



## Advanced Lubricants For All Industries

- Full Range Synthetic Fluids and Greases
- Multi-Purpose Gear, Bearing, Chain and Recirculating Fluids and Oils
- Compressor Fluids and Oils
- Hydraulic Fluids and Oils
- Specialty Lubricants
- Multi-Purpose Greases
- Environmentally Responsible Lubricants
- NSF H1 Registered Food Machinery Lubricants
- Spray Lubricants
- Metalworking Fluids
- Automotive Lubricants Motor Oils
- Perma Automatic Lubricators



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This catalog is available in the following languages:  
Chinese, Danish, English, French, German, Polish, Portuguese, Spanish and Swedish.



### **Lubriplate Lubricants Company**

Corporate Headquarters: 129 Lockwood Street / Newark, NJ 07105  
Tel: 800-733-4755 / Fax 973-589-4432 / Fax 800-347-5329

Midwest Office & Plant: 1500 Oakdale Ave. / Toledo, OH 43605  
Tel: 419-691-2491 / Fax 419-693-3806 / Fax 800-347-5348

www.lubriplate.com / Email: LubeXpert@lubriplate.com



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## ■ Introduction

To: Our LUBRIPLATE Distributors and Consumers

Ladies and Gentlemen:

For 150 years, our company has strived to manufacture and deliver only the finest lubricant products possible. Our dedication to customer-driven manufacturing, coupled with the support of experienced technical and sales teams, provides the ability to deliver on that promise. Our company's ISO-9001 registered Quality Management System and its ISO 21469 certification – both of which ensure a maximum commitment to the formulation, manufacture, packaging, distribution and storage of NSF H1 registered food grade lubricants – reinforce our promise to deliver lubricants exhibiting only the highest quality and performance.

We thank you for your interest in our products and look forward to earning and maintaining your trust.

Sincerely,



Richard T. McCluskey, Jr.  
President and CEO  
E-mail: [rmccluskey@lubriplate.com](mailto:rmccluskey@lubriplate.com)



## ■ Complimentary Value Added Services Offered



### Technical Support Hotline and E-mail

Call our technical service center toll free at 800-347-5343 or 800-733-4755 for answers to your lubrication questions by phone, or e-mail your questions to [LubeXpert@lubriplate.com](mailto:LubeXpert@lubriplate.com) or contact your nearest Lubriplate district manager (see back cover for listing) or your local distributor representative for complete technical support.



### Complete Plant Surveys and Lubricant Inventory Consolidation

Complete plant surveys by our professional staff of lubrication engineers are also available to determine your exact lubricant requirements and identify opportunities for lubricant inventory consolidation.



### Customized, Color Coded, Lubricant Specification, Machinery Tags

Customized with your company logo, these color coded machinery tags help prevent lubricant misapplication and ensure that the proper lubricant is used when servicing a particular piece of equipment. Based on a complete plant survey, tags can be provided for each piece of equipment in your plant.



### Lubrication Maintenance Software

Lubriplate offers a PC based computer software program that puts your entire lubrication and maintenance schedules at your fingertips. This service is based on a complete survey of your entire plant. Contact Dan Moroses (Newark office) for details at 973-589-9150.



### No-Charge Oil / Fluid and Grease Analysis

Our Oil/Fluid and Grease Analysis Program that is offered at no-charge on all Lubriplate products. Tests that are performed include: Viscosity, Acidity, Contamination (% sediment and % moisture,) Spectrochemical (PPM of wear metals and additives) ISO Cleanliness (optional). An interpretation of the results is included along with suggested actions to take.



### In Plant User Lubrication Training and Distributor Training

We offer training programs tailored to fit your needs. These educational training sessions focus on all facets of machinery lubrication and are not a sales presentation. Seminars are graphically presented with PowerPoint presentations, and other support material. Available on-site at your facility or in a local conference room. Contact us at 800-733-4755 for more information. Our Online Training Program is available at: <http://www.lubriplate.com/Training-Videos/Lubrication-BasicTraining.aspx>

## Synthetic, Gear, Bearing, Chain & Recirculating Fluids

### Syn Lube 150 - 1000: Polyalphaolefin (PAO)-Based, 100% Synthetic Multi-Purpose Fluids.

These multi-purpose polyalphaolefin (PAO) based, zinc-free fluids are formulated with state-of-the-art additives. These fluids provide outstanding performance over extended drain intervals. They are recommended for gearboxes, bearings, chains and recirculating systems.

### Syn Lube HD Series: Heavy-Duty, Extreme Pressure, Polyalphaolefin (PAO)-Based, 100% Synthetic Fluids.

These heavy-duty, zinc free, extreme pressure, 100% synthetic based, fluid lubricants are designed for applications where an extreme pressure synthetic fluid is required. They deliver outstanding extreme pressure protection, excellent anti-wear properties and very low coefficients of friction, resulting in lower operating temperatures, reduced power consumption and longer equipment life. Excellent thermal stability and oxidation resistance increases service life, providing extended drain intervals. Compatible with a broad range of seals. Syn Lube HD 220 and 460 pass 12 stages of the FZG Test.

### Syn Lube XHD 3200: Extra Heavy-Duty, Polyalphaolefin (PAO)-Based, Synthetic Girth Gear Lubricant.

This extra heavy-duty, ISO 3200 viscosity grade lubricant is recommended for use on large heavy-duty girth gears commonly found in rotary kilns and for applications where an extra heavy-duty ISO 3200 viscosity grade lubricant is required.

### Synthetic Worm Gear Lubricant: Polyalphaolefin (PAO)-Based, 100% Synthetic Fluid Lubricant.

This high performance, ISO 460 grade, synthetic gear lubricant is recommended for all types of worm gear reducers. Formulated with advanced additives, this 100% synthetic-based fluid provides outstanding anti-wear and anti-friction properties ideal for the high sliding action of worm gears. It works well over a wide range of temperature extremes. It is compatible with a broad range of seal materials. Excellent oxidation resistance insures long service life. Passes 12 stages of FZG Test.

### PGO Series: ECO-Responsible, Polyalkylene Glycol (PAG)-Based, Synthetic Gear, Bearing and Chain Lubricants.

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 and helps ease waste oil disposal problems.

