



# BIOBLEND™

High Performance BioBased Lubricants



“HERE IS YOUR COUNTRY. CHERISH THESE NATURAL WONDERS, CHERISH THE NATURAL RESOURCES, CHERISH THE HISTORY AND ROMANCE AS A SACRED HERITAGE, FOR YOUR CHILDREN AND YOUR CHILDREN’S CHILDREN. DO NOT LET SELFISH MEN OR GREEDY INTERESTS SKIN YOUR COUNTRY OF ITS BEAUTY, ITS RICHES OR ITS ROMANCE.”

- THEODORE ROOSEVELT

## LUBRICANT INDUSTRY

Globally, the entire finished lubricant market is evaluated at approximately 35.3 million tons (aka that’s 78 billion pounds , 10 billion gallons or 38 billion liters)! Over 1/2 of that volume is engine oils. Over 1/4 quarter of that volume is industrial (hydraulic oils, gear oils). The balance is process oils, metal-working, and grease.

Biobased lubricants and Synthetic lubricants represent a small but rapidly growing part of the of the total market today.

What will the industry look like 5-10-20 years from now? More and more people are switching to Bio-Blend from petroleum based lubricants. You know it’s the right choice... what are you waiting for?

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# ABOUT BIOBLEND



BioBlend has been in the business of making high performance biodegradable lubricants and greases since 2001 and that's been our primary focus all along. We started out blending vegetable oil base stocks and have expanded into synthetic esters which offer additional performance benefits without sacrificing favorable biodegradability and minimal toxicity characteristics. By offering a full range of technology solutions in a range of price points, we can satisfy virtually every industrial need. Technology continues to evolve in base oils as well as the complex additives that go into our lubricants. Greater performance specifications, increased renewability, enhanced sustainability and decreasing costs have been our goals throughout history and continue to be primary goals.

Our customers lead us into new markets every year. In recent history, we've developed suites of products for the oil & gas industry, the marine industry, the elevator industry, and the food packaging industry, to name just a few.

We've been growing steadily over the years. We've been able to do that because of the strong team we've put in place, our strong relationships with our distribution partners, our reputation in the marketplace, and delivering the highest quality products.

WITH BIOBLEND PRODUCTS,  
YOU ARE GETTING INDUSTRY  
LEADING PERFORMANCE,  
COMPETITIVE PRICES,  
GLOBAL DISTRIBUTION, AND  
PERSONALIZED SERVICE.

# BIODEGRADABLE

## TYPES OF OILS

Polyisobutylene (PIB)

0-25%  
biodegradable

PAO (synthetic)

5-30%  
biodegradable

Petroleum

15-35%  
biodegradable

White Oil

25-45%  
biodegradable

Polyols & Diesters

55-100%  
biodegradable

NATURAL &  
VEGETABLE OILS

70-100%

BIODEGRADABLE



## WHAT DOES BIODEGRADABLE MEAN?

The combination of “high performance” and “environmentally responsible” sounds like a great foundation for an advanced line of lubricants. While the phrase “high performance” translates easily into functional specifications, words like “environmentally responsible” or “biodegradable” too often are used as descriptors with no real meaning for lubricant users coping with environmentally sensitive applications and operations.

## BIODEGRADABLE DEFINITIONS FOR LUBRICANTS

### ENVIRONMENTALLY ACCEPTABLE LUBRICANT (EAL):

As defined by the United States EPA, EALs are lubricants that are “biodegradable” and “minimally-toxic,” and are “not bioaccumulative” per the 2013 VGP.

### BIODEGRADATION:

Is the chemical breakdown of the base oil and additives into carbon dioxide and water, in the presence of organisms, air, and water.

### INHERENTLY BIODEGRADABLE:

Means at least 20% of the product will have biodegraded in 28 days or less.

### READILY BIODEGRADABLE - ULTIMATELY BIODEGRADABLE:

Means that 60% or more of the product will have biodegraded in 28 days or less. Nearly all BioBlend products fit this category.

### RENEWABLE RESOURCE:

Is any natural resource (such as plants or solar energy) that can be replenished naturally with the passage of time.

### SUSTAINABLE RESOURCE:

Is an available supply that can be drawn on when needed and is capable of being continued with minimal long-term effect on the environment.







BioBlend is conscious of performance requirements and the environment. We offer a wide range of products that are adapted to your needs.

