











ECO-FRIENDLY LUBRICANTS WITH

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ZF SERIES HYDRAULIC OILS

MARINE SAFE SERIES HYDRAULIC OILS

BIO-BASED SERIES HYDRAULIC OILS

UTF-BIOBASED/GREEN TRACTOR FLUID

BIODEGRADABLE PENETRATING OIL

BIO-SYNXTREME HF SERIES HYDRAULIC FLUIDS

SYNXTREME AC SERIES COMPRESSOR FLUIDS

SYNCOOL & SYNCOOL FG COMPRESSOR FLUIDS

PGO SERIES GEAR OILS

BIOBASED EP-2 GREASE













Complimentary Extra Services Package

Equipment Surveys / Tech Support / Training Color Coded Lube Charts & Machine Tags Lubrication Software / Follow-Up Oil Analysis

Lubriplate® Environmentally Responsible Lubricants



Lubriplate's environmentally responsible lubricants have been formulated to help reduce their impact on our environment without sacrificing lubricant performance. Their use can also help our customers comply with the ever increasing environmental regulations for equipment operating in environmentally sensitive areas. This chart lists some of the industry's standards and terms used for environmentally responsible lubricants.

Terminology	Test Method	Requirements / Results
Ultimate Biodegradation (Pw1)	ASTM D-5864	Min 60% converted to CO2 in 28 days or less
Readily Biodegradable (Pw1)	OECD 301B	Min 60% converted to CO2 in 28 days or less
Inherently Biodegradable (Pw2) (Pw3) (Pw4)	ASTM D-5864 OECD 301B	Min. 60% (Pw2), 40% (Pw3), 20-39% (Pw4) converted to CO2 in 84 days
Non/Low Acute Toxicity LC50	US EPA LC50	Pass

■ ECO-Responsible, Petroleum/Mineral Oil-Based Hydraulic Oils

ZF Series Hydraulic Fluids: Heavy-Duty, Zinc-Free, Extended Life, Hydraulic Fluids.

These heavy-duty, high performance fluids were designed to perform in the most demanding hydraulic applications. They can withstand elevated temperatures and high pressures over extended periods thus providing long service life and extended fluid change intervals. They meet the service requirements of Vickers (Eaton) M-2950-S, I-286-S, General Motors LS-2, Bosch Rexroth RE 90 220, Denison HF-0, HF-1, HF-2 and Cincinnati Milacron P-68, P-69 and P-70. Lubriplate ZF Series Hydraulic Fluids are free of zinc or silicone compounds.

Marine-Safe Hydraulic Oils: Non-Toxic to Aquatic Life (LC50).

Formulated a zinc free anti-wear additive package, these high-performance hydraulic fluids meet or exceed the performance requirements of most types of hydraulic equipment while providing an additional level of environmental safety. Lubriplate Marine-Safe Hydraulic Oils are non-toxic to aquatic life, exceeding U.S. EPA LC50 and U.S. Fish and Wildlife requirements. They meet the service requirements of Vickers, Racine, Denison HF-0, HF-2 and Cincinnati Milacron P-68, P-69 and P-70.

LUBRIPLATE PRODUCT	*PRODUCT PART NO.	ISO GRADE	AGMA NO.	SAE GEAR OIL NO.	SAE NO.	VISCOSITY cSt @40°C / 100°C	VISCOSITY INDEX	FLASH POINT	FIRE POINT	POUR POINT
ZF 32	L0948-	32	-	-	10	35 / 5	129	440°F / 227°C	480°F / 249°C	-40°F / -40°C
ZF 46	L0949-	46	1	75W	20	46 / 6	117	470°F / 243°C	510°F / 266°C	-35°F / -37°C
ZF 68	L0950-	68	2	80W	20	70/8	106	475°F / 246°C	510°F / 266°C	-20°F / -29°C
ZF 100	L0953-	100	3	80W	30	101 / 11	97	475°F / 246°C	545°F / 285°C	-10°F / -23°C
*ZF Series Fluids are av	ailable in 5 Gallon Pa	ails (Package Pt. N	o. Suffix -060) ar	nd 55 Gallon Drums	(Package Pt.	No. Suffix -062).				
Marine-Safe 32	L0822-	32	-	-	10	33/6	110	395°F / 202°C	455°F / 235°C	-45°F / -43°C
Marine-Safe 46	L0823-	46	1	75W	20	44 / 7	108	425°F / 218°C	470°F / 243°C	-35°F / -37°C
Marine-Safe 68	L0824-	68	2	80W	20	68/9	104	445°F / 229°C	520°F / 271°C	-20°F / -29°C