LUBRIPLATE PRODUCT	*PRODUCT PART NO.	ISO GRADE	AGMA NO.	SAE GEAR OIL NO.	VISCOSITY cSt @40°C / 100°C	VISCOSITY SUS @100°F / 210°F	VISCOSITY INDEX	FLASH POINT	FIRE POINT	POUR POINT
<b>SYN LUBE 150</b>	L0974-	150	4	80W-90	151 / 20	762 / 97	156	510°F / 266°C	555°F / 291°C	-60°F / -51°C
<b>SYN LUBE 220</b>	L0975-	220	5	90	216 / 26	1088 / 128	155	510°F / 266°C	555°F / 291°C	-50°F / -46°C
<b>SYN LUBE 320</b>	L0976-	320	6	80W-140	311 / 34	1557 / 161	155	505°F / 263°C	550°F / 288°C	-50°F / -46°C
<b>SYN LUBE 460</b>	L0977-	460	7	140	446 / 45	2143 / 211	156	505°F / 263°C	550°F / 288°C	-45°F / -43°C
<b>SYN LUBE 680</b>	L0978-	680	8	-	623 / 57	3289 / 275	157	500°F / 260°C	545°F / 285°C	-45°F / -43°C
<b>SYN LUBE 1000</b>	L0979-	1000	8A	-	950 / 77	4900 / 372	157	500°F / 260°C	545°F / 285°C	-35°F / -37°C
*Syn Lube 150 through 1000 is available in Jugs, Pails, 1/4 Drums & Drums. See page 26 more information and the package part number suffix.										
<b>SYN LUBE HD 150</b>	L1000-	150	4 EP	80W-90	162 / 21	816 / -	154	540°F / 282°C	590°F / 310°C	-60°F / -51°C
<b>SYN LUBE HD 220</b>	L1001-	220	5 EP	90	199 / 25	988 / -	154	540°F / 282°C	580°F / 304°C	-55°F / -48°C
<b>SYN LUBE HD 320</b>	L1002-	320	6 EP	80W-140	310 / 35	1545 / -	157	540°F / 282°C	585°F / 307°C	-50°F / -46°C
<b>SYN LUBE HD 460</b>	L1003-	460	7 EP	140	440 / 47	2191 / -	164	550°F / 288°C	585°F / 307°C	-50°F / -46°C
<b>SYN LUBE HD 680</b>	L1004-	680	8 EP	-	705 / 68	3384 / -	170	555°F / 291°C	580°F / 304°C	-45°F / -43°C
*Syn Lube HD Series Lubricants are available in Jugs, Pails, 1/4 Drums & Drums. See page 26 more information and the package part number suffix.										
<b>SYN LUBE XHD 3200</b>	L1006-	3200	-	-	3071 / 153	-	145	495°F / 257°C	580°F / 304°C	20°F / -7°C
*SYN LUBE XHD 3200 is available in 55 Gallon Drums. See page 26 for package part number suffix.										
<b>Syn Worm Gear</b>	L0981-	460	7	140	440 / 47	2191 / -	164	550°F / 288°C	585°F / 307°C	-50°F / -46°C
*Synthetic Worm Gear Lubricant is available in Bottles, Jugs, Pails, 1/4 Drums & Drums. See page 26 more information and the package part number suffix.										
<b>PGO-150</b>	L0845-	150	4	90	150 / 25	-	232	>536°F / >280°C	-	-53°F / -47°C
<b>PGO-220</b>	L0838-	220	5	90	227 / 42	-	242	>536°F / >280°C	-	-44°F / -42°C
<b>PGO-320</b>	L0840-	320	6	140	334 / 59	-	247	>536°F / >280°C	-	-31°F / -35°C
<b>PGO-460</b>	L0839-	460	7	140	477 / 83	-	262	>536°F / >280°C	-	-33°F / -36°C
<b>PGO-680</b>	L0846-	680	8	250	725 / 122	-	272	>536°F / >280°C	-	-27°F / -33°C
*PGO Series Fluids are available in Jugs, Pails and Drums. See page 26 for more information and package part number suffix.										

## Synthetic High Temperature Oven Chain and Gearbox Lubricants

### Synthetic High Temp Fluids 68 and 220: 100% Ester-Based, Oven Chain and Gearbox Fluid Lubricants.

These 100% ester based synthetic lubricants are recommended for use on bakery oven chains, drying oven chains, tenter frame chains, heat treating chains, paint curing oven chains and any other type of bearing/slide/gearbox applications where they are exposed to high operating temperatures and must maintain a clean lubricated surface. Available in ISO viscosity grades 68 and 220. Proven successful in applications in excess of 600°F / 316°C.

LUBRIPLATE PRODUCT	*PRODUCT PART NO.	ISO GRADE	AGMA NO.	SAE GEAR OIL NO.	VISCOSITY cSt @40°C / 100°C	VISCOSITY SUS @100°F / 210°F	VISCOSITY INDEX	FLASH POINT	FIRE POINT	POUR POINT
<b>SYN High Temp 68</b>	L0778-	68	2	80W	74 / 11	364 / 58	109	554°F / 290°C	640°F / 338°C	-25°F / -32°C
<b>SYN High Temp 220</b>	L0780-	220	5	90	220 / 19	1112 / 102	92	525°F / 274°C	580°F / 304°C	-5°F / -21°C
*SYN High Temp 68 & 220 is available in Pails & Drums. See page 26 more information and the package part number suffix.										

# Petroleum-Based, Gear, Bearing & Recirculating Oils

## SPO Series: Extra-Duty Anti-Wear, Rust & Oxidation Inhibited (R&O) Gear and Bearing Oils.

Designed for industrial applications such as gear cases, bearings, chains, machine ways, and general oiling. These tacky lubricants provide anti-wear lubrication for high sliding action in worm gears. They are also excellent for bevel, helical, and spur gears. SPO oils can be used with silver alloy, copper, and copper alloy bearings. Excellent for use in high moisture and high temperature applications. Provides performance comparable to synthetic lubricants. SPO-MG is a semi-synthetic lubricant formulated with a unique blend of synthetic hydrocarbon and mineral oil base stocks. This base stock combination results in exceptional thermal and oxidation stability, extended drain intervals and improved performance.