**24+** INDUSTRY SEGMENTS

- AUTOMOTIVE
- AGRICULTURE
- ASPHALT & PAVING
- CONCRETE
- CONSTRUCTION
- DREDGING
- DRILLING
- ELEVATORS
- FLEETS
- FOOD PROCESSING
- FORESTRY
- GOLF
- GOVERNMENT
- LANDSCAPING
- MANUFACTURING
- METALWORKING
- MINING
- MUNICIPALITIES
- OILFIELD SERVICES
- PARKS
- PORT & MARINE
- RAILROAD
- SAND & GRAVEL
- WASTE & REFUSE

**35** PRODUCT SLATE

### BIODEGRADABLE LUBRICANTS

- Aerosols
- Air Tool Lubricant
- Chain and Bar Lubricants
- Chain and Cable Lubricants
- Cutting Fluids
- Engine Oils
- Extreme Pressure Greases
- FM Approved Lubricants
- Food Grade & Bio Lubricants
- Form Release Oils
- Gear Oils
- General Purpose Greases
- Heavy Duty Greases
- Hydraulic Fluids
- Metalworking Fluids
- Multi-Purpose Lubricants
- Penetrating Oils
- Plunger Packing Greases
- Plunger Packing Lubricants
- Rock Drill Oils
- Specialty Products
- Stern Tube Lubricants
- Synthetic Lubricants
- Thread & Joint Compound

### FOOD GRADE LUBRICANTS

- Aerosols
- Air Tool Lubricant
- All Purpose Greases
- Chain and Cable Lubricants
- Cutting Fluids
- Gear Oils
- Hydraulic Fluids
- Specialty Products
- Synthetic Lubricants
- White Oils
- Wipe Down Oils



**CARD**

**LINE**

# HYDRAULIC



## BIOFLO AW

BIODEGRADABLE ANTI-WEAR HYDRAULIC FLUIDS



**BIOFLO AW** Hydraulic Fluids are readily biodegradable, zinc-free, anti-wear hydraulic oils formulated from renewable basestocks to meet the performance requirements of mobile and industrial hydraulic systems. These high lubricity base oils are paired with environmentally friendly additive technologies to minimize ecological impact. These lubricants offer excellent thermal and oxidative stability, assuring superior service life with minimal viscosity change over a broad range of operating temperatures. BioFlo AW fluids are suitable for use in all conventional hydraulic systems, especially environmentally sensitive applications. Available as a sheen-free product upon request. Available in ISO grades 32, 46, and 68.

## BIOFLO AWS

BIODEGRADABLE SEMI-SYNTHETIC HYDRAULIC FLUIDS



**BIOFLO AWS** Hydraulic Fluids are semi-synthetic, readily biodegradable, zinc-free, anti-wear hydraulic oils formulated from renewable basestocks to meet the performance requirements of mobile and industrial hydraulic systems. The addition of synthetic esters allows for greater temperature ranges vs. BioBlend's BioFlo AW lubricants. BioFlo AWS fluids are suitable for use in all conventional hydraulic systems, especially environmentally sensitive applications. Available in ISO grades 15, 22, 32, 46, and 68.

## BIOFLO HEES

BIODEGRADABLE SYNTHETIC HYDRAULIC FLUIDS



**BIOFLO HEES** is a fully synthetic, ester based hydraulic fluid. It meets the OECD standard 301-B and is designed to provide better performance in extreme temperatures and over extended periods of time. It offers high thermal and oxidative stability which reduces operating temperatures. Friction and wear of parts is minimized in industrial and mobile hydraulic systems. Readily available for delivery worldwide. Available in ISO grades 32, 46, 68.

## BIOFLO HFDU

FM APPROVED FR HYDRAULIC FLUIDS



**BIOFLO FIRE RESISTANT HFDU** is made from premium vegetable oils. HFDU is an excellent anti-wear hydraulic fluid for use in all applications requiring an approved fire resistant fluid. In addition to high performance, the product also provides excellent environmental performance due to its low toxicity additives and vegetable base oils. HFDU is compatible with most mineral oils and polyolester type hydraulic fluids. For phosphate esters, please contact your BioBlend rep. HFDU is not compatible with water containing fluids. Available in ISO grades 40, 46, and 68.







