



*The First in Synthetics*®

## Series 3000 Synthetic 5W-30 Heavy Duty Diesel Oil

**Maximum Fuel Economy and  
Excellent Anti-Wear Protection**



### **PRODUCT DESCRIPTION**

AMSOIL Series 3000 100% Synthetic 5W-30 Heavy Duty Diesel Oil (HDD) delivers extraordinary lubrication in both diesel and gasoline engines found in commercial, fleet and personal vehicles. By combining the industry's premier synthetic technology with AMSOIL premium additives, AMSOIL Series 3000 exceeds the higher performance demands of modern engines. It withstands the stress of higher heat, higher acid levels and excessive soot-loading found in EGR-equipped engines. AMSOIL Series 3000 Synthetic 5W-30 Heavy Duty Diesel Oil consistently outperforms conventional and synthetic diesel oils for long-lasting performance and protection.

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

### **Extends Drain Intervals**

AMSOIL Series 3000 Synthetic 5W-30 Heavy Duty Diesel Oil can extend drain intervals far beyond those recommended for conventional oils. Its unique synthetic formulation and long-drain additive system deliver maximum engine protection, cleanliness and performance over extended drain intervals, reducing vehicle maintenance and waste oil disposal costs.

### **Maximizes Fuel Economy**

AMSOIL Synthetic 5W-30 Heavy Duty Diesel Oil is energy efficient for reduced fuel costs. Its low viscosity minimizes "drag" associated with high-viscosity oils, allowing the engine to operate more freely, maximizing power and fuel economy.

### **Maximum Protection Against Engine Wear**

Even under high temperatures and pressures, AMSOIL Series 3000 Diesel Oil's superior film strength and anti-wear additives help prevent metal-to-metal contact. AMSOIL Series 3000 reduces ring wear, cylinder bore polishing, oil consumption and valve train wear for improved engine life and lower maintenance costs.

### **Controls Soot-Thickening and Wear**

AMSOIL Synthetic 5W-30 Heavy Duty Diesel Oil is heavily fortified with detergent/dispersant additives and is naturally resistant to soot. It is designed to keep soot particles suspended independently and prevent them from attaching together to form larger, wear-causing particles. Viscosity increase is minimized and soot-related wear is controlled.

### **Reduces Oil Consumption and Emissions**

AMSOIL Series 3000 loses only 7.6% of its mass to high-temperature volatility (evaporation) in the NOACK test, outperforming all conventional oils. Because less oil vapor passes into the combustion chamber, oil consumption and emissions are reduced. Additionally, lower volatility helps AMSOIL 5W-30 Diesel Oil retain its viscosity after high-temperature service for continued dependable protection and excellent fuel economy.

### **Excels in Extreme Temperatures**

AMSOIL Series 3000 Synthetic 5W-30 Heavy Duty Diesel Oil resists thermal (heat) breakdown, oxidation and sludge formation better than conventional oils. And unlike conventional petroleum oils, AMSOIL HDD contains no wax. It stays fluid down to -50°C (-58°F) for improved cold-temperature oil flow, reduced bearing wear and easier starting.



## TYPICAL TECHNICAL PROPERTIES

### AMSOIL Series 3000 Synthetic 5W-30 Heavy Duty Diesel Oil (HDD)

Kinematic Viscosity @ 100°C, cSt (ASTM D-445)	11.7
Kinematic Viscosity @ 40°C, cSt (ASTM D-445)	67.8
Viscosity Index (ASTM D-2270)	169
Cold Crank Simulator Apparent Viscosity @ -30°C, cP (ASTM D-5293)	5276
Pour Point °C (°F) (ASTM D-97)	-50 (-58)
Flash Point °C (°F) (ASTM D-92)	226 (439)
Fire Point °C (°F) (ASTM D-92)	244 (471)
NOACK Volatility (ASTM D-5800) 250°C for 1 hour, % weight loss	7.6
High Temperature/High Shear Viscosity, cP, 150°C, 1.0 x 10 <sup>6</sup> s <sup>-1</sup> (ASTM D-5481)	3.5
Four-Ball Wear Test (ASTM D-4172: 40kg, 75°C, 1200 rpm, 1 hr.) Scar, mm	0.35
Total Base Number	12.1

## APPLICATIONS

AMSOIL Synthetic 5W-30 Heavy Duty Diesel Oil is recommended for diesel engines, gasoline engines and other applications that require any of the following world-wide specifications:

- API CI-4+, CI-4, CH-4, CF-2, CF, SL • ACEA A3/B3, E2, E3, E5, E7
- Global DHD-1 • JASO DH-1 • Mack EO-M+, EO-N Premium Plus
- DDC Power Guard 93K214 • Caterpillar ECF-1-a, ECF-2 • Cummins CES 20076, 20077, 20078 • Volvo VDS-2, VDS-3 • MB 228.1, 228.3, 229.1 • MAN 271/3275 • MTU Type 2

## COMPATIBILITY

AMSOIL Series 3000 Synthetic 5W-30 Heavy Duty Diesel Oil is compatible with conventional and synthetic motor oils. Mixing AMSOIL motor oils with other oils, however, will shorten the oil life expectancy and reduce the performance benefits. AMSOIL does not support extended drain intervals where oils have been mixed.

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

## SERVICE LIFE

AMSOIL Synthetic 5W-30 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

- **Normal Service** – Up to 25,000 miles or one year, whichever comes first, or longer based on oil analysis.
- **Severe Service** – Up to 15,000 miles or one year, whichever comes first, or longer based on oil analysis.

\*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 Guide* (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](http://www.amsoil.com) or by request at (715) 392-7101. **Keep Out of Reach of Children.** Don't pollute. Return used oil to collection centers.

For warranty information, visit [www.amsoil.com](http://www.amsoil.com).

AMSOIL products and Dealership information are available from your local AMSOIL Dealer.