■ ECO-Responsible, Bio-Based Fluid Lubricants



Bio-Based Series Hydraulic Oils: Ultimately Biodegradable (Pw1), Vegetable-Based Oils.

For use in hydraulic systems where biodegradability properties are required. A zinc-free additive system delivers exceptional anti-wear, anti-rust, anti-foam and demulsibility properties. They meet ASTM D-5864 (Pw1).

UTF-Bio-Based/Green: Ultimately Biodegradable (Pw1), Vegetable-Based, Universal Tractor Fluid.

An ultimately biodegradable (Pw1), vegetable-based fluid, designed for use in agricultural, construction/industrial equipment where UTF type fluids are required. Meets the requirements of API GL-4 and most OEMs including: John Deere's Hygard, J20-C, J14A, Quantrol™ J20D, Allison C-3 and C-4, Cat TO-2, Case, Ford, Massey-Ferguson White Farm, Kubota, Steiger and others.

LUBRIPLATE PRODUCT	*PRODUCT PART NO.	ISO GRADE	AGMA NO.	SAE GEAR OIL NO.	SAE NO.	VISCOSITY cSt @40°C / 100°C	VISCOSITY INDEX	FLASH POINT	FIRE POINT	POUR POINT
BIO-BASED 32	L1050-	32	-	-	10	31 / 7	184	457°F / 236°C	500°F / 260°C	-40°F / -40°C
BIO-BASED 46	L1051-	46	1	75W	20	44 / 10	199	469°F / 243°C	514°F / 268°C	-22°F / -30°C
BIO-BASED 68	L1052-	68	2	80W	20	64 / 13	198	484°F / 251°C	525°F / 274°C	-31°F / -35°C
*BIO-Based Series Hydraulic Oils are available in 5 Gallon Pails (Package Pt. No. Suffix -060), 55 Gallon Drums (Package Pt. No. Suffix -062) and Spacekraft Bins (Package Pt. No. Suffix -070).										
UTF-BIO-BASED/GREEN	l L1072-	46	1	75W	20	48 / 10	210	484°F / 251°C	-	-38°F / -39°C
*LITE-Rio-Rased/Green is	available in 5 Galle	on Pails (Package F	Pt No Suffix -06	0) and 55 Gallon Dr	ume (Package	Pt No Suffix -062)				

Biodegradable Penetrating Oil Multi-Purpose Lubricating Fluid:

ECO-Friendly, Biodegradable, Vegetable-Based, Multi-Purpose Spray Lubricant.



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An environmentally friendly, biodegradable, bio-based, lubricating oil for general lubrication of hinges, locks, latches, slides, chains, cables or anywhere metal contacts metal. Ideal for cars, boats, bicycles, garden equipment, guns, tools, office equipment, garage doors, farm equipment and golf courses. Provides a long lasting protective film that prevents friction, wear, rust and corrosion. Excellent moisture displacement properties. Available in 11 OZ. / 312 g. spray can, Part No. L0721-063.

ECO-Responsible, Synthetic Fluid Lubricants



BIO-SYNXTREME HF Series: Polyalkylene Glycol (PAG)-Based, Biodegradable (Pw1), Synthetic Hydraulic Fluids.