## **BIOFLO UTF** BIODEGRADABLE UNIVERSAL TRACTOR FLUID

**BIOFLO UTF** is formulated from readily biodegradable, high lubricity base oils coupled with proprietary anti-wear and anti-corrosion additives to meet the requirements for Universal Tractor/Transmission Oil (UTTO), drive train/hydraulic fluid. This high performance formula can reduce operating temperatures and component wear in mobile and industrial hydraulic systems. Excellent thermal and oxidative stability assures superior service life with minimal viscosity change over a broad range of operating conditions. BioFlo UTF is suitable for use in ecologically sensitive applications or wherever a readily biodegradable, high performance UTTO is required.

## **BIOFLO STL** BIODEGRADABLE STERN TUBE LUBRICANT



**BIOFLO STL** is a high performance, readily biodegradable product formulated from high quality synthetic ester technologies. This product is formulated to meet the US EPA 2013 Vessel General Permit (VGP) guidelines as an Environmentally Acceptable Lubricant (EAL). BioFlo STL's lubricating film resists water, which keeps stern tube systems protected for extended periods of time and under severe operating conditions. In addition, this product is miscible with petroleum products commonly used for stern tube lubrication. Available in ISO grades 68, 100 and 150.

## **BIOFLO FG** BIODEGRADABLE FOOD GRADE AW HYDRAULIC FLUIDS



**BIOFLO FG** is a readily biodegradable, high performance food grade lubricant that meets the requirements for high-pressure anti-wear hydraulic fluids for the food processing industry. BioFlo FG is NSF registered as meeting the guidelines of an H1 product for incidental food contact. Excellent lubricity and temperature stability provide efficient power transfer and superior service life with minimal viscosity change over a broad range of applications. Available in ISO grades 32 and 46.

## **TRUFLO FG** FOOD GRADE ANTIWEAR HYDRAULIC FLUIDS



**TRUFLO FG** is a general-purpose food grade hydraulic fluid formulated from premium white oils. It includes anti-wear, anti-foam, and anti-corrosion additives to protect hydraulically operated food processing and packaging equipment. All TruFlo FG fluids are NSF registered as meeting the guidelines of an H1 product for incidental food contact. Available in ISO grades 32, 46, 68, 100, 150.

# HYDRAULIC



## **BIOLUBE RD/RDP** BIODEGRADABLE HEAVY DUTY ROCK DRILL FLUIDS

**BIOLUBE RD/RDP** are readily biodegradable, heavy duty rock drill lubricants designed to meet the requirements of pneumatic tools, down-hole and surface drilling equipment. They are formulated with high viscosity index vegetable base oil, anti wear additives, and corrosion protection. The high viscosity index provides superior lubrication in a working hammer. BioLube RD/RDP's natural polarity and tackiness allows the lubricant to adhere to tooling surfaces, further reducing corrosion and wear in the presence of compressed air. Available in ISO grades 40, 46, 100, 150, 220 and 320.

## **BIOBLEND PPL** BIODEGRADABLE PLUNGER PACKING LUBRICANT

**BIOBLEND PPL** is a readily biodegradable lubricant for the fluid end of positive displacement reciprocating pumps, such as triplex/quintuplex pumps used in oil and gas fields. It is formulated from ultra-low toxicity renewable resources and contains no mineral oil or metallic additives, thus greatly reducing environmental impact and liability compared to traditional lubricants. BioBlend PPL is designed to reduce wear on plungers, packing, and liners. Available in ISO grades 68 and 100.

## **BIOGREASE PPG** BIODEGRADABLE PLUNGER PACKING GREASE

**BIOGREASE PPG** is specifically designed for plunger packing lubrication of triplex and quintuplex pumps. BioGrease PPG is made from a high quality vegetable oil base with a special blend of polymers to provide low temperature pumpability, excellent adhesion to the plunger, and minimize friction while providing an excellent seal in the system. Pumpability is critical in these pumps and BioGrease PPG offers excellent performance at a very wide range of temperatures. In addition, this ultra-low toxicity grease is made from bio-based, sustainable base stocks, and is readily biodegradable if released in the environment. Available in NLGI grades 00, 0, and 1.

DRILLING &







## **BIOLUBE CS-3W** BIODEGRADABLE CEMENT SHIELD

**BIOLUBE CS-3W** is a readily biodegradable, high-performance release agent formulated from natural base oils and esters. It was developed to prevent cement, concrete, grout and mortar from bonding to equipment surfaces. BioLube CS-3W forms an effective barrier shield on any surface, easing the burden of removing dried cement and similar substances from equipment. BioLube CS-3W does not react with metals, plastics, or paint finishes, making it a better choice than acid based cleaning chemicals.

