



SERIES 3000

SYNTHETIC 5W-30 HEAVY-DUTY DIESEL OIL

Recommended for applications specifying the following:

- API CI-4, CH-4, CF-2, CF, SJ, SL • Global DHD-1
- Cummins CES 20076, 20077 • Mack EO-M+, EO-N Premium Plus
- Detroit Diesel Series 2000/4000 Category 2 • Volvo VDS, VDS-2
- MTU Type 2 • MAN 271, M3275 • Scania LDF • DB 228.3, 229.1
- ACEA A-3, B-3, E-3, E-5 • Allison C-4

Outstanding all-fleet performance for diesel and gasoline engines

Product Description

AMSOIL Series 3000 Synthetic 5W-30 Heavy-Duty Diesel Oil is a premium quality all fleet lubricant, specifically designed for use in commercial, industrial and fleet applications requiring diesel specifications CI-4, CH-4, CG-4, CF-2 and CF, while also suitable for API SL gasoline engine lubrication.

Resists Oxidation and Thermal Breakdown

AMSOIL Series 3000 Synthetic 5W-30 Heavy-Duty Diesel Oil resists breakdown from heat, blowby chemicals and oxygen up to ten times longer than do conventional oils. AMSOIL Series 3000 Synthetic 5W-30 Heavy-Duty Diesel Oil resists forming sludge and varnish deposits, which contribute to corrosion, decreased fuel efficiency and increased engine wear. AMSOIL Series 3000 Synthetic 5W-30 Heavy-Duty Diesel Oil doesn't thicken like conventional oils but maintains its viscosity, providing peak engine performance and extended drain intervals. AMSOIL Series 3000 Synthetic 5W-30 Heavy-Duty Diesel Oil's superior heat transfer properties and exceptional lubricity reduce engine operating temperatures and engine wear.

Fuel Efficient Formula

AMSOIL Series 3000 Synthetic 5W-30 Heavy-Duty Diesel Oil efficiently transfers energy from the engine to the drivetrain. Its low coefficient of friction inhibits the energy loss to "drag" common to high viscosity oils. AMSOIL Series 3000 Synthetic 5W-30 Heavy-Duty Diesel Oil surpasses the API Energy Conserving Rating requirements and provides significant fuel savings, with additional savings in oil make-up for over-the-road service.

Low Temperature Protection

AMSOIL Series 3000 Synthetic 5W-30 Heavy-Duty Diesel Oil remains fluid at temperatures as low as -60°F (-51°C). It circulates rapidly to provide vital lubrication and prevent engine wear caused by lack of oil flow. AMSOIL Series 3000 Synthetic 5W-30 Heavy-Duty Diesel Oil allows quicker, easier cold temperature starting with significantly reduced engine wear.

Reduces Oil Consumption

AMSOIL Series 3000 Synthetic 5W-30 Heavy-Duty Diesel Oil loses only 6.5 percent of its mass to high temperature volatilization. Conventional multigrade oils often lose over 15 percent. Lower volatility means less oil vapor passing into the combustion chamber, resulting in a reduction in oil

consumption and hydrocarbon emissions. Additionally, lower volatilization helps AMSOIL Series 3000 Synthetic 5W-30 Heavy-Duty Diesel Oil retain its viscosity characteristics after high temperature service for continued dependable protection and excellent fuel economy.

Non-Foaming

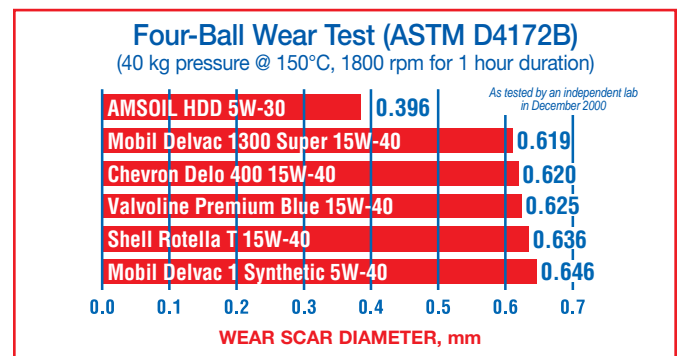
AMSOIL Series 3000 Synthetic 5W-30 Heavy-Duty Diesel Oil contains highly effective anti-foam agents to prevent oil foaming.