These high performance, zinc-free hydraulic fluids are designed for demanding industrial and marine (Vessel General Permit) applications requiring environmental sensitivity, fire resistance, and excellent anti-wear properties over wide temperature ranges. They are Polyalkylene Glycol (PAG) based fluids, that are anhydrous (water-free). LUBRIPLATE BIO-SYNXTREME Hydraulic Fluids do not break down to form sludge and they do not hydrolyze in the presence of water. Non-Sheening – Does not cause a sheen or discoloration on the surface of the water or adjoining shorelines. "Practically Non-Toxic" to fish and other aquatic wildlife according to the U.S. Fish and Wildlife Service hazard classification. They meet U.S. EPA Vessel General Permit (VGP) Requirements. Not compatible with hydrocarbon-based hydraulic fluids. As with any fluid conversion, recognized industry procedures including system cleanup and flushing should be followed.

SYNXTREME AC Series: Polyolester (POE)-Based, 100% Synthetic Compressor Fluids.

These state-of-the-art fluids are designed for maximum performance in rotary screw and vane type air compressors. Special advanced POE base esters combined with a multi-charged additive system produce unmatched oxidative stability, enhanced hydrolytic stability and excellent wear and corrosion protection. Potential for fluid drain intervals of +10,000 hours.

SYNCOOL & SYNCOOL FG (H1 Food Grade): Biodegradable, Polyglycolester (PGE)-Based Compressor Fluids.

These high-performance, biodegradable, polyglycol/ester (PGE)-based, synthetic air compressor fluids were developed to meet the needs of most rotary screw and rotary vane air compressors where high operating temperatures are present and environmental issues are a concern. They are readily biodegradable (Meets OECD criteria) >70% biodegradation (Pw1). Excellent thermal and oxidation stability helps eliminate harmful deposits and extend drain intervals. SYNCOOL FG is NSF H1 Registered and NSF/ISO 21469 Certified Food Machinery Grade.

PGO Series: ECO-Responsible, Polyalkylene Glycol (PAG)-Based, Synthetic Gear Oils.

These 100% polyalkylene glycol (PAG) fluids are designed for gearboxes, bearings and chains operating in the most demanding conditions. They provide outstanding thermal stability, excellent extreme pressure and anti-wear performance and protection against micropitting. They exceed 13 stages of the FZG test. Lubriplate PGO Fluids are free of zinc and other additives that may be undesirable in environmentally sensitive areas. They offer long service life and work well over extended fluid change intervals which conserves resources. Inherently biodegradable (ASTM D-5864/OECD 301B).

LUBRIPLATE PRODUCT	*PRODUCT PART NO.	ISO GRADE	AGMA NO.	SAE GEAR OIL NO.	SAE NO.	VISCOSITY cSt @40°C / 100°C	VISCOSITY INDEX	FLASH POINT	FIRE POINT	POUR POINT
BIO-SYNXTREME HF-32	L1020	32	-	-	10	35.4 / 8	194	520°F / 271°C	579°F / 304°C	-74°F / -59°C
BIO-SYNXTREME HF-46	L1021-	46	1	75W	20	46 / 9.8	200	594°F / 312°C	600°F/316°C	-60°F / -51°C
BIO-SYNXTREME HF-68	L1022-	68	2	80W	20	68 / 13.7	209	550°F / 288°C	612°F / 322°C	-60°F / -51°C
*BIO-SYNXTREME HF Series	Fluids are available	e in 5 Gallon Pail	s (Package Pt. N	lo. Suffix -060) and	l 55 Gallon D	rums (Package Pt. No.	Suffix -062).			
SYNXTREME AC 32	L0939-	32	-	-	10	32/6	125	525°F / 274°C	-	-51°F / -46°C
SYNXTREME AC 46	L0940-	46	-	-	20	46 / 7	117	527°F / 275°C	-	-40°F / -40°C
SYNXTREME AC 68	L0941-	68	-	-	20	66 / 9	103	530°F / 277°C	-	-20°F / -29°C
*SynXtreme AC Series Fluids	are available in 5	Gallon Pails (Pac	kage Pt. No. Su	ffix -060) and 55 G	allon Drums	(Package Pt. No. Suffix	k -062).			
SYNCOOL	L0964-	32/46	-	-	10	41 / 8	172	530°F / 277°C	595°F / 313°C	-40°F / -40°C
SYNCOOL FG	L0963-	46	-	-	20	41 / 10	178	530°F / 277°C	595°F / 313°C	-45°F / -43°C
*SYNCOOL & SYNCOOL FG F	luids are available	in 5 Gallon Pails	(Package Pt. N	o. Suffix -060) and	55 Gallon Dr	ums (Package Pt. No. S	Suffix -062).			
PGO-150	L0845-	150	4	90	40	150 / 25	232	>536°F/>280°C	-	-53°F / -47°C
PGO-220	L0838-	220	5	90	50	227 / 42	242	>536°F/>280°C	-	-44°F / -42°C
PGO-320	L0840-	320	6	140	60	334 / 59	247	>536°F/>280°C	-	-31°F / -35°C
PGO-460	L0839-	460	7	140	-	477 / 83	262	>536°F/>280°C	-	-33°F / -36°C
PGO-680	L0846-	680	8	250	-	725 / 122	272	>536°F/>280°C	-	-27°F / -33°C
*PGO Series Fluids are availa	ble in 1 Gallon Jug	gs (Package Pt. N	o. Suffix -057),	5 Gallon Pails (Pac	kage Pt. No. S	Suffix -060) and 55 Gal	llon Drums (Pack	age Pt. No. Suffix -062).		