## **BIOLUBE TJC** BIODEGRADABLE THREAD AND JOINT COMPOUND

**BIOLUBE TJC** is a readily biodegradable thread and joint compound for drill pipe and other threaded connections. It is formulated with high quality vegetable base oil and non-metallic solids, providing excellent protection against seizing and galling. This formula is also highly resistant to water washout and corrosion. It is easy to apply across a wide temperature range. BioLube TJC is a premium quality, non-toxic alternative to petroleum oil based thread compounds, many of which contain a high percentage of metallic solids.

“I ALONE CANNOT CHANGE THE  
WORLD, BUT I CAN CAST A STONE  
ACROSS THE WATER TO CREATE MANY  
RIPPLES.”

- MOTHER TERESA

**NO  
OIL  
FIELD  
NEEDS  
SPECIAL  
SUSPENSE**

**SULLAIR**



## **BIOGREASE HD** BIODEGRADABLE HEAVY DUTY GREASE

**BIOGREASE HD** is a readily biodegradable, minimally toxic Lithium 12-OH Stearate grease formulated to provide high film strength, withstand high operating temperatures, and maintain excellent stability. BioGrease HD features a high viscosity base oil for high load carrying capabilities. BioGrease HD also has excellent anti-wear and water washout properties. It is designed for heavy-duty use in a variety of industrial, mobile, and marine applications. Available in NLGI grades 1 and 2.



## **BIOGREASE GP** BIODEGRADABLE GENERAL PURPOSE GREASE

**BIOGREASE GP** is a general purpose grease for a variety of applications. This environmentally friendly grease is formulated from high purity vegetable oils and thickened with shear stable lithium soap. The additive package contains the latest in ashless, rust and antiwear technology in an ultra-low toxicity product. BioGrease GP utilizes an optimized blend of polymers which enable the product to function at temperatures well beyond the limits of other pure vegetable products. Available in NLGI grades OO, O, and 1.

## **BIOGREASE PPG** BIODEGRADABLE PLUNGER PACKING GREASE

**BIOGREASE PPG** is specifically designed for plunger packing lubrication of triplex and quintuplex pumps. BioGrease PPG is made from a high quality vegetable oil base with a special blend of polymers to provide low temperature pumpability, excellent adhesion to the plunger, and minimize friction while providing an excellent seal in the system. Pumpability is critical in these pumps and BioGrease PPG offers excellent performance at a very wide range of temperatures. In addition, this ultra-low toxicity grease is made from bio-based, sustainable base stocks, and is readily biodegradable if released in the environment. Available in NLGI grades OO, O, and 1.

## **BIOGREASE DR 3** BIODEGRADABLE DRILL ROD GREASE

**BIOGREASE DR 3** is the ideal environmentally friendly solution for drill rod applications. It is formulated from high purity vegetable oils and thickened with very shear stable lithium soap. The additive package contains environmentally friendly rust and anti-wear technology. This provides rust protection while the rod is in service, but also for extended periods while the rod is in storage. BioGrease DR 3 utilizes an optimized blend of polymers which enable the product to function at temperatures well beyond the limits of other vegetable based products, as well as improving water resistance, pumpability, and adhesion to the rod in service while minimizing torque.

# GREASE







## **BIOGREASE RC 1**

### BIODEGRADABLE RAIL CURVE GREASE

**BIOGREASE RC 1** is a readily biodegradable, Lithium 12-OH Stearate based rail curve lubricant designed to provide high film strength, withstand heavy load applications, and maintain excellent stability. BioGrease RC 1 features high load carrying and anti-wear characteristics along with low water washout properties. In addition, this product contains organic friction modifiers, special polymers for water resistance and adhesion, and graphite to dampen sound and improve overall performance.

## **BIOLUBE TJC**

### BIODEGRADABLE THREAD AND JOINT COMPOUND

**BIOLUBE TJC** is a readily biodegradable thread and joint compound for drill pipe and other threaded connections. It is formulated with high quality vegetable base oil and non-metallic solids, providing excellent protection against seizing and galling. This formula is also highly resistant to water washout and corrosion. It is easy to apply across a wide temperature range. BioLube TJC is a premium quality, non-toxic alternative to petroleum oil based thread compounds, many of which contain a high percentage of metallic solids.