## APG Series: Heavy-Duty, Extreme Pressure (EP) Petroleum-Based Gear Oils.

These heavy-duty, extreme pressure oils were developed to meet gear oil needs of most automotive, truck, heavy equipment and industrial gearboxes requiring an extreme pressure type oil. Meets military specification MIL-PRF-2105E and MIL-L-2105D and API categories GL-3, GL-4, GL-5, MT-1.

## Kling Gear Oils: Heavy-Duty, Tacky, Red, Extreme Pressure (EP) Petroleum-Based Gear Oils.

These heavy-duty, adhesive, extreme pressure oils cling tenaciously to gear teeth. Formulated for heavy service, these oils minimize wear and prolong the life of gears in automotive, truck, heavy equipment and industrial applications. Fortified with an additive system to accommodate extreme pressure and posi-traction applications. This series meets military specification MIL-PRF-2105E and conform to API classification GL-5.

## CP-8A: Compounded (CP) Petroleum-Based Gear Oil.

Compounded with acidless tallow to meet AGMA 8ACP specification. Recommended for cone drives and double enveloping worm gears.

## HO-3, HO-4, HO-5 & HO-6: High-Performance, Heavy-Duty, Multi-Functional Lubricating Oils.

These multi-functional oils are recommended for gear cases, bearings, central lubricating oil systems, air compressors, hydraulic systems and chains. Contains fluid zinc anti-wear additive. High aniline points for controlled seal-swelling characteristics. Excellent foam suppression properties.

## Machine Tool Oils - No. 0 thru No. 8: Petroleum-Based Machine Oils.

Compounded to impart a unique load carrying film, exceptional lubricity, and anti-friction properties not found in conventional oils of the same viscosity.

LUBRIPLATE PRODUCT	*PRODUCT PART NO.	ISO GRADE	AGMA NO.	SAE GEAR OIL NO.	VISCOSITY cSt @40° C / 100° F	VISCOSITY SUS @100° F / 210° F	VISCOSITY INDEX	FLASH POINT	FIRE POINT	POUR POINT
SPO-222	L0242-	68	2	80W	63 / 9	317 / 55	109	415°F / 213°C	465°F / 241°C	-30°F / -34°C
SPO-233	L0243-	100	3	80W	91 / 11	464 / 63	103	450°F / 232°C	500°F / 260°C	-35°F / -37°C
SPO-244	L0244-	150	4	90	135 / 14	685 / 75	102	460°F / 238°C	525°F / 274°C	-25°F / -32°C
SPO-255	L0245-	220	5	90	200 / 19	1044 / 95	103	465°F / 241°C	560°F / 293°C	-10°F / -23°C
SPO-266	L0246-	320	6	90	280 / 23	1476 / 115	102	470°F / 243°C	570°F / 299°C	10°F / -12°C
SPO-277	L0247-	460	7	140	432 / 30	2260 / 148	101	475°F / 246°C	580°F / 304°C	15°F / -9°C
SPO-288	L0248-	680	8	250	628 / 38	3314 / 184	98	425°F / 218°C	525°F / 274°C	10°F / -12°C
SPO-299	L0249-	1000	8A	250	950 / 50	5100 / 245	99	450°F / 232°C	505°F / 263°C	10°F / -12°C
SPO-MG	L0252-	220	6	80W-140	237 / 25	1223 / 123	120	425°F / 218°C	465°F / 241°C	-25°F / -32°C
*SPO Series Oils are available in Bottles, Jugs, Pails, 1/4 Drums and Drums. SPO-222 & SPO-333 are also available in Permas. See page 26 & 27 for package part number suffix.										
APG-75	L0116-	32	-	75W	31 / 6	152 / 44	113	350°F / 177°C	365°F / 185°C	-55°F / -48°C
APG-80	L0117-	68	2 EP	80W	67 / 9	356 / 58	113	380°F / 193°C	440°F / 227°C	-35°F / -37°C
APG 80W-90	L0030-	100	3 EP	80W-90	124 / 15	650 / 84	121	380°F / 193°C	410°F / 210°C	-35°F / -37°C
APG-90	L0118-	150	5 EP	90	156 / 16	816 / 86	112	395°F / 202°C	440°F / 227°C	-20°F / -29°C
APG 80W-140	L0124-	320	6 EP	80W-140	248 / 25	1300 / 125	120	380°F / 193°C	410°F / 210°C	-25°F / -32°C
APG-140	L0119-	460	7 EP	85W-140	410 / 31	2220 / 152	107	405°F / 207°C	440°F / 227°C	0°F / -18°C
APG-250	L0120-	680	8 EP	250	701 / 42	3700 / 203	100	390°F / 199°C	450°F / 232°C	5°F / -15°C
*APG Series Oils are available in Bottles, Jugs, Pails, 1/4 Drums & Drums, APG 90 is also available in Tubes. See page 26 for package part number suffix.										
Kling 80W-90	L0212-	150	5 EP	80W-90	-	816 / 89	114	410°F / 210°C	460°F / 238°C	-25°F / -32°C
Kling 85W-140	L0213-	460	7 EP	85W-140	-	1866 / 140	107	390°F / 199°C	435°F / 224°C	-10°F / -23°C
*Kling Gear Oils are available in Pails, 1/4 Drums & Drums. See page 26 for package part number suffix.										
CP-8A	L0141-	1000	8A CP	250	950 / 47	4950 / 230	95	550°F / 288°C	600°F / 316°C	35°F / 2°C
*CP-8A is available in Pails, 1/4 Drums & Drums. See page 26 for package part number suffix.										
HO-3	L0764-	150	4	85	151 / 15	690 / 75	98	505°F / 263°C	555°F / 291°C	0°F / -18°C
HO-4	L0765-	220	5	90	241 / 20	950 / 83	96	505°F / 263°C	565°F / 296°C	5°F / -15°C
HO-5	L0766-	320	6	90	349 / 26	1450 / 107	97	520°F / 271°C	575°F / 301°C	15°F / -9°C
HO-6	L0794-	460	7	140	447 / 30	2070 / 140	96	545°F / 285°C	625°F / 329°C	15°F / -9°C
*HO-3, HO-4, HO-5 & HO-6 are available in Jugs, Pails, 1/4 Drums & Drums. See page 26 for package part number suffix.										
NO. 0	L0000-	7-10	-	-	9 / -	56 / 34	-	275°F / 135°C	295°F / 146°C	-60°F / -51°C
NO. 1	L0002-	22	-	-	22 / -	115 / 38	-	345°F / 174°C	360°F / 182°C	-50°F / -46°C
NO.2	L0003-	46	1	75W	45 / -	228 / 45	96	365°F / 185°C	385°F / 196°C	-30°F / -34°C
NO. 3V	L0009-	68	2	80W	62 / -	326 / 48	98	380°F / 193°C	395°F / 202°C	-25°F / -32°C
NO. 4	L0011-	150	4	90	162 / 13	854 / 72	98	420°F / 216°C	450°F / 232°C	-20°F / -29°C
NO. 8	L0014-	460	7	140	432 / 28	2300 / 142	90	435°F / 224°C	515°F / 268°C	0°F / -18°C
*Machine Tool Oils are available in Bottles, Jugs, Pails, 1/4 Drums & Drums. See page 26 for package part number suffix.										