■ ECO-Responsible Grease



VGP COMPLIANCE STATEMENT

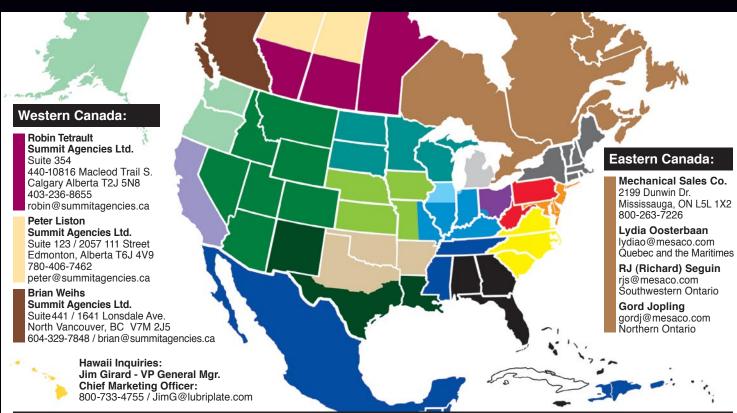
LUBRIPLATE BIOBASED EP-2 GREASE is an Environmentally Acceptable Lubricant (EAL) according to the definitions and requirements of the US EPA 2013 Vessel General Permit, as described in VGP Section 2.2.9

BIOBASED EP-2 Grease: Ultimately Biodegradable (Pw1), Environmentally Acceptable, Bio-based Grease.

An Environmentally Acceptable Lubricant (EAL). Meets U.S. EPA Vessel General Permit (VGP) Requirements. Passes U.S. EPA Static Sheen Test (1617). Passes U.S. EPA Acute Toxicity Test (LC 50). Ultimately Biodegradable (Pw1). Excellent for slow to medium speed bearings, Articulated Tug Barges (ATB) notch interface, rudder shafts, wire rope, above deck equipment, port equipment, cranes, barges, oil platforms, water treatment and hydroelectric facilities. Excellent extreme pressure/anti-wear properties. Highly resistant to fresh and salt water.