## **SYNGREASE XT 1**

### SYNTHETIC EXTREME TEMPERATURE GREASE



**SYNGREASE XT 1** is a grease formulated to provide superior performance in the toughest conditions. SynGrease XT 1 is formulated with synthetic esters that enable the products to protect equipment at a very wide temperature range while also having limited impact on the environment. The grease provides excellent protection for equipment without using Moly to further reduce its impact on the environment and to enhance its cold weather performance. SynGreaseXT 1 has mobility at temperatures as low as -40C.

## **TRUGREASE AP 2**

### HEAVY DUTY FOOD GRADE GREASE



**TRUGREASE AP 2** is a revolutionary, heavy duty lubricating grease and is NSF registered as meeting the guidelines of an H1 product for incidental food contact, for use throughout the plant. TruGrease AP 2 is a technologically advanced product that has been developed by complexing modified overbased calcium sulfates. This technology is characterized by exceptional mechanical stability, high dropping point, high load carrying performance, reduced wear, and excellent resistance to water and corrosion. This technology equals and in many ways outperforms other premium, high temperature greases such as Lithium Complex, Aluminum Complex and Polyurea.

# GREASE

# METALWORKING



## **BIOCUT**

### BIODEGRADABLE GENERAL PURPOSE CUTTING FLUIDS

**BIOCUT** products are readily biodegradable, general purpose metal working fluids for ferrous and nonferrous metals. It can be used on a wide range of operations, including pipe threading, tapping, screw machines, and CNC machines. It is recommended where surface finish and tool life are critical. BioCut products are sulfur and chlorine free and are pleasant to work with for better operator acceptance. Available in ISO Grades 15, 22, 36 & 46.

## **BIOCUT FG 2000**

### BIODEGRADABLE FOOD GRADE METAL CUTTING FLUID



**BIOCUT FG 2000** is a readily biodegradable, food grade general purpose cutting fluid. It reduces friction, dissipates heat, and extends cutting tool life. BioCut FG 2000's structure protects tools and metal materials. BioCut FG 2000 meets the guidelines of an H1 product for incidental food contact, and is suitable for use as a general-purpose metal and thread-cutting fluid in food processing and packaging environments.

"THE ECONOMY IS A WHOLLY OWNED  
SUBSIDIARY OF THE ENVIRONMENT,  
NOT THE REVERSE."

- HERMAN E. DALY





## **BIOGEAR EP**

VGP

### BIODEGRADABLE EXTREME PRESSURE GEAR OILS

**BIOGEAR EP** is a series of readily biodegradable extreme pressure gear lubricants designed for a variety of industrial and mobile equipment applications. Each grade of BioGear EP is designed to replace standard gear oils within the AGMA grades. The BioGear EP series offers excellent thermal and oxidation stability and reduces operating temperatures to ensure superior service life with minimal gear, shaft, and bearing wear, all in a readily biodegradable, environmentally friendly formula. Available in ISO grades 68, 100, 150, 220 and 320.

## **BIOGEAR S**

VGP

### BIODEGRADABLE SYNTHETIC GEAR OILS

**BIOGEAR S** is a biodegradable industrial gear oil formulated from synthetic ester base stocks. The combination of these high quality base oils and robust additive package allows for maximum equipment protection for extended drain intervals, while simultaneously providing protection for the environment. The additional lubricity of the fluid allows for efficient operation in demanding conditions. Available in ISO grades 220, 320, 460.

## **TRUGEAR FG**

NSF

### FOOD GRADE EXTREME PRESSURE GEAR OILS

**TRUGEAR FG** food grade extreme pressure gear oils are formulated from premium white oils. They contain extreme pressure, anti wear, and anticorrosion additives to protect gears, bearings and shafts in a variety of enclosed gear systems. TruGear FG gear oils are NSF registered as meeting the guidelines of an H1 product for incidental food contact. Available in ISO grades 220, 320, 460, 680.

## **SYNGEAR FG**

NSF

### SYNTHETIC FOOD GRADE GEAR OILS

**SYNGEAR FG** food grade gear oils are formulated from pure synthetic base oils for outstanding thermal and oxidative stability. They are NSF registered as meeting the guidelines of an H1 product for incidental food contact. SynGear FG gear oils contain extreme pressure, anti-wear, and anticorrosion additives to protect gears, bearings and shafts in a variety of enclosed gear systems. They are suitable for use wherever an extended service or extreme temperature food grade gear lubricant is required. Available in ISO grades 220 and 320.