## Syn Lube 22 - 100: Polyalphaolefin (PAO)-Based, 100% Synthetic Fluids.

These polyalphaolefin (PAO)-based, zinc-free, synthetic air compressor fluids are recommended for rotary screw and rotary vane air compressors. They are also recommended for centrifugal air compressors striving for lower power consumption. They offer superior thermal and oxidation stability, outstanding water demulsibility, extremely low pour points, very high viscosity indexes, superior heat transfer characteristics and excellent seal material compatibility. Fluid drain intervals are 6 - 8,000 hours under normal conditions.

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

These state-of-the-art, polyolester (POE) type, 100% synthetic 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.

## Synac Series: Diester-Based, 100% Synthetic Compressor Fluids.

These diester-based synthetic air compressor fluids are for rotary screw, rotary vane, reciprocating air compressors, vacuum pumps, blowers, centrifuges and a multitude of other high temperature applications. They are outstanding for applications in which the fluid is subjected to high temperature and high stress conditions over extended drain intervals up to 8,000 hours. They eliminate sludge and varnish buildup caused by high operating temperatures. Due to their clean natural detergency characteristics, they are ideal for upper cylinder lubrication of reciprocating air compressors.

## SYNCOOL: Polyglycol/Ester-Based, Readily Biodegradable (Pw1), Synthetic Air Compressor Fluid.

A high-performance, readily biodegradable, synthetic air compressor fluid 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. Readily biodegradable (Meets OECD criteria) >70% biodegradation (Pw1). Excellent thermal and oxidation stability helps eliminate harmful deposits and extends fluid change intervals.

## SYNCOOL FG: NSF H1 Registered Food Grade, 100% Synthetic, Polyglycolester (PGE) Air Compressor Fluid.

Recommended for use in high performance rotary screw and rotary vane air compressors where high operating temperatures are present. State of the art additives enhance its inherent outstanding performance characteristics. Readily biodegradable. NSF H1 registered, food machinery grade.

## SFGO Ultra 22 - 100: NSF H1 Registered Food Machinery Grade, 100% Synthetic H1 Fluids.

Manufactured with ingredients that comply with FDA regulation 21 CFR 178.3570 for lubricants with incidental food contact, these 100% synthetic H1 fluids are recommended for oil-flooded rotary screw, rotary vane and reciprocating air compressors operating in food processing and bottling plants. They are outstanding lubricants for applications in which the fluid must undergo high temperature and high stress conditions over extended drain intervals. Fluid drain intervals are 6 - 8,000 hours under normal conditions.

LUBRIPLATE PRODUCT	*PRODUCT PART NO.	ISO GRADE	SAE NO.	VISCOSITY cSt @40°C / 100°C	VISCOSITY SUS @100°F / 210°F	VISCOSITY INDEX	FLASH POINT	FIRE POINT	POUR POINT
<b>SYN LUBE 22</b>	L0968-	22	5W	23 / 5	129 / 44	138	420°F / 216°C	470°F / 243°C	-70°F / -57°C
<b>SYN LUBE 32</b>	L0970-	32	10	32 / 6	160 / 47	136	470°F / 243°C	505°F / 263°C	-70°F / -57°C
<b>SYN LUBE 46</b>	L0971-	46	20	44 / 8	223 / 52	138	485°F / 250°C	550°F / 288°C	-65°F / -54°C
<b>SYN LUBE 68</b>	L0972-	68	20	66 / 10	314 / 58	138	515°F / 267°C	580°F / 304°C	-60°F / -51°C
<b>SYN LUBE 100</b>	L0973-	100	30	110 / 15	523 / 66	142	530°F / 277°C	590°F / 310°C	-55°F / -48°C
*SYN LUBE Fluids 22 through 100 are available in Pails & Drums. See page 26 for package part number suffix.									
<b>SYNXTREME AC 32</b>	L0939-	32	10	32 / 6	-	125	525°F / 274°C	-	-51°F / -46°C
<b>SYNXTREME AC 46</b>	L0940-	46	20	46 / 7	-	117	527°F / 275°C	-	-40°F / -40°C
<b>SYNXTREME AC 68</b>	L0941-	68	20	66 / 9	-	103	530°F / 277°C	-	-20°F / -29°C
*SYNXTREME AC Series Fluids are available in Pails & Drums. See page 26 for more information and package part number suffix.									
<b>SYNAC 32</b>	L0932-	32	10	31 / 6	155 / 46	135	450°F / 232°C	530°F / 277°C	-45°F / -43°C
<b>SYNAC 46</b>	L0933-	46	20	44 / 7	213 / 49	118	455°F / 235°C	535°F / 279°C	-35°F / -37°C
<b>SYNAC 68</b>	L0934-	68	20	64 / 8	311 / 53	98	455°F / 235°C	535°F / 279°C	-20°F / -29°C
<b>SYNAC 100</b>	L0935-	100	30	100 / 10	510 / 60	76	450°F / 232°C	530°F / 277°C	-15°F / -26°C
<b>SYNAC 150</b>	L0936-	150	40	147 / 13	754 / 71	71	540°F / 282°C	570°F / 299°C	-25°F / -32°C
<b>SYNAC 220</b>	L0937-	220	-	201 / 16	1003 / 83	74	545°F / 285°C	575°F / 302°C	-20°F / -29°C
<b>SYNAC 320</b>	L0938-	320	-	290 / 20	1496 / 99	77	475°F / 246°C	505°F / 263°C	-5°F / -20°C
*SYNAC Series Fluids are available in Pails & Drums. See page 26 for more information and package part number suffix.									
<b>SYNCOOL</b>	L0964-	32 / 46	10	41 / 8	-	172	530°F / 277°C	595°F / 313°C	-40°F / -40°C
*SYNCOOL Fluid is available in Pails and Drums. See page 26 for more information and the package part number suffix.									
<b>SYNCOOL FG</b>	L0963-	46	20	41 / 10	-	178	530°F / 277°C	595°F / 313°C	-45°F / -43°C
*SYNCOOL FG Fluid is available in Jugs, Pails, Drums and Bulk Bins. See page 26 for more information and package part number suffix.									
<b>SFGO Ultra-22</b>	L0931-	22	5W	20 / 4	106 / 41	128	405°F / 207°C	430°F / 221°C	-65°F / -54°C
<b>SFGO Ultra-32</b>	L0915-	32	10	30 / 6	160 / 46	135	475°F / 246°C	515°F / 268°C	-58°F / -50°C
<b>SFGO Ultra-46</b>	L0916-	46	20	50 / 8	220 / 52	134	480°F / 249°C	520°F / 271°C	-45°F / -43°C
<b>SFGO Ultra-68</b>	L0917-	68	20	67 / 10	325 / 59	141	495°F / 257°C	530°F / 277°C	-45°F / -43°C
<b>SFGO Ultra-100</b>	L0983-	100	30	98 / 14	556 / 77	145	485°F / 252°C	520°F / 271°C	-43°F / -42°C
*SFGO Ultra Fluids are available in Jugs, Pails, 1/4 Drums & Drums. See page 26 for more information and package part number suffix.									

