



## Synthetic Heavy Duty Diesel & Marine Motor Oil SAE 15W-40

### Premium Protection for Severe Service Diesels

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 15W-40 Diesel Oil 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,<sup>®</sup> to do the best job protecting your engine.*



#### Extends Drain Intervals

AMSOIL Synthetic Heavy Duty Diesel & Marine Oil can extend drain intervals far beyond those recommended for conventional petroleum 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.

#### Advanced Soot and Wear Control Formula

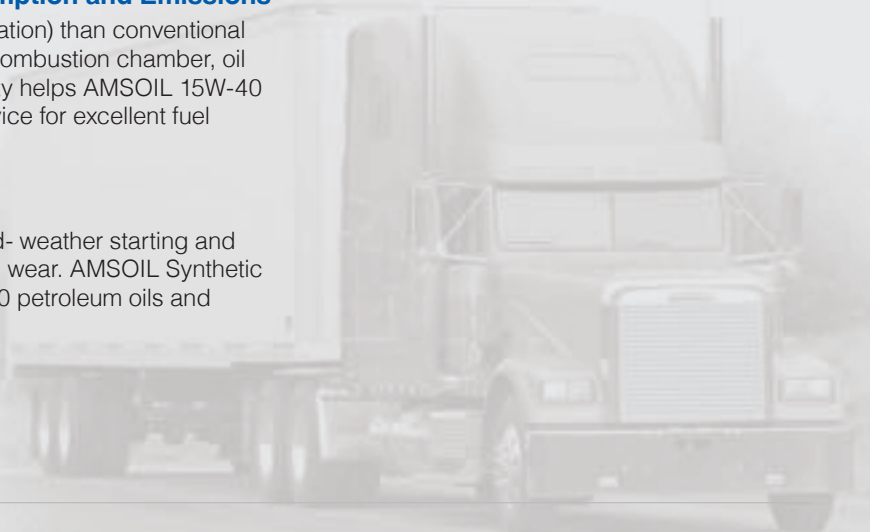
AMSOIL Synthetic Heavy Duty Diesel & Marine Motor Oil is heavily fortified with detergent/dispersant additives and is naturally resistant to soot. It is designed to keep soot particles suspended independently and prevent them from attaching together to form larger, wear-causing particles. Viscosity increase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

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

AMSOIL Diesel & Marine Oil has lower 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 15W-40 Diesel Oil 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 help prevent engine wear. AMSOIL Synthetic Heavy Duty Diesel Oil outperforms conventional 15W-40 petroleum oils and minimizes the impact of cold-weather operation.



## TYPICAL TECHNICAL PROPERTIES

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

Kinematic Viscosity @ 100°C, cSt (ASTM D-445) . . . . .	14.2
Kinematic Viscosity @ 40°C, cSt (ASTM D-445) . . . . .	93.2
Viscosity Index (ASTM D-2270) . . . . .	157
CCS Viscosity @ -20°C, cP (ASTM D-5293) . . . . .	4386
Pour Point °C (°F) (ASTM D-97) . . . . .	-42 (-44)
Flash Point °C (°F) (ASTM D-92) . . . . .	238 (460)
Fire Point °C (°F) (ASTM D-92) . . . . .	256 (493)

Four-Ball Wear Test (ASTM D-4172B @ 40 kg, 75°C, 1200 rpm, 1 hr), Scar, mm. . . . .	0.35
Noack Volatility, % weight loss (g/100g) (ASTM D-5800) . . . . .	6.0
High-Temperature/High-Shear Viscosity (ASTM D-4683 @ 150°C, 1.0 X 10 <sup>6</sup> s. <sup>-1</sup> ), cP. . . . .	4.3
Total Base Number . . . . .	12.1

## 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 diesel engines, gasoline engines and other applications that require any of the following worldwide specifications:

SAE 15W-40	Cummins CES 20076,
API CI-4+, CF, CF-2, SL, SJ, SH	20077, 20078
ACEA A3/B3, E2, E3, E5, E7	Volvo VDS-2, VDS-3
Global DHD-1	MB 228.1, 228.3, 229.1
JASO DH-1	MAN 271/3275
Mack EO-M+ EO-N Premium Plus	MTU Type 2
DDC Power Guard 93K214	Allison C-4
Caterpillar ECF-1A, ECF-2	

## MIXING AMSOIL

AMSOIL Synthetic Heavy Duty Diesel & Marine 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 Heavy Duty Diesel & Marine Motor 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 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 upon 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).



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 # \_\_\_\_\_