**GEAR**



## **BIOLUBE CBC**

### BIODEGRADABLE CHAINSAW BAR & CHAIN OILS

**BIOLUBE CBC** is a readily biodegradable chain saw bar and chain lubricant designed for chain saws used in forestry, landscaping and similar applications. Its excellent lubricity and temperature stability provide smooth mechanical performance and superior anti-wear protection while it's added tackiness minimizes sling loss. BioLube CBC's readily biodegradable formula protects vegetation, wildlife and the environment, and is suitable for the lubrication of chain saws and similar wood cutting equipment in all ecologically sensitive environments. Available in ISO grades 46 and 100. The 46 is preferred in colder conditions and the 100 is preferred in warmer conditions.

## **BIOLUBE CFR**

### BIODEGRADABLE CONCRETE FORM RELEASE

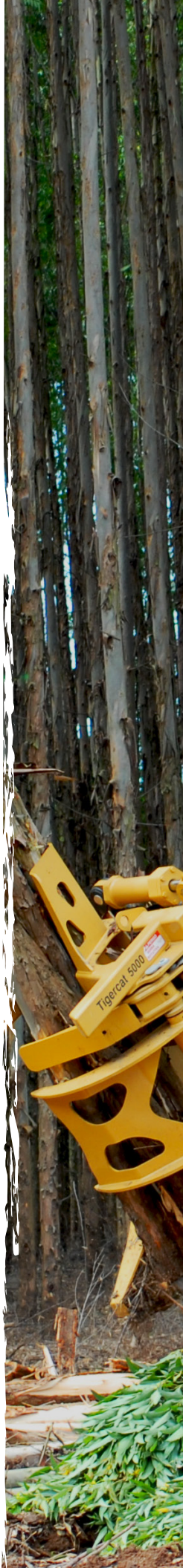
**BIOLUBE CFR** is a readily biodegradable product formulated as a concrete release agent for the concrete construction forming industry for both indoor and outdoor applications. It is designed to produce a void free concrete surface and aid in the release of the form from hardened concrete on a wide range of forming materials without creating a chemical action or causing harm to the concrete. BioLube CFR's low toxicity formula protects vegetation, wildlife, and the environment and is easy to apply with a brush, spray, or roller. Wood forms after repeated use will become water repellent and last longer. Coverage is approximately 600-1500 square feet per gallon depending on form material.

## **BIOLUBE AR**

### BIODEGRADABLE ASPHALT RELEASE

**BIOLUBE AR** is a biodegradable, vegetable oil based product formulated to act as an asphalt release oil. It is designed to produce an exceptional lubrication barrier for use on truck beds, paver boxes, pneumatic rollers, shuttle buggies, and patching machines. BioLube AR is designed to aid in the release of asphalt from many types of equipment, and does so without stripping the oils from the aggregate or causing a chemical reaction or any harm to the asphalt.

**SPECIALTY**







## **BIOLUBE AT FG**

BIODEGRADABLE FOOD GRADE AIR LINE & TOOL OIL

NSF

**BIOLUBE AT FG** is a readily biodegradable, food grade compressed air line and pneumatic equipment lubricant and is NSF registered as meeting the guidelines of an H1 product for incidental food contact. Its vegetable base oil virtually eliminates petroleum hydrocarbons and VOCs, while its anti-misting, de-gumming and lubricity additives provide maximum performance and equipment protection.

## **TRULUBE WD FG**

FOOD GRADE WIPE DOWN OIL

NSF

**TRULUBE WD FG** is a general purpose food grade wipe down oil formulated from premium white oils. It is designed to protect food processing equipment after wash downs from oxidation and corrosion. Seals metal surfaces and can be used to lubricate moving parts. It is NSF registered as meeting the guidelines of an H1 product for incidental food contact.

## **SYNLUBE CO FG**

FOOD GRADE SYNTHETIC COMPRESSOR OIL

NSF

**SYNLUBE COFG** is a food grade synthetic compressor lubricant that meets the guidelines of an H1 product for incidental food contact. It is made from high quality synthetic base oils for outstanding thermal and oxidation stability. It is fortified with a unique additive system for maximum protection against wear, rust, corrosion and foaming, reducing downtime and minimizing operating costs. SynLube CO FG is offered in a range of viscosities for use in a variety of rotary and reciprocating compressors.