## Petroleum-Based Air Compressor Oils

### AC Series: Petroleum-Based, Anti-Wear Fortified Compressor Oils.

These high quality, petroleum-based air compressor oils are especially formulated to reduce carbon and varnish buildup. Formulated with fluid zinc to effectively fight friction and wear, thus reducing heat and foaming. Available in six ISO grades.

### Turbine Oil 32: Petroleum-Based Oil For Centrifugal Air Compressors.

This high-performance, zinc-free fluid meets the requirements of most centrifugal air compressors. Provides excellent oxidation resistance.

LUBRIPLATE PRODUCT	*PRODUCT PART NO.	ISO GRADE	SAE NO.	VISCOSITY cSt @40°C / 100°C	VISCOSITY SUS @100°F / 210°F	VISCOSITY INDEX	FLASH POINT	FIRE POINT	POUR POINT
AC-0	L0704-	32	10	29 / 5	137 / 43	116	425°F / 218°C	460°F / 238°C	-35°F / -37°C
AC-1	L0705-	46	20	42 / 7	196 / 47	104	470°F / 243°C	505°F / 263°C	-30°F / -34°C
AC-2	L0706-	68	20	74 / 9	336 / 57	104	500°F / 260°C	535°F / 279°C	-15°F / -26°C
AC-2A	L0707-	100	30	94 / 11	430 / 63	101	505°F / 263°C	550°F / 289°C	-10°F / -23°C
AC-3	L0708-	150	40	135 / 14	690 / 75	102	460°F / 238°C	510°F / 266°C	-10°F / -23°C
AC-4	L0710-	220	40	205 / 18	950 / 83	95	495°F / 275°C	545°F / 285°C	0°F / -18°C

\*AC Series Air Compressor Oils are available in Bottles, Jugs, Pails, 1/4 Drums & Drums, See page 26 for more information and package part number suffix.

<b>Turbine Oil 32</b>	L0942-	32	10	32 / 5	152 / 44	113	390°F / 199°C	440°F / 227°C	-10°F / -23°C
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\*Turbine Oil 32 is available in Drums. See page 26 for more information and the package part number suffix.

## Refrigeration Compressor Fluids

### 68-P: Semi-Synthetic-Based, Refrigeration Compressor Fluid.

This highly refined lubricant is formulated for use in refrigeration compressor systems utilizing ammonia, CFC (chlorofluorocarbon) and HCFC (hydrochlorofluorocarbon) refrigerants, such as R-717, R-11, R-12, R-13, R-113, R-114, R-115, R-22, R-123, R-141b, R-142b, R-500, R-501 and R-502. It is not recommended for use with HFC (hydrofluorocarbon) refrigerants such as HFC-134a (R-134a).

### 68-N: Naphthenic Refrigeration Compressor Fluid.

A highly refined naphthenic lubricant formulated for use in refrigeration compressor systems utilizing ammonia, CFC (chlorofluorocarbon) and HCFC (hydrochlorofluorocarbon) refrigerants, such as R-717, R-11, R-12, R-13, R-113, R-114, R-115, R-22, R-123, R-141b, R-142b, R-500, R-501 and R-502. It is not recommended for use with HFC (hydrofluorocarbon) refrigerants such as HFC-134a (R-134a).

### RCO-68FG: NSF H-1 Food Grade, Polyalphaolefin (PAO)-Based, Synthetic, Refrigeration Compressor Fluid.

Formulated for use in refrigeration compressor systems where a NSF H-1 Registered, food machinery grade lubricant is required. It is recommended for CFC (chlorofluorocarbon) and HCFC (hydrochlorofluorocarbon) refrigerants such as R-717, R-11, R-12, R-13, R-113, R-114, R-115, R-22, R-123, R-141b, R-500, R-501 and R-502 or where ammonia is used as the coolant. It is not recommended for use with HFC (hydrofluorocarbon) refrigerants such as HFC-134a. High performance formulation provides extended service life while minimizing the formation of harmful varnish and sludge deposits.

LUBRIPLATE PRODUCT	*PRODUCT PART NO.	ISO GRADE	SAE NO.	VISCOSITY cSt @40°C / 100°C	VISCOSITY SUS @100°F / 210°F	VISCOSITY INDEX	FLASH POINT	FIRE POINT	POUR POINT
68-P	L0843-	68	20	63 / 9	315 / 42	106	468°F / 242°C	510°F / 266°C	-38°F / -39°C
68-N	L0842-	68	20	65 / 7	330 / 48	28	385°F / 196°C	435°F / 224°C	-35°F / -37°C
RCO-68 FG	L0818-	68	30	62 / 10	325 / 59	142	390°F / 199°C	545°F / 285°C	-60°F / -51°C

\*68-P, 68-N and RCO-68 FG are available in Pails & Drums. See page 26 for more information and package part number suffix.