LUBRIPLATE PRODUCT	*PRODUCT PART NO.	GREASE TYPE THICKENER	NLGI GRADE	BASE OIL TYPE	BASE OIL VIS. cSt @ 40°C	RECOMMENDED T MINIMUM	EMPERATURE RANGE MAXIMUM	ASTM DROP POINT			
BIOBASED EP-2	L0341-	Lithium 12 Hydroxy Stearate	2	Vegetable Oil	100	15°F / -9°C	285°F / 196°C	385°F / 196°C			
*BIOBASED EP-2 Grease	*BIORASED EP-2 Grease is available in Cartridges (Package Pt. No. Suffix -098) and 120 lb Lined 1/4 Drums (Package Pt. No. Suffix -039)										

District Managers and Specialists



Western Region:

District Managers:

Douglas J. Smith 1705 NW Viewmont Ct Silverdale, WA 98383 360-488-3382 dsmith@lubriplate.com

Dan O'Brien

1359 East Skyview Drive Salt Lake City, UT 84124 801-550-0383 dobrien@lubriplate.com

Francis Gondouin 32 San Marino Drive San Rafael, CA 94901 415-279-0609 fgondouin@lubriplate.com

Mike Wrocklage 25210 Butterwick Drive Spring, TX 77389 713-725-1294 mwrocklage@lubriplate.com

Central Region:

District Managers:

Chris Qualizza W197 N17141 Stonewall Dr. Jackson, WI 53037 262-339-3659 cqualizza@lubriplate.com

Brian Joens 34 East Fulton Drive

Des Moines, IA 50315 bjoens@lubriplate.com 515-320-1012

Don Wrocklage 2330 Winegarden Court

Ballwin, MO 63011 314-614-7488 636-458-7549 (Fax) dwrocklage@lubriplate.com

Roger Thostenson 1329 Auburn Place Plano, TX 75093 972-998-0344/972-403-3801(Fax) rthostenson@lubriplate.com

Chris Franzoni

21653 Kendyl Court Macomb. MI 48044 586-530-6922 cfranzoni@lubriplate.com

Scott Besedick

1219 Elliston Court Crown Point, IN 46307 219-689-2365 sbesedick@lubriplate.com

Kim Henricks 414 Winter Street

Elmore, OH 43416 419-261-2080 khenricks@lubriplate.com

Nick Guerrero 973-934-1929 nguerrero@lubriplate.com Covered Areas: TN, MS, PR, Central & South America

Eastern Region: District Managers:

Michael Barto

531 Allegiance Drive Lititz. PA 17543 717-475-6694 717-568-8294 (Fax) mbarto@lubriplate.com

David Reh 142 Andrew Street

Hamilton, NJ 08610 973-722-6098 dreh@lubriplate.com

Robert A. Reh Jr. 5312 Meadow Chase Rd. Midlothian, VA 23112 864-270-8558 rrehjr@lubriplate.com

Jim Zappulla

176 Tobacco Street Lebanon, CT 06249 860-303-1148 jzappulla@lubriplate.com

Lee Myers

PMB 290 / 3948 S. Third St. Jacksonville Bch., FL 32250 973-722-6520 Imyers@lubriplate.com

Global Mining Specialist:

Bernie Meeks

(505) 320-1123 / bmeeks@lubriplate.com

Specialists:

Vice President & Gen Mgr. International Inquiries: **Chief Marketing Officer:** Jim Girard - 800-733-4755 JimG@lubriplate.com

Sales & Technical Assistant to Chief Marketing Officer: Vera Tehayel - 973-589-9150 VeraT@lubriplate.com

Assistant Vice President **Domestic Sales & Service** Inquiries:

Tim Cusack - 800-733-4755 TimC@lubriplate.com

Domestic Sales Director Toledo:

Mike Kontak - 419-691-2491 MikeK@lubriplate.com

Vice President, Sales: Steve Morrow -

Office: 973-589-9150 Cell: 973-722-6516 SMorrow@lubriplate.com

Quality Manager: Jacki Dusza -419-691-2491 JackiD@lubriplate.com

Vice President - Toledo Operation and Corporate Director of Technology: Sib Hamid - 419-691-2491 SHamid@lubriplate.com

National Accounts Rep: Don Wrocklage -314-614-7488

dwrocklage@lubriplate.com

OEM Marketing Analyst and Government Agency Liaison: Ellen Girard -908-489-7355 EGirard@lubriplate.com

Director of Field Engineering & Training Services: David Reh - 973-722-6098 dreh@lubriplate.com

Lubriplate Lubricants Company





