

The First in Synthetics ®

# **Commercial and Industrial Products**

Lubricants, filters and services for off-road and industrial applications



Reduced operating costs • Greater fuel economy Increased equipment durability • Extended drain intervals

## **Compressor Oils**

AMSOIL Synthetic PC Series Compressor Oils (PCH, PCI, PCJ, PCK, PCL) are made from highquality synthetic oils. They promote long compressor life through reduced component wear, corrosion protection and resistance to water degradation and lubricant breakdown.

#### **Application Recommendations**

AMSOIL Synthetic PC Series Compressor Oils are recommended for use in single-stage and multistage rotary screw, vane and reciprocating compressor crankcases and cylinders, vacuum pumps and other compressor applications. Available in five viscosity grades, AMSOIL PC Series Synthetic Compressor Oils match compressor manufacturer viscosity recommendations.

#### **Performance Features**

AMSOIL Synthetic PC Series Compressor Oils are highly resistant to thermal and oxidative breakdown, which inhibits carbon buildup. The inhibition of carbon buildup promotes efficient, normal temperature range operation.

AMSOIL PC Series Synthetic Compressor Oils are formulated to keep water from mixing with the oil and deteriorating its lubricating ability. AMSOIL PC Series Synthetic Compressor Oils are also formulated for easy water removal, with no need for specialized water removal processes.

#### Safety Advantage

AMSOIL Synthetic PC Series Compressor Oils' higher flash, fire and auto-ignition points and reduced tendency to form carbon deposits makes them a reduced fire or explosion hazard as compared to conventional petroleum compressor oils. However, PC Series Compressor Oils are not considered non-flammable.

PCI

# SIROCCO® Synthetic Compressor Oil

AMSOIL SIROCCO<sup>®</sup> Synthetic Compressor Oil (SEI) is a highquality, long-life fluid formulated with premium synthetic ester technology. SIROCCO<sup>®</sup> effectively prevents wear, oxidation, foam and rust,

while its inherent lubricity and thermal conductivity reduce heat and energy consumption, increasing operating efficiency and reducing maintenance costs.

#### **Application Recommendations**

AMSOIL SIROCCO<sup>®</sup> Synthetic Compressor Oil is a multi-viscosity oil meeting the requirements of 5W-20. It may be used in applications calling for either an ISO-32



or ISO-46 compressor oil or coolant and is recommended for use in single- and multistage rotary screw compressors and vacuum pumps that call for this viscosity.

#### **Performance** Features

AMSOIL SIROCCO<sup>®</sup> Synthetic Compressor Oil maintains performance across a wide operating temperature range. Its low pour point, high viscosity index and lack of paraffins (wax) make it an excellent all-season lubricant.

SIROCCO<sup>®</sup> is also highly resistant to water. It prevents damaging oil/water emulsions, allowing for longer lubricant life and ease of water removal from the sump. AMSOIL SIROCCO<sup>®</sup> Synthetic Compressor Oil resists oxidation, foaming and rust for extended drain performance.

AMSOIL SIROCCO<sup>®</sup> Synthetic Compressor Oil has higher flash, fire and auto ignition points than competitive petroleum oils. Its resistance to carbon formation and its ashless additive system minimize the incidence of deposits acting as ignition-promoting hot spots.

AMSOIL SIROCCO<sup>®</sup> Compressor Oil safely replaces PAG type compressor oils, such as Ingersoll-Rand SSR Ultra-Coolant<sup>®</sup> or Sullair Sullube 32<sup>®</sup> following normal oil change procedures, without extensive flushing.





#### Water Separation Test

Samples of Ingersoll-Rand SSR Ultra-Coolant<sup>®</sup>, Sullair Sullube<sup>®</sup> and AMSOIL SIROCCO<sup>®</sup> Synthetic Compressor Oil were mixed with 50 percent water, agitated and heated. The photograph, taken 15 minutes after the procedure, demonstrates the superior water separation abilities of AMSOIL SIROCCO<sup>®</sup> Synthetic Compressor Oil.

### **Hydraulic Fluids**

AMSOIL Synthetic AW Series Antiwear Hydraulic Oils (AWF, AWG, AWH, AWI, AWJ) are long-life lubricants based on high-quality synthetic oil technology. These oils are formulated with a premium additive system that inhibits oxidation, acid production, viscosity increase, rust and foam for outstanding component protection and positive equipment performance.

AMSOIL Synthetic AW Series Antiwear Hydraulic Oils typically reduce maintenance and fuel costs by extending drain intervals and reducing labor associated with repairs, downtime and changeouts. AW Series Hydraulic Oils are maximum efficiency (mehf) oils and can reduce energy consumption, equating to 6 to 15 percent increased production or fuel savings in mobile equipment.

