2 • Cummins CES 20076/20077/20078 • Volvo VDS-3/VDS-2 • Mercedes Benz 228.1/228.3/229.1 • MAN 271/3275 • MTU Type 2

COMPATIBILITY

AMSOIL Synthetic 10W-30/SAE 30 Heavy Duty Diesel Oil is compatible with conventional and synthetic motor oils; however, mixing AMSOIL motor oils with other oils will shorten the oil's life expectancy and reduce the performance benefits. AMSOIL does not support extended drain intervals where AMSOIL Synthetic Heavy Duty Diesel Oil has been mixed with another product.

Aftermarket additives are not recommended for use with AMSOIL motor oil.

SERVICE LIFE

AMSOIL Synthetic Heavy Duty Diesel Oil is recommended for extended drain intervals in unmodified, mechanically sound vehicles or equipment as follows:

Diesel Engine Service

- Three times (3X) OEM* recommendation, not to exceed 50,000 miles/600 hours or one year, whichever comes first. Drain intervals may be extended further with oil analysis.

Gasoline Engine Service

- Two times (2X) OEM* recommendation, not to exceed 15,000 miles or one year, whichever comes first.

*Operating conditions and drain intervals for severe and normal service are defined by the OEM. Refer to your owner's manual.

Note: Extended drain intervals are **not recommended** when using biofuels containing >10% ethanol or 5% biodiesel (B5). Follow OEM drain intervals or extend drain intervals with oil analysis.

AMSOIL Ea and Donaldson Endurance Full-Flow Oil Filters are designed for extended drain intervals. They stop smaller particles, have less restriction and last longer than regular filters. For best performance, use AMSOIL Ea or Donaldson Endurance Oil Filters.

AMSOIL Ea By-Pass Oil Filters are specialized for the removal of small, wear-causing dirt particles, thereby extending engine life. AMSOIL encourages using an AMSOIL Ea By-Pass Filtration system for maximum engine and oil life.

OIL ANALYZERS INC., (715) 395-0222, is a division of AMSOIL that provides cost-effective, quality oil analysis services.

For more information on product applications and service life, refer to the *AMSOIL Product Recommendation and Drain Interval Chart* (G1490).

HEALTH & SAFETY

This product is not expected to cause health concerns when used for the intended application and according to the recommendations in the Material Safety Data Sheet (MSDS). An MSDS is available via the Internet at www.amsoil.com or upon request at (715) 392-7101. **Keep Out of Reach of Children.** Don't pollute. Return used oil to collection centers.

For AMSOIL warranty information, visit www.amsoil.com.

AMSOIL The First in Synthetics®

Contact your AMSOIL Dealer for more information on AMSOIL products or to place an order. You may also order direct by calling AMSOIL INC. at 1-800-956-5695 and providing the referral number listed here. ▼

Referral #_____

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