## Natural Gas Compressor Fluids

### 981: Synthetic Natural Gas Compressor Lubricant.

Formulated for use in hyper-compressors and natural gas reinjection applications. It may also be used as a cylinder lubricant for reciprocating compressors processing natural gas, carbon dioxide and other gases that require chemical resistance in an ISO 100 viscosity grade.

### 989: Synthetic Natural Gas Compressor Lubricant.

Designed for the lubrication of flooded rotary screw and vane-type compressors processing natural gas, carbon dioxide or other hydrocarbon gases. It may also be used as a cylinder lubricant for reciprocating compressors processing natural gas, carbon dioxide and other gases that require chemical resistance in an ISO 150 viscosity grade.

LUBRIPLATE PRODUCT	*PRODUCT PART NO.	ISO GRADE	SAE NO.	VISCOSITY cSt @40°C / 100°C	VISCOSITY SUS @100°F / 210°F	VISCOSITY INDEX	FLASH POINT	FIRE POINT	POUR POINT
981	L1009-	100	30	84 / 17	-	218	527°F / 275°C	-	-49°F / -45°C
989	L1010-	150	40	138 / 24	-	224	473°F / 245°C	518°F / 270°C	-43°F / -42°C

\*981 and 989 are available in Pails & Drums. See page 26 for more information and the package part number suffix.

## Synthetic Hydraulic Fluids

### Syn Lube 22-100: 100% Synthetic, Polyalphaolefin (PAO)-Based Hydraulic Fluids.

These multi-purpose, polyalphaolefin (PAO) based, zinc-free fluids are recommended and approved for many types of hydraulic systems. Formulated with state-of-the-art additives, these premium quality fluids offer excellent thermal and oxidation stability, outstanding water demulsibility, extremely low pour points, high viscosity indexes and superior heat transfer characteristics. They deliver outstanding performance over a wide range of temperatures and operating conditions. They provide excellent seal material compatibility and work well over extended fluid change intervals.

### SFGO Ultra 22 - 100: NSF H1 Registered Food Machinery Grade, 100% Synthetic H1 Fluids.

Manufactured with ingredients that comply with FDA regulation 21 CFR 178.3570 for lubricants with incidental food contact, these 100% synthetic, NSF H1 registered fluids are recommended for many types of hydraulic systems operating in food processing and bottling plants. They are outstanding lubricants for applications in which the fluid must undergo high temperature and high stress conditions over extended drain intervals.

### SYNXTREME FRHD-46: 100% Synthetic, FM Approved, Fire Resistant, Hydraulic Fluid.

A high performance, 100% synthetic Polyolester (POE)-Based hydraulic fluid designed for demanding industrial applications requiring fire resistance, and excellent anti-wear properties over wide temperature ranges.



LUBRIPLATE PRODUCT	*PRODUCT PART NO.	ISO VIS. GRADE	SAE NO.	AGMA NO.	SAE GEAR OIL NO.	VISCOSITY cSt @40°C / 100°C	VISCOSITY SUS @100°F / 210°F	VISCOSITY INDEX	FLASH POINT	FIRE POINT	POUR POINT
SYN LUBE 22	L0968-	22	5W	-	-	23 / 5	129 / 44	138	420°F / 216°C	470°F / 243°C	-70°F / -57°C
SYN LUBE 32	L0970-	32	10	-	-	32 / 6	160 / 47	136	470°F / 243°C	505°F / 263°C	-70°F / -57°C
SYN LUBE 46	L0971-	46	20	1	75W	44 / 8	223 / 52	138	485°F / 250°C	550°F / 288°C	-65°F / -54°C
SYN LUBE 68	L0972-	68	20	2	80W	66 / 10	314 / 58	138	515°F / 267°C	580°F / 304°C	-60°F / -51°C
SYN LUBE 100	L0973-	100	30	3	85W	110 / 15	523 / 66	142	530°F / 277°C	590°F / 310°C	-55°F / -48°C
*Syn Lube Fluids 22 through 100 are available in Pails & Drums. See page 26 for more information and the package part number suffix.											
SFGO Ultra-22	L0931-	22	5W	-	-	20 / 4	106 / 41	128	405°F / 207°C	430°F / 221°C	-65°F / -54°C
SFGO Ultra-32	L0915-	32	10	-	-	30 / 6	160 / 46	135	475°F / 246°C	515°F / 268°C	-58°F / -50°C
SFGO Ultra-46	L0916-	46	20	1	75W	50 / 8	220 / 52	134	480°F / 249°C	520°F / 271°C	-45°F / -43°C
SFGO Ultra-68	L0917-	68	20	2	80W	67 / 10	325 / 59	141	495°F / 257°C	530°F / 277°C	-45°F / -43°C
SFGO Ultra-100	L0983-	100	30	3	85W	98 / 14	556 / 77	145	485°F / 252°C	520°F / 271°C	-43°F / -42°C
*SFGO Ultra Fluids are available in Jugs, Pails, 1/4 Drums & Drums. See page 26 for more information and package part number suffix.											
SYNXTREME FRHD-46	L1023-	46	20	1	75W	50 / 10	-	176	594°F / 312°C	600°F / 316°C	-42°F / -41°C
*SynXtreme FRHD-46 Fluid is available in Pails, Drums and 275 Gallon Passport Bins. See page 26 for more information and package part number suffix.											

## Environmentally Responsible/ Biodegradable Hydraulic Fluids:

See pages 14 and 15 for information on these fluids.

## Petroleum-Based Hydraulic Oils

### HO Series: Petroleum-Based, Heavy-Duty Hydraulic Oils.

Formulated for superior performance, this series contains fluid zinc to effectively reduce ring and vane wear. High aniline points ensure long seal life with fewer leaks. They can withstand elevated temperatures and high pressures over extended drain intervals. High natural V.I. provides stable viscosities over a wide temperature range. Excellent ISO cleanliness ratings.

