DATA BULLETIN



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

Premium Protection for Severe-Service Diesels

AMSOIL Synthetic Heavy Duty Diesel & Marine Motor Oil is a premium diesel oil that provides excellent performance in all types of diesel engines where highly effective control of wear and deposits is vital. Engineered with heavy-duty dispersant/detergent additives, its Total Base Number (TBN) of 12 neutralizes acids and controls soot thickening from exhaust gas recirculation (EGR) and blow-by to protect against corrosion, cylinder bore polishing (wear), varnish and 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,[®] to do the best job protecting your engine.



Extends Drain Intervals

AMSOIL Synthetic Heavy Duty Diesel & Marine Motor Oil can extend drain intervals far beyond those recommended for conventional petroleum oils. Its unique synthetic formulation and long-drain additive chemistry deliver maximum engine protection, cleanliness and performance over extended drain intervals, reducing vehicle maintenance and waste-oil disposal costs.

Controls Soot and Wear

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 aggregating to form larger, wear-causing particles. Viscosity increase is minimized and soot-related wear is reduced.

Reduces Oil Consumption and Emissions

AMSOIL Synthetic Heavy Duty Diesel & Marine Motor Oil has lower volatility than conventional petroleum oils. Oil consumption and emissions are minimized due to less vapor passing into the combustion chamber. Lower volatility helps AMSOIL 15W-40 Diesel Oil retain its viscosity after high-temperature service for continued dependable protection.

Excellent Cold-Flow Properties

AMSOIL Synthetic Heavy Duty Diesel & Marine Motor Oil eases cold-weather starting (down to -44°F) and provides vital startup 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 @ 40°C, cSt (ASTM D445). 106.9 Viscosity Index (ASTM D2270). 146 CCS Viscosity @ -20°C, cP (ASTM D5293). 4723 Pour Point °C (°F) (ASTM D97). -38 (-36 Flash Point °C (°F) (ASTM D92) 232 (450 Fire Point °C (°F) (ASTM D92) 262 (504 Four-Ball Wear Test (ASTM D4172), Scar, mm. 0.36 Noack Volatility, % weight loss (g/100g) (ASTM D5800) 4.8 High-Temperature/High-Shear Viscosity (ASTM D5481), cP 4.2 Total Base Number 12.7	Kinematic Viscosity @ 100°C, cSt (ASTM D445)	15.0
CCS Viscosity @ -20°C, cP (ASTM D5293) 4723 Pour Point °C (°F) (ASTM D97) -38 (-36 Flash Point °C (°F) (ASTM D92) 232 (450 Fire Point °C (°F) (ASTM D92) 262 (504 Four-Ball Wear Test (ASTM D4172), Scar, mm. 0.36 Noack Volatility, % weight loss (g/100g) (ASTM D5800) 4.8 High-Temperature/High-Shear Viscosity (ASTM D5481), cP 4.2		
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Four-Ball Wear Test (ASTM D4172), Scar, mm.0.36Noack Volatility, % weight loss (g/100g) (ASTM D5800)4.8High-Temperature/High-Shear Viscosity (ASTM D5481), cP4.2	Flash Point °C (°F) (ASTM D92)	232 (450)
Noack Volatility, % weight loss (g/100g) (ASTM D5800)	Fire Point °C (°F) (ASTM D92)	262 (504)
High-Temperature/High-Shear Viscosity (ASTM D5481), cP	Four-Ball Wear Test (ASTM D4172), Scar, mm	0.36
	Noack Volatility, % weight loss (g/100g) (ASTM D5800)	4.8
Total Base Number	High-Temperature/High-Shear Viscosity (ASTM D5481), cP	4.2
	Total Base Number	

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 diesels 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 specifications:

- SAE 15W-40
- API CI-4+/CI-4/CH-4/CF/ CF-2/SL/SJ
- ACEA A3/B3, E2, E3, E5, E7
- Global DHD-1
- JASO DH-1
- Mack EO-M. EO-N.
- DDC 93K214

- Caterpillar ECF-1A, ECF-2
- Cummins CES 20076, 20077, 20078
- Volvo VDS-2, VDS-3
- MB 228.1, 228.3, 229.1
- MAN 271, 3275
- MTU Type II

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 10% biodiesel (B10). Follow OEM drain intervals or extend drain intervals with oil analysis.

AMSOIL PRODUCT WARRANTY

AMSOIL products are backed by a Limited Liability Warranty. For complete information visit www.amsoil.com/warranty.aspx.

HEALTH & SAFETY

This product is not expected to cause health concerns when used for the intended application and according to the recommendations in the Safety Data Sheet (SDS). An SDS is available online at www.amsoil.com or upon request at (715) 392-7101. Keep Out of Reach of Children. Recycle used oil and bottle.

COMPATIBILITY

AMSOIL Synthetic Heavy Duty Diesel & Marine Oil is compatible with conventional and synthetic motor oils. Mixing AMSOIL motor oils with other oil, however, will shorten the oil's 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.



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