## **SYNLUBE LFC 5111**

LUBE FLUSH & CLEAN COMPOUND NO. 5111

**SYNLUBE LFC 5111** Lube Flush & Clean is a blend of natural and synthetic esters combined with a unique EP additive package that provides antiwear protection while flushing and cleaning engines, transmissions, hydraulic systems, gearboxes, compressors, and other equipment. Application guideline: Add SynLube LFC 5111 as a pre-drain top-treat to existing oil at a rate of 5% of reservoir capacity; install fresh filter at time of treatment. Run system for approximately 100 hours while monitoring filter pressure differential for signs of clogging. Thoroughly drain system, replace filter, and refill with recommended BioBlend product. Product settling is normal, shake well before using.

**SPECIALTY**  
**QUALITY**  
**PERFORMANCE**  
**SPECIALTY**





## BIOBLEND ENGINE OILS

RENEWABLE AND SYNTHETIC AUTOMOTIVE ENGINE OILS

**BIOBLEND ENGINE OILS** are the first of their kind renewable & synthetic passenger car motor oils. Using a blend of renewable base oils combined with an industry leading additive package, BioBlend has formulated an engine oil that performs on par with the leading synthetic motor oils on the market. BioBlend Engine Oils fit into the existing supply chain, offering drop-in compatibility. The first renewable engine oil to achieve full American Petroleum Institute approval, API-SN Resource Conserving, ILSAC GF-5. Available in SAE grades 0W-20, 5W-20, and 5W-30.

BIOBLEND'S CHAIRMAN, JEFF HART, IS AN AVID HOCKEY PLAYER. HE ALWAYS TALKS ABOUT "SKATING TO WHERE THE PUCK IS GOING, NOT WHERE IT IS". WITH THAT IN MIND, BIOBLEND DEVELOPED A LINE OF RENEWABLE ENGINE OILS THAT COMPETE AT THE TOP OF THE GAME. BIOBLEND IS FOCUSED ON THE NEXT GENERATION OF ENGINE OILS THAT PROVIDE GREATER FUEL ECONOMY AND CONSERVE RESOURCES. WE'RE EXCITED FOR WHAT THE WORLD OF AUTOMOTIVE AND INDUSTRIAL LUBRICANTS WILL LOOK LIKE IN THE COMING DECADES.

# ENGINE OILS







### **BIOBLEND MPO**

BIODEGRADABLE AND FOOD GRADE MULTI-PURPOSE OIL

**BIOBLEND MPO** is a readily biodegradable, bio based high performance multi-purpose lubricant designed for commercial, household, and general lubrication applications. It is ideal for use on oven and conveyor chains, wire ropes, cables, slides, open mechanisms, and light duty metal cutting and tapping applications. Its excellent lubricity and temperature stability provide smooth mechanical performance and superior antiwear protection. BioBlend MPO is NSF registered as meeting the guidelines of an H1 product for incidental food contact. Available in liquid or aerosol.



### **BIOLUBE C&C-P**

BIODEGRADABLE PENETRATING CHAIN & CABLE LUBE

**BIOLUBE C&C-P** is a readily biodegradable chain and cable lubricant designed for oven and conveyor chains, wire ropes, and cables. Its excellent lubricity and temperature stability provide smooth mechanical performance and superior anti-wear protection. Available in ISO grades 32 and 46.

### **BIOLUBE WRL**

BIODEGRADABLE WIRE ROPE LUBE

**BIOLUBE WRL** is a readily biodegradable, zinc-free wire rope lube formulated from renewable basestocks. The high lubricity base oil of BioLube WRL is paired with environmentally friendly additive technologies to deliver optimum wear and corrosion protection. Available upon request are a Sheen Free formulation or a Tackified formulation to enhance metal adhesion.

### **BIOBLEND PO**

BIODEGRADABLE PENETRATING OIL

**BIOBLEND PO** is an excellent penetrating oil and general purpose lubricant that is formulated from readily biodegradable base stocks and proprietary additives. BioBlend PO has superior wetting ability and a high affinity for metal surfaces. These properties offer superior penetration to enable the loosening of frozen, rusted or stuck components. The environmentally friendly solvents used are excellent for dissolving dirt, grease and removing debris, while leaving a light lubricating film which helps control corrosion. As with any solvent-type product, care should be taken when using around certain plastics, foam rubbers, urethanes, and painted surfaces as they can be incompatible. Available in liquid or aerosol.