Extended Drain Intervals

AMSOIL Series 3000 Synthetic 5W-30 Heavy-Duty Diesel Oil is specifically designed for long drain capability in both diesel and gasoline engines. Its unique synthetic formulation, improved detergent/dispersant capabilities and long drain additive package ensure maximum engine protection, cleanliness and performance over extended drain intervals. The extended drain intervals allowable with AMSOIL Series 3000 Synthetic 5W-30 Heavy-Duty Diesel Oil reduce vehicle downtime and waste oil disposal costs.

Unsurpassed Engine Protection

AMSOIL Series 3000 Synthetic 5W-30 Heavy-Duty Diesel Oil's higher VI provides a better protective film at higher temperatures than conventional SAE 40 oils, while remaining fluid at subzero temperatures. In every engine tested, AMSOIL Series 3000 Synthetic 5W-30 Heavy-Duty Diesel Oil's unique technology significantly reduced ring wear, cylinder bore polishing, cylinder lining wear, oil consumption, piston deposits and ring breakage.



*The Smaller the Wear Scar,
the Better the Protection!*

TYPICAL TECHNICAL PROPERTIES

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

Kinematic Viscosity @ 100°C, cSt (ASTM D-445)	11.5
Kinematic Viscosity @ 40°C, cSt (ASTM D-445)	63.8
Viscosity Index (ASTM D-2270)	176
Cold Crank Simulator Apparent Viscosity @ -30°C, cP (ASTM D-2602)	5012
Pour Point, °C (°F) (ASTM D-97)	-51 (-60)
Flash Point, °C (°F) (ASTM D-92)	236 (457)
Fire Point °C (°F) (ASTM D-92)	250 (482)
Noack Volatility (ASTM D-5800) 250°C for 1 hour, % weight loss	6.5
High Temperature/High Shear Viscosity, cP, 150°C, 1.0 x 10 ⁸ s ⁻¹ (ASTM D-4683)	>3.5
Four-Ball Wear Test, 40 kgf, 150°C, 1800 rpm, 1 hr., scar diameter, mm (ASTM D-4172)	0.40
Total Base Number	>12

Application

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- Detroit Diesel Series 2000/4000 Category 2
- Volvo VDS, VDS-2
- MTU Type 2
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- Scania LDF
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- ACEA A-3, B-3, E-3, E-5
- Allison C-4

Service Life

In light-duty diesel engines, nonturbocharged diesel engines and turbocharged gasoline engines: drain oil at intervals up to three times the oil drain interval recommended by the engine manufacturer or six months, whichever comes first.

In heavy-duty diesel engines and turbocharged diesel engines: drain oil at intervals up to twice or more the oil drain interval recommended by the engine manufacturer if extended drain intervals are supported by the findings of a used oil analysis program, or six months, whichever comes first.

In car and light truck nonturbocharged gasoline engines: drain oil at intervals up to 25,000 miles or one year, whichever comes first.

In marine craft and infrequently used gasoline automotive engines: drain oil at intervals up to three times the oil drain interval recommended by the engine manufacturer or one year, whichever comes first.

In motorcycles and small off-road four-cycle gasoline engines equipped with filters: drain oil at two times the engine manufacturer's recommendations or six months, whichever comes first. In motorcycles and small off-road four-cycle gasoline engines without filters: drain oil at intervals recommended by the engine manufacturer.

In high-performance or racing engines: drain oil at intervals determined by the findings of a used oil analysis program.

Change AMSOIL Full-Flow Oil Filters at 12,500-mile or six-month intervals, whichever comes first, in gasoline engines. In diesel engines, change AMSOIL Full-Flow Oil Filters at 7000-mile or six-month intervals, whichever comes first. Change other manufacturers' filters at the engine manufacturer's recommended filter change intervals.

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

