

FARMING LUBRICANTS



®

INDUSTRIAL, HYDRAULIC & DRIP OILS

ECOTERRA® HVI HYDRAULIC OIL

Ecoterra HVI Hydraulic Oil is a premium quality, zinc-free, high viscosity index antiwear hydraulic oil specifically formulated for use in the hydraulic systems of off-road equipment manufactured by Hitachi, John Deere and others, and operating over a wide temperature range.

APPLICATIONS

- Hydraulic systems of excavators, backhoes, bulldozers, crawlers, skid steers, front-end loaders, wheel loaders, motor graders, compaction equipment and forestry equipment where the manufacturer recommends a zinc-free hydraulic fluid
- Hitachi excavators with 4000-hour service intervals

FEATURES/BENEFITS

- Zinc-free formulation
- Suitable for year-round use
- Excellent wear protection for hydraulic pumps and motors
- Excellent oxidation resistance
- Protects against rust and corrosion
- Excellent water-separating properties
- Good foam resistance
- Extended equipment life

MEGAFLOW® AW HYDRAULIC OIL

Megaflow AW Hydraulic Oil is a high-quality, antiwear hydraulic oil developed for use in a wide variety of industrial and mobile hydraulic system applications. It is recommended for use in all types of high-pressure, high-speed hydraulic pumps.

APPLICATIONS

Megaflow AW Hydraulic Oil is recommended for use in the following equipment:

- Hydraulic systems on industrial and mobile equipment
- Farm tractor implements
- Pivots used in irrigation systems
- Plain and antifriction bearings used in electric motors
- Chain drives
- Machine shop hydraulic presses
- Hydraulic floor jacks

FEATURES/BENEFITS

- Excellent oxidation stability
- Longer service life
- Excellent rust and corrosion protection
- Excellent foam resistance
- Separates quickly from water

INDUSTRIAL OIL

Industrial Oil is a highly refined, non-compounded paraffinic mineral oil recommended for drip-feed lubrication of deep-well turbine water pumps, and for general-purpose lubrication in applications that do not require a compounded oil.

APPLICATIONS

- Deep-well water pumps for domestic and agricultural use
- Vacuum pumps
- Chain drives and other “once-through” applications
- General-purpose lubrication in applications where a non-compounded mineral oil is specified

FEATURES/BENEFITS

- Uniform quality and chemical composition
- High natural oxidation stability
- Contains no hazardous additives
- Low odor
- Very light color (except 2500 grade)

MULTIPURPOSE R&O OIL

Multipurpose R&O Oil is a rust & oxidation (R&O)-inhibited, ashless antiwear circulating oil developed for use in many industrial applications where good oxidation stability, corrosion inhibition and mild wear protection are required.

APPLICATIONS

- Centrifugal and some rotary air compressors
- Electric motor bearings
- Mild-duty hydraulic systems
- Lightly loaded enclosed gear drives that do not require an extreme-pressure gear oil
- Vacuum pumps and deep-well water pumps
- General-purpose machinery and shop lubrication

FEATURES/BENEFITS

- Good oxidation resistance
- Mild wear protection
- Protects against rust and corrosion
- Separates quickly from water
- Good foam resistance

WHITE OIL

White Oil is a highly refined, premium quality mineral oil developed for use in food processing plants, consumer products and in other applications that require an exceptionally pure white mineral oil.

APPLICATIONS

- Food processing, bottling and canning equipment requiring a NSF H1/1998 USDA H-1 mineral oil
- Protective coating for raw fruits and vegetables
- Eggshell sealant
- Dust suppressant for grain or animal feed
- Drip oil for deep well water pumps

FEATURES/BENEFITS

- Colorless, odorless and tasteless
- Excellent color stability
- Contains vitamin E for oxidation inhibition



HEAVY-DUTY ENGINE OILS

GUARDOL ECT® WITH LIQUID TITANIUM® PROTECTION ADDITIVE

Guardol ECT (Emissions Compatible Technology) is a premium quality, synthetic blend, API CJ-4 engine oil with our exclusive Liquid Titanium protection additive. It is specially formulated to reduce wear and enhance protection against bearing corrosion and oxidation, while also protecting exhaust after-treatment devices. Approved under the latest OEM specifications from Caterpillar, Cummins, Detroit Diesel, Mack, Mercedes and Volvo, Guardol ECT is backward serviceable so older engines can get the benefits of our premium formulation. Its exclusive Liquid Titanium protection additive provides increased engine protection from a strongly bonded titanium shield formed on the surface of critical engine parts, which reduces wear and helps extend component life.