**MPO / C&C-P / WRL / C&C-P / MPO**

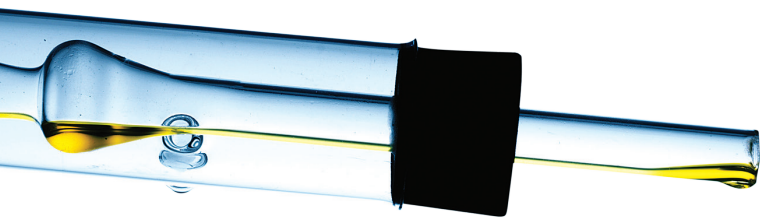
## ADDITIONAL SERVICES

BioBlend and its distributors will assist you in converting your equipment with biodegradable fluids. A conversion to BioBlend will allow you to meet the most stringent environmental requirements while ensuring performance under severe weather conditions.

## LUBRICANT ANALYSIS

BioBlend provides critical support to your preventive maintenance program by providing sampling, testing, and analysis of lubricants in a systematic way. This approach is an efficient way to manage your operations. These services may include:

- 1 Monitoring for incipient lubricant oxidation and breakdown
- 2 Particle count
- 3 Wear-metal analysis for lubricant and equipment optimization
- 4 Performance alerts before critical breakdown occurs
- 5 Data analysis and preventive recommendations from BioBlend technicians
- 6 Environmental compliance certification



# SERVICES AND ANALYSIS





# A CERTIFICATE of COMPLIANCE

Upon request, we will provide a certificate of compliance for each piece of equipment that uses our lab facility for certification and that follows our conversion procedures.



**ATTESTATION | CERTIFICATE**

**ATTESTATION DE CONFORMITÉ BIO-ENVIRONNEMENTALE** / **CERTIFICATE OF BIENVIRONNEMENTAL CONFORMITY**

**BIOBLEND**

LE PRÉSENT CERTIFICAT atteste qu'un échantillon de lubrifiant tiré de l'appareil susmentionné, bien que propriétaire ou par son agent, a été soumis à un test de conformité à la directive d'essai biologique relatif à des échantillons de biodégradabilité relative à des échantillons de 95 %, et sa conformité à la norme écologique d'innocuité bio-environnementale.

THIS CERTIFIES that a sample of lubricant drawn from the equipment identified below, by its owner or its agent, has been subjected to a control test pursuant to OECD testing guideline 301 B, and that the level of biodegradable lubricant tested at more than 95%, which satisfies the ecological norm of bio-environmental safety.

Le maintien de la validité de ce certificat est conditionné à ce qu'aucun lubrifiant autre que celui ci-dessus désigné ne soit utilisé dans l'appareil désigné et que des échantillons additionnels de lubrifiant soient prélevés et soumis pour analyse à chaque 500 heures d'utilisation de l'appareil.

To remain valid, this certificate requires that no lubricant other than that indicated below be used in the described equipment and that a further lubricant sample be collected and submitted for test after each 500 hours of runtime of the equipment.

**CERTIFICAT N° PM121550 DATÉ DU 20 décembre 20 12**  
 Propriétaire de l'appareil/Equipment Owner : P.A. Thériault Ltée

**IDENTIFICATION DE L'APPAREIL / EQUIPMENT IDENTIFICATION**  
 Marque/Brand : Caterpillar / Numéro d'identification / Identification No. :  
 Type d'appareil/type of equipment : Système hydraulique excavatrice  
 Modèle/Model : 360DL / Année 2010 / Unité : 186-003  
 Numéro de série/Serial number : W9K004572-003

**IDENTIFICATION DU LUBRIFIANT / LUBRICANT IDENTIFICATION**  
 Lubrifiant/Lubricant : BioFlo Synthétique S46 (BioBlend)  
 Date du prélèvement des échantillons/Sampling date : 20/12/2012  
 Numéro d'identification des échantillons/Sample ID number : 121550CE1

Robert P.M.  
 par/by Robert

LABORATOIRE DE CERTIFICATION LAURENTIEN / LAURENTIAN CERTIFICATION LABORATORY

Cherivier Lubrifiants inc. 2320, rue de la Métropole  
 Longueuil (QC) Canada J4G 1E6 | 1.800.363.0100

**BioFlo AWS 46 SF**

**Biodegradable Synthetic SF Anti-Wear Hydraulic Oil**

Product Code: 912101460F  
 Container: 60RM  
 Net Weight/Net: 55 GAL / 208 L  
 Batch Number: 1.56811

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 A COMPLETE FAMILY OF HIGH PERFORMANCE LUBRICANTS



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