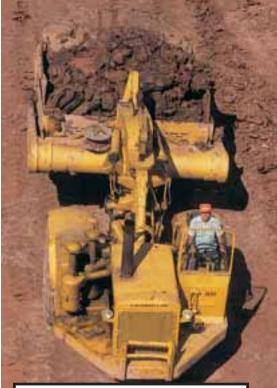
#### **Application Recommendations**

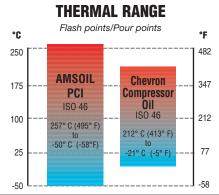
AMSOIL Synthetic AW Series Antiwear Hydraulic Oils are recommended for high and low pressure gear, vane and piston stationary and mobile hydraulic systems. They are available in many viscosity grades; choose the grade recommended by the equipment manufacturer.

AMSOIL Synthetic AW Series Antiwear Hydraulic Oils meet the performance requirements of all major hydraulic manufacturers and are excellent for general purpose use where extended drain intervals are desired or in severe-duty operations where temperature extremes are encountered. The ISO 15 and 22 grade products, AWF and AWG, are preferred for use in temperatures -20°F or lower.

#### **Performance Features**

AMSOIL Synthetic AW Series Antiwear Hydraulic Oils resist thermal and oxidative breakdown, inhibiting carbon and varnish deposits. Deposit-free hydraulic equipment outlasts and outperforms deposit-laden equipment. Machinery lubricated with AMSOIL Synthetic Hydraulic Fluid runs cooler than machinery





lubricated with conventional fluids. Cooler operation promotes long life for hoses, seals and other components.

AMSOIL Synthetic AW Series Antiwear Hydraulic Oils separate readily from water, preventing the formation of oil-water emulsions and subsequent degradation of equipment lubrication and protection. Ready water separation also promotes easy sump water drainage.

AMSOIL Synthetic AW Series Antiwear Hydraulic Oils' high-quality zinc-based antiwear/antioxidant additive prevents wear in highspeed, high-pressure vane and gear pumps while meeting the lubrication requirements of axial piston pumps with bronze-steel metallurgy.

#### Also available:

AMSOIL Synthetic Thermally Stable Biodegradable Hydraulic Oil (TBI).

## AMSOIL Synthetic Greases

AMSOIL synthetic greases offer the superior properties of synthetic oils, premium quality lithium complex thickeners (except X-Treme Food Grade Grease, which features aluminum complex thickeners) and top-quality performance additives.

#### **Broad Temperature Performance**

AMSOIL synthetic greases perform across a broader temperature range than other greases do. One AMSOIL synthetic grease may replace two conventional, seasonal greases, reducing inventory and the possibility of misapplication.

#### Extreme Pressure and Load Carrying Ability

AMSOIL synthetic greases protect components from metal-to-metal contact, even under heavy loads. Their extreme pressure additives form a shield against sudden or sustained extreme loads for dependable protection from wear.

#### **Rust and Corrosion Protection**

AMSOIL synthetic greases contain special rust and corrosion inhibitors to protect parts from rust and corrosion.

#### **Compatibility**

AMSOIL synthetic greases are compatible with most other greases and most seal materials. Preventive maintenance practices dictate thorough removal of one grease before installing a new grease, even when grease incompatibility is not expected.

#### Synthetic GL Series Multipurpose EP Lithium Complex Greases

AMSOIL Synthetic GL Series Multipurpose Greases (GLC, GLB) are the preferred greases for highspeed/high-temperature applications and are formulated with dissolved load carrying and extreme pressure agents. NLGI consistency grades #0, #1, and #2.

#### Synthetic GH Series Heavy Duty EP Lithium Complex Greases

AMSOIL Synthetic GH Series Greases (GHD, GHB) are formulated with dissolved extreme pressure agents and suspended molybdenum for exceptional loadcarrying abilityin extreme-load, low-speed applications. NLGI consistency grades #1 and #2.



#### Synthetic Water Resistant Lithium Complex Grease

AMSOIL Synthetic Lithium Complex Water Resistant Grease (GWR) is formulated for utmost protection against water. Its outstanding resistance to washoff and anti-rust/anticorrosion activity make it the preferred grease for components subjected to frequent or prolonged water contact. NLGI consistency grade #2.

#### **X-Treme Food Grade Grease**

AMSOIL X-Treme Food Grade Grease (GXC) is formulated for applications in which incidental food contact may occur. It offers excellent high- and low-temperature performance and rust and corrosion protection, making it ideal for food processing. Aluminum Complex. NLGI consistency grade #2. USDA H-1.

#### Semi-Fluid 00 Synthetic EP Grease

AMSOIL Semi-Fluid 00 Synthetic EP Grease (GSF) is a problem-solving lubricant ideal for leaky gearboxes in industrial and fleet applications and for use in applications that are difficult to service. It provides superior protection and performance in shockloading applications that rupture the oil film of conventional greases. NLGI consistency grade #00.

