



*The First in Synthetics®*

## Synthetic Heavy-Duty Diesel and Marine Motor Oil (AME) SAE 15W-40

### Premium Protection for Severe Service Diesels

#### PRODUCT DESCRIPTION

AMSOIL Synthetic Heavy Duty Diesel & Marine Motor Oil (AME) is a premium diesel oil providing excellent performance in all types of diesel engines where highly effective control of wear and deposits is vital. Built with heavy-duty dispersant/detergent additives, its 12 TBN chemistry neutralizes acids and controls soot thickening from EGR and blow-by to protect against corrosion, cylinder bore polishing (wear) and varnish/sludge deposits. AMSOIL AME resists heat and breakdown better than conventional petroleum 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 AME can extend drain intervals far beyond those recommended for conventional petroleum oils. Its unique synthetic formulation and long drain additive system deliver the best possible engine protection, cleanliness and performance over extended drain intervals, reducing vehicle maintenance and waste oil disposal costs.

#### Advanced Soot and Wear Control Formula

AMSOIL Synthetic Heavy Duty Diesel & Marine Motor Oil is heavily fortified with detergent/dispersant additives and is naturally resistant to soot. It keeps soot particles suspended independently, preventing them from attaching together to form larger, wear-causing particles. Viscosity increase is minimized and soot related wear is controlled.



#### Maximizes Fuel Economy, Reduces Oil Consumption and Emissions

AMSOIL AME has lower high temperature volatility (evaporation) than conventional petroleum oils. Because less oil vapor passes into the combustion chamber, oil consumption and emissions are reduced. Lower volatility helps AMSOIL AME retain its viscosity after high temperature service for excellent fuel economy and continued dependable protection.

#### Excellent Cold Flow Properties

AMSOIL AME remains fluid down to -44°F. It eases cold weather starting and provides vital start-up lubrication to prevent engine wear. AME outperforms conventional 15W-40 petroleum oils and greatly minimizes the impact of cold weather operation.

#### APPLICATIONS

AMSOIL Synthetic Heavy Duty Diesel & Marine Motor Oil is engineered for use in a wide variety of light and heavy-duty applications, including over-the-road trucks, off road construction, marine engines, farm equipment, mining, industrial (pumps & generators) and personal automotive or commercial transportation. It is excellent for use with low or high sulfur diesel fuels in standard, turbocharged or supercharged engines, including modern low emission diesels such as those equipped with EGR systems.

AMSOIL Synthetic Heavy Duty Diesel & Marine Motor Oil is recommended for use in diesel engines and other applications requiring any of the listed worldwide specifications and gasoline engines requiring API SL, SJ, SH... or ACEA A3.

- API CI-4+, CF, CF-2, SL • ACEA A3/B3, E2, E3, E5, E7
- Global DHD-1 • JASO DH-1 • Mack EO-N Premium Plus '03 • DDC Power Guard 93K214 • Caterpillar ECF-1
- Cummins CES 20071, 20072, 20076, 20077, 20078
- Volvo VDS-2, VDS-3 • MB 228.1, 228.3, 229.1 • MAN 271/3275 • MTU Type 2 • MIL-PRF-2104G



## TYPICAL TECHNICAL PROPERTIES

### AMSOIL Synthetic SAE 15W-40 Heavy-Duty Diesel and Marine Motor Oil (AME)

Kinematic Viscosity @ 100°C, cSt (ASTM D-445)	14.4	Four-Ball Wear Test	
Kinematic Viscosity @ 40°C, cSt (ASTM D-445)	89.7	(ASTM D-4172B @ 40 kg, 75°C, 1200 rpm, 1 hr), Scar, mm	0.35
Viscosity Index (ASTM D-2270)	167	Noack Volatility, % weight loss (g/100g) (ASTM D-5800)	6.8
CCS Viscosity @ -20°C, cP (ASTM D-5293)	4477	High-Temperature/High-Shear Viscosity	
Pour Point °C (°F) (ASTM D-97)	-42 (-44)	(ASTM D-4683 @ 150°C, 1.0 X 10 <sup>6</sup> s. <sup>-1</sup> ), cP	4.4
Flash Point °C (°F) (ASTM D-92)	234 (453)	Total Base Number	12.1

#### MIXING AMSOIL

AMSOIL AME 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 Heavy Duty Diesel & Marine Motor Oil is recommended for extended drain intervals in unmodified<sup>(1)</sup>, mechanically sound<sup>(2)</sup> vehicles or equipment as follows:

##### Personal Light Truck Diesel Engine Service

- **Normal Service**<sup>(3)</sup> -- Up to 25,000 miles or one year, whichever comes first, or longer based on oil analysis.
- **Severe Service**<sup>(4)</sup> -- Up to 15,000 miles or one year, whichever comes first, or longer based on oil analysis.
  - Replace AMSOIL Ea™ full flow oil filter at the time of oil change up to 25,000 miles (other brands at standard OEM\* intervals).

##### Commercial or Fleet Vehicles, Long-Haul Trucks, Marine Craft, RV, Off-Road Equipment

- **Non-EGR equipped diesels** -- extend drain intervals up to two times (2X) the OEM\* recommended drain interval or one year, whichever comes first, or longer based on oil analysis.
- **EGR equipped or low emission diesels** -- extend drain intervals based on oil analysis or use the longest drain recommendation of the OEM\*.
  - Replace Donaldson Endurance™ or AMSOIL Ea™ full flow oil filters at the time of oil change up to two times (2X) longer than the OEM\* standard interval, not to exceed 60,000 miles in long-haul trucks.

##### Gasoline Engine Service

- In gasoline engines, oil drain intervals may be extended up to two times (2X) the OEM\* recommended drain interval (not to exceed 15,000 miles without oil analysis)

or one year, whichever comes first. Replace AMSOIL Ea™ full flow filter at the time of oil change up to 25,000 miles. Replace other brand oil filters at standard OEM\* intervals.

\*OEM = Original Equipment Manufacturer

- (1) Engines operating under modified conditions are excluded from extended drain recommendations. Examples include the use of performance computer chips; non-OEM approved exhaust, fuel or air induction systems; and the use of fuels other than those recommended for normal operation by the manufacturer.
- (2) Engines are in good working condition and within the factory design settings. Mechanically sound engines, for example, do not leak oil or consume excessive amounts, are not worn out, do not overheat, do not have internal or external anti-freeze leaks and have a properly working emission control system. AMSOIL recommends repairs be made to malfunctioning engines prior to the installation of AMSOIL synthetic oils.
- (3) Personal transportation vehicles frequently traveling greater than 10 miles (16 km) at a time and not operating under severe service.
- (4) Extensive engine idling, daily short trip driving less than 10 miles (16 km), frequent towing, plowing, hauling heavy loads or dusty-condition driving.

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 by-pass oil filters are specialized for the removal of small, wear-causing dirt particles, thereby extending engine life. AMSOIL encourages using an AMSOIL by-pass filter 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.

#### 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 upon request at 715-392-7101 or via the Internet at [www.AMSOIL.com](http://www.AMSOIL.com). **Keep Out of Reach of Children.** Don't pollute. Return used oil to collection centers.

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