LUBRIPLATE PRODUCT	*PRODUCT PART NO.	ISO VIS. GRADE	SAE NO.	AGMA NO.	SAE GEAR OIL NO.	VISCOSITY cSt @40°C / 100°C	VISCOSITY SUS @100°F / 210°F	VISCOSITY INDEX	FLASH POINT	FIRE POINT	POUR POINT
HO-0	L0760-	32	10	-	-	29 / 5	137 / 43	116	425°F / 218°C	460°F / 238°C	-35°F / -37°C
HO-1	L0761-	46	20	1	75	42 / 7	196 / 47	104	470°F / 243°C	505°F / 263°C	-30°F / -34°C
HO-2	L0762-	68	20	2	80	74 / 9	336 / 57	104	500°F / 260°C	535°F / 279°C	-15°F / -26°C
HO-2A	L0763-	100	30	3	80	94 / 11	430 / 62	101	505°F / 263°C	550°F / 288°C	-10°F / -23°C
*HO Series Oils are available in Jugs, Pails, 1/4 Drums & Drums. See page 26 for more information and the package part number suffix.											

### Low Temp Hydraulic Oils: Petroleum-Based Oils For Low Temperature Applications.

MV-HO Multi-Viscosity, Special Low Pour, and Minus 70 Hydraulic Oil are for low temperature applications.

LUBRIPLATE PRODUCT	*PRODUCT PART NO.	ISO VIS. GRADE	SAE NO.	AGMA NO.	SAE GEAR OIL NO.	VISCOSITY cSt @40°C / 100°C	VISCOSITY SUS @100°F / 210°F	VISCOSITY INDEX	FLASH POINT	FIRE POINT	POUR POINT
MV-HO	L0777-	32	5W-20	-	75	35 / 8	186 / 53	199	350°F / 177°C	380°F / 193°C	-50°F / -46°C
Low Pour	L0767-	22	5W-20	-	75W	25 / 7	126 / 46	210	315°F / 157°C	350°F / 177°C	-70°F / -57°C
Minus 70	L0769-	15	5W-20	-	75W	16 / 6	84 / 45	340	200°F / 93°C	220°F / 104°C	-70°F / -57°C
*Low Temp Hydraulic Oils are available in Jugs, Pails, 1/4 Drums & Drums. See page 26 for more information and the package part number suffix.											



## ■ Specialty Fluids and Oils

**Air Tool Lubricant:** Designed for both rotary and reciprocating types of air tools such as hammers, impact wrenches, air motors, grinders, reamers and drills. Proven excellent air line lubricant, used effectively on lift cylinders of can fillers in breweries, bottling plants. Removes gumming and sludge. Product Part No. L0713-. Available in bottles, jugs, pails, 1/4 drums and drums. See page 26 for packaging information and package part number suffix.

**Hydraulic Jack Oil:** A heavy-duty, high pressure hydraulic oil, designed to meet the requirements of most types of hydraulic jacks. Contains anti-wear and anti-corrosion additives. Product Part No. L0768-. See page 26 for packaging information and package part number suffix.

**Bar & Chain Oil:** Formulated with special anti-wear additives to provide maximum protection to the bar and chain of all makes of chain saws. SAE grade 20. Good adhesion properties provide excellent resistance to "throw off" action. Part No. L0720-. Available in bottles, jugs and drums. See page 26 package part number suffix.

**Chain & Cable Fluid / Chain & Cable Heavy:** Superior penetrating oils that clean and lubricate without gumming. Ideal for wire rope, chains, cables, hinges, springs, slides and other moving metal parts. Protects bright work. Excellent oils to loosen rusty nuts and bolts. Ideal for tapping and drilling. Part Nos. L0135- and L0136-. See page 26 for packaging information and package part number suffix.

**Super Chain Oil:** A heavy polymer, tenacious, high flash point oil containing micro-fine graphite. Excellent for bakery ovens, drying ovens where temperatures do not exceed 450°F / 232°C. Works well on floor chain conveyors, car wash lines, assembly lines. Flash point 520°F / 271°C. Fire point 600°F / 316°C. Product Part No. L0857-. Available in jugs, pails, 1/4 drums and drums. See page 26 for package part number suffix.

**Heat Transfer Oils:** These high flash and fire point oils are designed for exceptional heat transfer properties. For use on oil type heat exchangers in asphalt plants, roofer tar kettles, curing machines. Flash point 525°F / 274°C. Fire Point 600°F / 316°C. Available in ISO viscosity grades 32, Part No. L0757-, ISO 68, Part No. L0751-, and ISO 150 Part No. L0750-. Available in pails and drums. See page 26 for package part number suffix.

**HTO Special:** This highly refined mineral-oil based heat transfer fluid designed for use up to 600°F(316°C) in closed-loop systems. It's low pour point provides easy start up in cold environments. Lubriplate HTO Special is also formulated with oxidation inhibitors, corrosion inhibitors and metal deactivators not found in most heat transfer fluids of this type; resulting in much longer oil life. Part No. L0748-. Available in pails, drums and 275 gallon Passport bins. See page 26 for package part number suffix.

**Rock Drill Oils 10R, 30R:** For all types of rock drills, air hammers and other pneumatic tools. Available in SAE 10W, Part No. L0847-, and 30, Part No. L0848-, with the lighter weight oil for cold weather conditions. Use SPO-255 for SAE 50 rock drill oil. Available in jugs, pails, 1/4 drums and drums. See page 26 for package part number suffix.

**Vacuum Pump Oil & Vacuum Pump Oil Light:** High performance, non-detergent mineral oils recommended for most rotary vane and rotary lobe vacuum pumps. They are designed to alleviate the sludge, carbon deposits and contamination problems commonly found in industrial vacuum pumps. Lubriplate Vacuum Pump Oil Light is recommended for vacuum pumps typically associated with delicate instrumentation. Vacuum Pump Oil is SAE-30 / ISO-100 grade. Part No. L0945-. Vacuum Pump Oil Light is SAE-10 / ISO-32 grade. Part No. L0944-. Available in bottles, jugs, pails and drums. See page 26 for more information and package part number suffix.

**HO Special Hydraulic Oils:** HO-32, HO-46\* and HO-68 meet the requirements and are approved by Abex-Denison HF-0 and HF-2, they are also accepted by Vickers specification M-2950-S. \*Lubriplate HO-46 is approved by Cincinnati-Milacron under Specification P-70. Product Part Nos. HO-32, L0770-, HO-46, L0771-, HO-68, L0772-. Available in jugs, pails, 1/4 drums and drums. See page 26 for packaging information and package part number suffix.