# **AMSOIL Synthetic Lubricants**

In 1972, AMSOIL INC. introduced AMSOIL Synthetic 10W-40 Motor Oil and became the first company in the world to manufacture and market an American Petroleum Institute (API) rated synthetic motor oil.

Why synthetic? Because synthetic lubricants are superior to conventional petroleum lubricants. Petroleum lubes are refined from crude oil, a natural substance pumped from the earth and containing diverse chemicals. Some of the chemicals in petroleum oil are detrimental to the lubrication process and to the lubricated components. For example, some petroleum oil chemicals invite oxidation in hightemperature operations. Oxidation quickly destroys lubricant integrity.

Synthetic lubes, on the other hand, are not refined from crude oil,

but constructed from pure chemicals selected for their ability to lubricate. The purity of synthetic lubricant basestocks significantly reduces lubricant oxidation, which promotes the ability of synthetics to be used in higher temperature applications than conventional lubes may be and promotes their ability to be used for extended drain intervals. In fact, AMSOIL synthetic lubricants are specifically formulated for extended drain intervals.

Synthetics are also free of the paraffins found in conventional petroleum oils. With no paraffin to congeal at low temperatures, synthetics maintain better low-temperature fluidity than petroleum oils do, which protects equipment operating in cold environments even the relative cold of a juststarted engine. The precise blend of synthetic base stocks and high-quality additives promotes superior lubrication and friction reduction, which in turn promotes superior heat control, wear control and energy efficiency. Molecular uniformity also helps synthetics

maintain their protective viscosity in high-temperature operations, which also promotes superiorwear control.

The superior performance and protection provided by AMSOIL synthetic lubricants adds up to increased productive time and profits.

### **Transmission and Gear Lubricants**

#### **Automatic Transmission Fluid**

AMSOIL Synthetic Automatic Transmission Fluid (ATF) is formulated for passenger car automatic transmissions, power steering units and hydraulic or compressor systems calling for ATF. Torque-Drive<sup>™</sup> Synthetic Automatic Transmission Fluid (ATD) is engineered specifically for the Allison<sup>®</sup> TES-295 transmission fluid specification.

AMSOIL synthetic automatic transmission fluids offer superior performance over a greater temperature range than conventional ATFs do, allowing free fluid flow through narrow transmission passageways in cold temperatures and resisting high-temperature thickening, sludging and deposit formation in high temperatures.

#### **Gear Lube**

AMSOIL offers 75W-90, 75W-110, 80W-90, 75W-140 and 80W-140 synthetic gear lubes for mobile applications requiring extremepressure protection. All are formulated for passenger car and commercial vehicle transmissions and differentials, including limited slip differentials.

#### **Powershift Transmission Fluid**

AMSOIL Synthetic Powershift

Transmission Fluids (CTG, CTJ, CTL) are formulated for heavyduty powershift transmissions. They are also ideally suited for use in large truck manual transmissions.

AMSOIL Synthetic Powershift Transmission Fluids are compatible with common metallic and nonmetallic friction materials. Their stable frictional characteristics inhibit excessive brake noise and vibration, clutch slippage, friction surface

deposits and design material degradation.

#### Tractor Hydraulic Transmission Fluid

AMSOIL Synthetic Tractor Hydraulic/Transmission Fluid (ATH) is formulated for farm and heavy equipment with a common sump for hydraulic fluid and vehicle transmission fluid. AMSOIL Synthetic Tractor Hydraulic/Transmission Fluid is formulated for long-lasting wet brake chatter suppression.



# **Engine Oils**

#### **Diesel Engine Oils**

AMSOIL offers 5W-30, 15W-40 and 10W-30/SAE 30 viscosity grade synthetic oils and a 15W-40 grade synthetic blend oil for stationary and mobile diesel engines. All are formulated with 12 TBN (Total Base Number) chemistry for durable corrosion control. Superior stability in terms of volatility, thermal degradation, oxidation, viscosity retention and TBN retention make AMSOIL synthetic diesel oils ideal for extended drain interval use.

AMSOIL Synthetic 5W-40 (DEO) is the premium choice for API CJ-4 emission quality diesel oil required by model year 2007 and newer diesel engines.

AMSOIL Series 3000 Synthetic 5W-30 Heavy Duty Diesel Oil (HDD) is the oil of choice for applications requiring superior fuel efficiency or for extreme cold temperature operations.

AMSOIL Synthetic 10W-30/ SAE 30 Synthetic Diesel Oil (ACD) is ideal for applications requiring a straight grade SAE 30 oil.

AMSOIL Synthetic 15W-40 Heavy Duty

Diesel and Marine Oil (AME) is preferred for most applications requiring diesel formulated oil, and

Filters

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#### Ea By-Pass Oil Filters

AMSOIL offers by-pass oil filters in single or dual filter element configurations for use in diesel or gasoline mobile or stationary engines. By-pass oil filters subject oil to ultra-fine filtration, removing particles smaller than those typically captured by conventional oil filters. The AMSOIL EaBP By-Pass Oil Filter has an efficiency of 98.7% at two microns.

