Heavy-Duty Off-Road



Synthetic AW Hydraolic Oil ISO-66 (AWI)

SYNTHETIC DIESEL OILS



SYNTHETIC HYDRAULIC FLUIDS CONCENT NUME

ESEL

FUEL ADDITIVES



AMSOIL synthetic lubricants provide maximum protection and performance in all types of heavyduty off-road equipment.



Premium synthetic drivetrain lubricants help reduce wear, extend service life and maximize fuel economy.



Synthetic Transmission Fluids

AMSOIL synthetic transmission fluids are formulated to control gear and bearing wear, resist sludge and increase energy efficiency better than conventional fluids. They are designed to resist mechanical shear for maximum viscosity retention and remain fluid at sub-zero temperatures for quick, responsive shifts. AMSOIL synthetic transmission fluids provide excellent protection for seals, helping prevent leaks. They deliver exceptional hydraulic fluid performance in servo-equipped units. Capable of extended drain intervals with oil analysis. Formulations for automatic, manual and powershift transmissions available.

Synthetic Gear Lubes

AMSOIL synthetic gear lubes feature high film strength and premium additives that help shield gears from metal-to-metal contact for maximum wear control. Their low-friction formulations promote increased fuel efficiency and are designed to provide longer oil, seal and equipment life. Recommended for twice the OEM drain interval for petroleum lubes in many applications.

Synthetic Polymeric Off-Road Grease

AMSOIL Synthetic Polymeric Off-Road Grease features exceptional adhesion (ability to cling to components) and cohesion (ability to cling to itself) properties. It is engineered to resist pound-out better than other greases in heavily loaded, extreme-pressure applications and stay in place longer, providing outstanding lubrication over extended service intervals.

Qualifies as a Universal Tractor Transmission Oil (UTTO)



Synthetic Hydraulic / Transmission Oil

AMSOIL Synthetic Tractor Hydraulic/Transmission Oil is sufficiently robust to protect heavily loaded transmissions, yet flows readily to provide dependable, smooth operation in hydraulic systems. Its all-weather formulation reduces the need for seasonal oil changes by resisting high-temperature breakdown during long summer hours and by remaining fluid in sub-zero winter conditions. Synthetic Tractor Hydraulic/Transmission Oil is formulated to resist corrosion, limit wear and promote increased energy efficiency.







Superior synthetic hydraulic fluids provide outstanding all-season performance.

Increased Protection

AMSOIL synthetic hydraulic fluids are formulated to resist high-temperature breakdown, helping to keep hoses, valves and pumps clean and operating properly. They remain fluid in sub-zero temperatures to limit pressure spikes, unresponsiveness and other problems inherent to inferior fluids. AMSOIL synthetic hydraulic fluids are designed to withstand the stresses of high-load, high-pressure operation and inhibit foam, corrosion and deposits for long equipment life.

AMSOIL Synthetic Anti-Wear Hydraulic Oil contains anti-wear additives and rust inhibitors to provide optimum protection for expensive equipment.

AMSOIL Synthetic Biodegradable Hydraulic Oil is designed to biodegrade when subjected to sunlight, water and microbial activity. Replaces either ISO 32 or ISO 46 hydraulic fluids.



Heavy-Duty Air, Oil & By-Pass Filtration

Premium filtration saves operators money through better protection and extended service life.

Maximum Protection & Service Life

AMSOIL Ea® Heavy-Duty Extended-Life Oil Filters feature full-synthetic media with an average filtering efficiency of 98.7 percent at 20 microns. They trap a larger percentage of small, wear-causing particles than less-efficient cellulose filters for maximum engine protection. They provide extended service intervals that coincide with the maximum drain intervals of AMSOIL synthetic motor oils, allowing maintenance managers to consolidate services and save time. Ea Heavy-Duty Oil Filters cost less than competitive extended-service oil filters.

AMSOIL also carries **Donaldson[®] Endurance[™] Air and Oil Filters** to complement the Ea filter line. They provide excellent filtering efficiency throughout extended service intervals.

By-Pass Filtration

AMSOIL Ea By-Pass Oil Filters are designed to help reduce engine wear by providing a filtering efficiency of 98.7 percent at two microns, nearly eliminating wear-causing particles. Paired with oil analysis, AMSOIL by-pass filtration systems can extend drain intervals, increasing convenience and reducing costs.



How does ZMSON Compare to Other Brands?

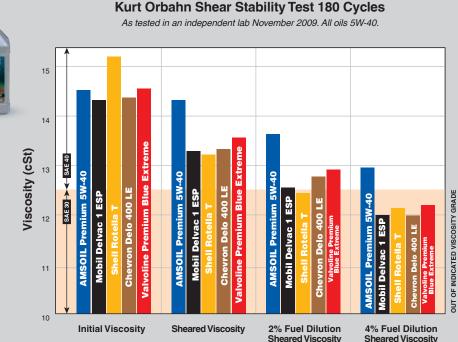
Maximum Shear Stability

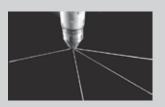
The severe environments found inside diesel engines can tear apart, or shear, the molecular structure of oil, leading to viscosity loss. Making matters worse, moderate levels of fuel dilution common in some applications impair an oil's ability to resist shear. Four percent fuel dilution is often enough



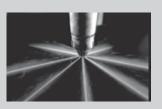
to reduce an oil's sheared viscosity to less than its specified viscosity grade, leading to metal-to-metal contact and accelerated equipment wear.