Guardol ECT with Liquid Titanium protection additive is designed for use in mixed fleets with both on-highway and off-road equipment operating in varying climates and under varying loads and service conditions.

APPLICATIONS

- On-highway diesel trucks equipped with exhaust after-treatment devices
- Diesel engines equipped with exhaust gas recirculation (EGR) or other NOx-reduction technologies
- Older diesel equipment with conventional, non-EGR engines
- Off-highway construction, earth-moving and mining equipment
- Mixed fleets with diesel and gasoline-fueled vehicles

Guardol ECT meets or exceeds the requirements of:

- API Service CJ-4/SN, CI-4 PLUS/CI-4, CH-4
- ACEA E9-08, E7-08
- Caterpillar ECF-3, ECF-2, ECF-1-a
- Cummins CES 20081
- Detroit Diesel Power Guard 93K218
- Mack EO-O Premium Plus
- Mercedes-Benz Sheet 228.31
- Volvo VDS-4

FEATURES/BENEFITS

- Proprietary additive package with exclusive Liquid Titanium protection additive provides excellent wear, rust and bearing corrosion protection
- Advanced low SAPS technology protects exhaust after-treatment devices
- Exceptional soot control protects against abrasive wear and oil thickening
- Enhanced oxidation resistance
- Resists viscosity and thermal breakdown, even at high temperatures
- Excellent low-temperature pumpability with soot-laden oil
- High shear stability
- Resists foaming and aeration
- Protects against sludge and varnish formation



FLEET SUPREME EC®

Fleet Supreme EC (Emissions Compatible) is an API CJ-4 universal fleet engine oil developed for use in 4-stroke cycle diesel engines designed to meet 2007 and later on-highway exhaust emission standards. It is specially formulated to protect exhaust after-treatment devices, such as diesel particulate filters (DPFs) and diesel oxidation catalysts (DOCs). It also is backward serviceable for use in pre-2007 diesel engines where API CI-4 PLUS, CI-4, CH-4 oils are specified.

APPLICATIONS

- On-highway diesel trucks equipped with exhaust after-treatment devices
- Diesel engines equipped with EGR, ACERT or other emissions control technologies
- Older diesel equipment with conventional, non-EGR engines
- Off-highway construction, earth-moving and mining equipment
- Mixed fleets with diesel and gasoline-fueled vehicles

Fleet Supreme EC meets or exceeds the requirements of:

- API Service CJ-4/SN, CI-4 PLUS/CI-4, CH-4
- ACEA E9-08, E7-04
- Caterpillar ECF-3, ECF-2, ECF-1-a
- Cummins CES 20081
- Detroit Diesel Power Guard 93K218
- Mack EO-O Premium Plus
- Mercedes-Benz Sheet 228.31
- Volvo VDS-4

FEATURES/BENEFITS

- Advanced low SAPS technology protects exhaust after-treatment devices
- Protects against particulate filter plugging
- Excellent soot control for protection against abrasive wear and soot-induced oil thickening
- Resistant to viscosity and thermal breakdown at high temperatures
- Protects against sludge and varnish formation
- Protects against wear
- Protects against rust and bearing corrosion
- Good resistance to foaming and aeration



Conoco Lubricants — Quality Lubricants for the Farming Industry

Conoco lubricants offer a broad spectrum of high-performance motor oils, tractor fluids, gear oils and greases to cover all of your farm lubrication needs. Conoco lubricants meet the most stringent industry and OEM specifications, along with customers' demands.

Our lubricants are built to meet today's technological requirements, to keep your equipment working as hard and as long as you do. From heavy-duty engine oils to industrial oils to greases, Conoco lubricants are designed to tackle the agriculture industry's tough conditions and demanding requirements, while keeping your equipment running smoothly all year round.

You need to be able to count on your equipment all season long and Conoco lubricants can make that happen. Every product in the farm lubricants line is designed to deliver the performance and protection agricultural applications require. So when you want to get the most from your equipment, choose the brand that offers versatility, quality and value — Conoco Gets It Done.



HEAVY-DUTY ENGINE OILS



HYDROCLEAR POWER-D® ENGINE OIL

This API CI-4 PLUS premium universal fleet engine oil is formulated from high-quality, hydrocracked base stocks and unique proprietary additives to provide exceptional soot control and superior protection against wear, deposits, varnish, rust and corrosion in modern high-output diesel engines. Backed by a limited lifetime warranty, Conoco Hydroclear Power-D Engine Oil meets the requirements of Mack EO-N Premium Plus 03, EO-M Plus; Cummins CES 20078, 20077; Volvo VDS-3/VDS-2 and other leading U.S. and European OEM specifications and is a solid choice for those needing high-level engine protection.