In addition, soot removal was determined to be a time weighted average of 39 percent.

AMSOIL by-pass oil filtration systems also call for the addition of oil to the engine's sump. The largerthan-typical volume of oil afforded by the by-pass "spreads the load" better, so each quart rests longer, cools more, stays cleaner and lasts longer.

#### The AMSOIL Dual Gard By-Pass Oil

Filtration System allows mounting of two by-pass filter elements, which allows even more oil in the system and doubles by-pass filter element change intervals.

#### **Ea Oil Filters**

AMSOIL Ea Oil Filters provide superior engine protection for a number of small gasoline and diesel-powered industrial and commercial engines.

is specifically formulated to control rust and corrosion, suiting it ideally for marine diesel use. AMSOIL Synthetic Blend 15W-40 Gasoline and Diesel Oil (PCO) is formulated for use in mixed diesel and gasoline fleets, offering top-notch lubrication and protection at a savings.

#### **Gasoline Engine Oils**

AMSOIL offers a wide range of gasoline engine oils. The preferred oil for stationary gasoline engines is AMSOIL Synthetic 10W-30 Motor Oil.

AMSOIL Synthetic 10W-30 Motor Oil (ATM) is formulated with12 TBN, providing generous corrosion-fighting capacity for a gasoline engine oil. Its high TBN and superior stability in terms of volatility, thermal degradation, oxidation, viscosity retention, thermal-viscosity competence and TBN retention makes AMSOIL Synthetic10W-30 Motor Oil ideal for extended drain interval use, a critical benefit for stationary engines in remote locations.

AMSOIL also offers 0W-30, 5W-20, 5W-30, 10W-40 and 20W-50 gasoline engine oils.

#### **Other Filters**

AMSOIL Dealers are authorized to distribute the complete line of Donaldson and WIX filters, which includes hydraulic filters, fuel filters and more. Please contact your servicing AMSOIL Dealer for coverage of all your filtration needs.





# **Oil Analysis**



Oil analysis is a maintenance management tool that allows users to monitor equipment condition for maximum equipment life, maximum lubricant drain interval and optimal downtime scheduling. Oil analysis saves users significant money by reducing equipment replacements and repairs, reducing the volume of lubricant purchased and destined for disposal, and most importantly, by reducing equipment downtime.

Oil analysis customers interested in extending their oil drain intervals often "trendline" their oil condition, comparing the results of the most recent report to those of previous reports. Trendlining establishes normal patterns in wear metals content, viscosity, acid content, neutralization ability and other characteristics as specified. Departures from established patterns indicate a change in engine or lubricant condition. The information offered by trendlining may be used to correct abnormal conditions before they cause damage or failure.

#### Oil Analyzers Inc.

Oil Analyzers Inc. is a fully equipped oil analysis laboratory staffed by highly trained analysts. Oil Analyzers Inc. offers a complete line of oil analysis services, including engine oil analysis, drivetrain oil analysis and industrial lubricant analysis.

Oil Analyzers Inc. normally turns out reports one working day after the sample is received. When a time-sensitive condition is detected, OAI calls with the information.

#### **Getting started**

It's simple. Order an Oil Analyzers Inc. sampling kit, draw a sample, complete the testing form and send the sample and form in the Oil Analyzers Inc. box. That's all there is to it. Your report will be faxed and/or mailed to you. The cost for testing and report return is included in the kit price. Postage paid U.S. or U.P.S. return boxes are available.

#### Will I understand my report?

Oil Analyzers Inc. reports are easy to read and understand. Customer and unit information identify the equipment for which testing was performed. Technical oil data appears in a quick-read chart with multiple entry capacity for trendlining. Easy to understand recommendations are included so you know exactly what you should do with your oil or component to provide the best care for your equipment. The report shows a detailed explanation of tests and results. Oil Analyzers Inc. reports are formatted for clear fax transmission. For a detailed explanation of oil analysis reports consult the Oil Analyzers User Guide (G-2047).

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I credit AMSOIL Compressor Oil with savings in five areas. By helping our compressors run 20°F to 40°F cooler, we no longer need fans and special ventilation systems for heat reduction. With those cooler operating temperatures and the high-quality fluid, our valves don't carbon up, so we don't have to replace them as often. Our compressors draw 10 percent less amperage with AMSOIL Compressor Oil. Our oil consumption is way down. And we've gone from three-month to 8000-hour compressor oil drain intervals. Multiply those savings times thousands of compressors and you can see why we're installing AMSOIL Compressor Oil nationwide.



-JOHN SMALL, SEARS

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