AMSOIL doubled the standard Kurt Orbahn 90-cycle test (ASTM D-6278) used to test shear stability and had the oils tested for 180 cycles. Samples were then contaminated with 2 and 4 percent ultra-low-sulfur diesel fuel (ULSD). Even at 4 percent fuel dilution, AMSOIL Premium Synthetic Diesel Oil stayed in grade to maintain engine protection while the other oils failed.





Dirty Fuel Injector Spray Pattern

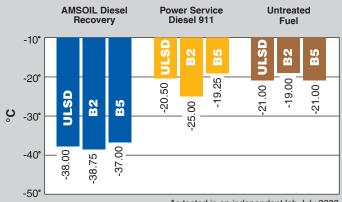


Clean Fuel Injector Spray Pattern

Restored Horsepower and Fuel Economy

By cleaning dirty injectors, AMSOIL Diesel Concentrate helps ensure an even spray pattern for improved fuel economy up to 5 percent, as tested with the Cummins L10 Injector Deposit test. Regular use enhances engine performance by keeping injectors clean, resulting in better fuel economy and restored horsepower.





Cold Filter-Plugging Point (CFPP)

ULSD = Ultra-Low-Sulfur Diesel, B2 = 2% Biodiesel, B5 = 5% Biodiesel

Cold-Weather Superiority

When diesel fuel surpasses its cold filterplugging point (CFPP), the wax crystals that form clog the fuel filter and starve the engine of fuel, preventing it from starting. AMSOIL Diesel Recovery lowers the CFPP of diesel fuel better than the competing brand. It quickly and effectively dissolves the wax crystals that have formed in untreated fuel to get equipment moving again, making it a necessity in cold climates.



As tested in an independent lab July 2009

Synthetic Diesel Oils

AMSOIL introduced the world's first synthetic motor oil for diesel engines in 1975 and dramatically redefined the performance and protection available for heavy-duty off-road equipment. Today, AMSOIL is the recognized leader in synthetic lubricant technology and offers a variety of exclusive synthetic diesel oil formulations, each tailored to meet the unique demands of hard-working equipment.

Protection and Performance

AMSOIL synthetic diesel oils reduce friction and wear, helping hard-working diesel engines perform better and last longer. They resist high-temperature breakdown to help prevent harmful deposits from forming, while remaining fluid in subzero temperatures for easier cold starts and faster circulation compared to conventional oils.

Maximum Fuel Economy

AMSOIL synthetic diesel oils' advanced lubricity (slipperiness) results not only in enhanced performance and protection, but maximum fuel efficiency as well. With less resistance to internal moving parts, equipment is able to operate at peak efficiency and deliver optimum fuel economy.

Extended Drain Intervals

AMSOIL coined the phrase "extended drain interval" nearly 40 years ago. Advanced chemistries allow extended-drain AMSOIL synthetic diesel oils to remain effective up to three times longer than original equipment manufacturer (OEM) recommendations*. Operators benefit through reduced oil costs and increased convenience due to fewer oil changes and less used oil disposal.

*Not to exceed 50,000 miles/600 hrs./one year. Drain intervals may be extended further with oil analysis.



AMSOIL Premium API Synthetic Diesel Oil

- The premium choice for modelyear 2007 and newer diesel engines requiring API CJ-4 oils
- Compatible with all exhaust treatment devices



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

- Advanced fuel-efficient formula
- Formulated to deliver exceptional wear protection for long engine life



AMSOIL OE 15W-40 Synthetic Diesel Motor Oil

- Provides excellent performance and protection for the duration of OEM-recommended drain intervals
- API CJ-4 certified



AMSOIL 10W-30/SAE 30 Synthetic Diesel Motor Oil

- Exceeds both 10W-30 and SAE 30 viscosity requirements
- Excellent for both heavy equipment and personal vehicles



AMSOIL 15W-40 Synthetic Heavy Duty Diesel & Marine Oil

- Formulated with a high 12 Total Base Number for excellent extended-drain performance
- Engineered for all on- and off-road diesel applications not equipped with diesel particulate filters (DPFs)

AMSOIL Diesel Fuel Additives & Engine Coolant





AMSOIL Cetane Boost

Improves combustion efficiency to increase power in diesel engines. Raises cetane up to seven numbers.

AMSOIL Cold Flow Improver

Helps prevent icing or gelling in fuel. Reduces cold filter-plugging point as much as 34°F.









AMSOIL Diesel Concentrate

Cleans fuel system components, increasing fuel economy by up to 5 percent.

AMSOIL Diesel Concentrate Plus Cold Flow Improver

Reduces cold filter-plugging point while maximizing fuel economy in one convenient package.

AMSOIL Diesel Recovery

Quickly liquefies gelled diesel fuel, thaws frozen fuel filters and reduces the need for a new filter.

AMSOIL Antifreeze & Engine Coolant

Surpasses standards for metallic corrosion and provides superior cooling and protection.





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 #___

The First in Synthetics ®