APPLICATIONS

- Farm equipment with diesel or gasoline engines
- On-highway diesel trucks equipped with EGR, ACERT or other technologies to meet 2004 and earlier exhaust emission standards
- Older diesel equipment with conventional, non-EGR engines
- Mixed fleets with both diesel and gasoline-fueled vehicles
- Off-highway construction, earth-moving and mining equipment

Hydroclear Power-D multigrade engine oils meet or exceed the requirements of:

- API Service CI-4 PLUS/CI-4, CH-4, SL
- ACEA E7-04, E5-02, E3-96
- Caterpillar ECF-2, ECF-1-a
- Cummins CES 20078, CES 20077
- Detroit Diesel Power Guard 93K214
- Global DHD-1
- Mack EO-N Premium Plus 03
- MAN 271, 3275
- Mercedes-Benz Sheet 228.3
- MTU MTL 5044 Type 2
- Volvo VDS-3

FEATURES/BENEFITS

- Outstanding soot control for protection against abrasive wear and soot-induced oil thickening
- Outstanding resistance to viscosity and thermal breakdown at high temperatures
- Protects against sludge and varnish formation
- Excellent wear protection
- High shear stability
- Excellent rust and bearing corrosion protection
- Good low-temperature pumpability, even with soot-laden oil
- Good resistance to foaming and aeration
- Excellent protection for EGR-equipped engines, and extended drain capability for non-EGR diesel engines



SUPER HD II ENGINE OIL

Super HD II Engine Oil is a high-quality universal fleet engine oil designed for use in pre-2004 on-highway diesel trucks and off-highway diesel equipment, and in diesel or gasoline passenger cars and light trucks.

APPLICATIONS

- On-highway diesel trucks equipped with cooled-EGR, ACERT or other technologies to meet 2004 and earlier exhaust emission standards
- Older diesel equipment with conventional, non-EGR engines
- Mixed fleets with both diesel and gasoline-fueled vehicles
- Off-road construction, earth-moving and mining equipment
- Farm equipment with diesel or gasoline engines

Super HD II meets or exceeds the requirements of:

- API Service CI-4 PLUS/CI-4, CH-4, SL
- Caterpillar ECF-2, ECF-1-a
- Cummins CES 20078, CES 20076
- Mack EO-N Premium Plus 03
- Volvo VDS-2
- Diesel engines manufactured by OEMs not listed above, including International (Navistar), John Deere, Hino, Komatsu, Kubota and others

FEATURES/BENEFITS

- Excellent soot control for protection against abrasive wear and soot-induced oil thickening
- Resists viscosity and thermal breakdown at high temperatures
- Protects against sludge and varnish formation
- Protects against wear
- Protects against rust and bearing corrosion
- Good low-temperature pumpability, even with soot-laden oil
- Good resistance to foaming and aeration
- Meets requirements for EGR-equipped diesel engines, conventional diesel engines and gasoline engines





UNIVERSAL GEAR LUBRICANT

Universal Gear Lubricant is a multipurpose, extreme-pressure, API GL-5 automotive gear lubricant specifically designed for use in passenger car and truck axles with hypoid gear sets. It is formulated to provide long service life and extended gear life in automotive differentials operating under varying conditions of speed, load, temperature and torque. The carefully balanced formulation is designed to minimize oxidative sludge and varnish formation, reduce wear, prevent scoring damage, and protect against metal fatigue and spalling damage under shock-load conditions.

APPLICATIONS

Universal Gear Lubricant is recommended for service fills of:

- Conventional differentials
- Top-off of limited-slip differentials in passenger cars and trucks
- Differentials
- Final drives and transfer cases in some off-highway equipment
- Non-synchronized manual transmissions in trucks, buses and heavy equipment where the manufacturer specifies an API GL-5 or MT-1 gear oil

FEATURES/BENEFITS

- Excellent oxidation resistance and thermal stability to minimize sludge and varnish formation
- Excellent thermal durability for extended gear life at elevated temperatures and under extreme-pressure conditions
- High load-carrying capacity for protection against scuffing and wear
- Protects against rust and corrosion
- Good foam resistance



POWERTRAN™ FLUID

PowerTran Fluid is a multifunctional fluid specially formulated for use in farm tractors and off-highway equipment requiring one lubricant for the transmission, final drive, wet brakes and hydraulic systems. It meets the performance requirements of all major brands of farm tractors and other farm equipment that utilize a common fluid reservoir. It has excellent oxidation resistance and provides excellent wear protection, rust and corrosion protection, and good foam resistance. Carefully balanced frictional properties ensure proper operation of wet brakes and transmission clutches.

APPLICATIONS

PowerTran Fluid is recommended for use where the manufacturer specifies:

- AGCO (Deutz-Allis) Power Fluid 821XL
- AGCO (White Farm) Q-1826, Q-1802 (Type 55 Fluid), Q-1766B
- Case IH MS1210, MS1209, MS1207, MS1206
- Caterpillar TO-2 (obsolete)
- CNH MAT3525 (134-D Fluid), MAT3506, MAT3505
- Denison Hydraulics HF-0, HF-1, HF-2
- John Deere J20C, J14C (Type 303 Fluid)
- Ford ESN-M2C134-d, ESN-M2C86-C/B, ESN-M2C41-B
- Ford-New Holland FNHA-2-C-201.00
- Kubota UDT Fluid
- Landini Tractor II Hydraulic Fluid
- Massey-Ferguson CMS M1145/M1143, M1141, M1135, M1129A
- Sundstrand Hydrostatic Transmission Fluid
- Vickers (Eaton) M-2950-S, I-286-S
- Volvo WB 101/VCE 1273.03
- ZF TE-ML 03E, 05F, 17E

FEATURES/BENEFITS

- Excellent oxidation resistance
- Excellent wear protection for clutches, gears and hydraulic pumps
- Prevents brake chatter and grabbing
- Protects against rust and corrosion
- Excellent seal compatibility
- Good foam resistance
- Suitable for year-round use in most climates



GREASES

DYNALIFE® HT

Dynalife HT is a high-quality, multipurpose, extreme-pressure (EP) lithium complex grease developed for the lubrication of mobile and industrial equipment operating under heavy loads and at moderate to high temperatures. The combination of tackifier and heavy base oil provides a high level of adhesion to metal parts for improved retention and reduced leakage at high temperatures, and enhanced resistance to water washout.

APPLICATIONS

- Agricultural, construction, mining and industrial equipment operating under heavy or shock loads
- Wheel bearings of passenger cars and heavy equipment with disc brakes
- Ball joints, universal joints, other chassis points and water pumps
- Conveyor bearings

SUPER-STA®

Super-STA is an adhesive, multipurpose, extreme-pressure (EP) lithium grease developed for use in a wide variety of automotive and industrial applications.

APPLICATIONS

- Automotive chassis parts such as steering knuckles, ball joints, U-joints and tie-rod ends
- Wheel bearings on passenger cars and heavy equipment with drum brakes
- Moderately loaded plain and rolling-element bearings in industrial equipment
- Agricultural and construction equipment requiring a tacky, water-resistant, extreme-pressure lithium grease

MEGAPLEX® XD3

Megaplex XD3 is a high-performance, multipurpose, extreme-pressure (EP) lithium complex grease developed to satisfy the severe lubrication requirements of construction and off-road equipment manufactured by Caterpillar, Komatsu Dresser, Case New Holland, John Deere and others. It contains 3% molybdenum disulfide for extra protection for off-highway equipment operating under heavy or shock loads.

APPLICATIONS

- Chassis parts and wheel bearings of farm, construction, mining and other heavy mobile equipment
- Universal joints, constant velocity joints, brake self-adjusting screws and clutch release bearings on off-highway trucks and other heavy equipment
- Tractor-trailer fifth wheels
- Heavily loaded plain and rolling-element bearings in industrial equipment, such as pumps, compressors and gearboxes, where the manufacturer specifies a corrosion-resistant, extreme-pressure lithium complex grease with 3% moly

MULTIPLEX® RED

Multiplex Red is a high-performance, multipurpose, extreme-pressure (EP) lithium complex grease developed for the lubrication of mobile and industrial equipment operating under heavy loads and at moderate to high temperatures.

APPLICATIONS

- Wheel bearings of passenger cars, trucks, high-performance vehicles, sport utility vehicles and motorcycles equipped with disc brakes
- Ball joints, universal joints, other chassis points and water pumps on passenger cars, trucks and other mobile equipment
- Heavily loaded plain and rolling-element bearings in industrial, mining and mobile equipment where a water-resistant, high-temperature, extreme-pressure grease is required



For more information, please call our Technical Hotline at **877.445.9198**
or visit **phillips66lubricants.com**