## ■ Cleansing and Flushing Fluids

**Syn Flush:** Synthetic, Cleaning, Flushing and Lubricating Fluid.

This premium quality, pure synthetic fluid is designed to clean and dissolve varnish deposits in air compressors while the compressor is in operation. It is compatible with petroleum/mineral oils as well as all Lubriplate Synthetic Compressor Fluids. Recommended for flushing compressors converting from petroleum base oils to synthetic fluids. SYNFLUSH can be used in its pure form in rotary screw air compressors up to 500 hours. Part No. L0962-. Available in pails and drums. See page 26 for package part number suffix.

**Hydroflush:** Synthetic, Cleaning, Flushing Fluid.

This premium quality, pure synthetic fluid is designed to clean and dissolve varnish/deposits found in hydraulic systems containing mineral oils and other synthetic fluids. It is also recommended for flushing hydraulic systems converting from petroleum/mineral oil to synthetic polyalkylene glycol based hydraulic fluids. It is compatible with petroleum/mineral oils as well as Biosynxtreme HF hydraulic fluids. Part Number L0798-. Available in pails and drums. See page 26 for packaging information and package part number suffix.

**Syn Flush FG and Pure Flush:** NSF H-1 Registered, Food Machinery Grade, Cleansing and Flushing Fluids.

See page 21 for information on these NSF H1 registered, food machinery grade, cleansing and flushing fluids.

# Synthetic, High-Performance, Multi-Purpose Greases

## SYNXTREME HD-Series: Extreme-Duty, High-Temperature, Synthetic, Calcium Sulfonate Complex Greases.

These high performance, extreme-duty, multi-purpose, synthetic, calcium sulfonate complex greases provide unsurpassed anti-wear, and extreme pressure protection. They are highly water resistant and work well over a wide range of temperature extremes and other adverse conditions. Superior shear stability and oxidation resistance provide long lasting protection. Available in a variety of NLGI grades for a wide range of applications. SYNXTREME HD/220 and HD/460 greases are formulated with heavier (ISO 220 and ISO 460 Grade) base fluids and are recommended for equipment operating under higher temperatures or extreme conditions. SYNXTREME HD-2 is NLGI GC-LB certified for wheel bearing and chassis lubrication.



## SYN LTR-2/460: Synthetic, Tacky, Red, Lithium Complex Grease.

This HighPerformance Grease is a 100% synthetic product. This product has far superior oxidation stability, better wear protection and significantly better operating temperature ranges than other synthetic greases built with polymers and mineral oil based greases. Manufactured with 100% polyalphaolefin (PAO) base fluids and thickened with lithium complex, the LUBRIPLATE SYN-LTR-2/460 grease is compatible with conventional lithium-thickened, mineral oil-based greases. The LUBRIPLATE SYN-LTR-2/460 grease is fortified with additives to prevent rust and corrosion and to reduce grease bleed. Its distinctive red color and tacky/adhesive texture increases its operating performance.

## SYN-1600 Series: High Performance, Multi-Purpose, PAO-Based Synthetic, Lithium Complex Greases.

These greases are manufactured with 100% polyalphaolefin (PAO) base fluids and lithium complex thickeners for superior oxidation stability, better wear protection and significantly better operating temperature ranges. Fortified with additives to prevent rust and corrosion and to reduce grease bleed. Recommended for most general grease applications.

## SYN-3000 Series: Moly-Fortified, Heavy-Duty, PAO-Based, Synthetic Lithium Complex Greases.

These high performance, heavy-duty, moly-fortified, 100% synthetic, lithium complex greases provide superior oxidation resistance for long lasting protection from friction, wear and corrosion. They have excellent high and low temperature performance and are highly resistant to water. Contains 5% Moly. Recommended for all types of heavy equipment.

## SYN-EMB: PAO-Based, Lithium Complex Type, Synthetic Grease for Electric Motor Bearings.

This high temperature capable, mechanically stable, 100% synthetic grease was developed specifically for the lubrication of medium to high speed electric motor bearings.

## SYN GR-132: PAO / Ester Combination-Based, Lithium Complex Type, Synthetic Grease.

This state-of-the-art, PAO/Ester combination based, 100% synthetic, lithium complex type grease delivers excellent mechanical stability. Recommended for all types of high speed anti-friction bearings. An outstanding synthetic grease for very low temperature applications.

LUBRIPLATE PRODUCT	*PRODUCT PART NO.	GREASE TYPE THICKENER	NLGI GRADE	BASE OIL TYPE	BASE OIL VIS. ISO cSt @ 40°C	RECOMMENDED TEMPERATURE RANGE		ASTM DROP POINT
						MINIMUM	MAXIMUM	
SYNXTREME HD-0	L0403-	Calcium Sulfonate Complex	0	Synthetic PAO	100	-45°F / -43°C	390°F / 199°C	>600°F / 316°C
SYNXTREME HD-1	L0402-	Calcium Sulfonate Complex	1	Synthetic PAO	100	-45°F / -43°C	440°F / 227°C	>600°F / 316°C
SYNXTREME HD-2	L0401-	Calcium Sulfonate Complex	2	Synthetic PAO	100	-45°F / -43°C	450°F / 232°C	>600°F / 316°C
SYNXTREME HD-1/220	L0313-	Calcium Sulfonate Complex	1	Synthetic PAO	220	-40°F / -40°C	440°F / 227°C	>600°F / 316°C
SYNXTREME HD-2/220	L0312-	Calcium Sulfonate Complex	2	Synthetic PAO	220	-40°F / -40°C	450°F / 232°C	>600°F / 316°C
SYNXTREME HD-00/460	L0408-	Calcium Sulfonate Complex	00	Synthetic PAO	460	-35°F / -37°C	410°F / 210°C	550°F / 288°C
SYNXTREME HD-0/460	L0407-	Calcium Sulfonate Complex	0	Synthetic PAO	460	-35°F / -37°C	450°F / 232°C	>600°F / 316°C
SYNXTREME HD-1/460	L0406-	Calcium Sulfonate Complex	1	Synthetic PAO	460	-35°F / -37°C	460°F / 238°C	>600°F / 316°C
SYNXTREME HD-2/460	L0405-	Calcium Sulfonate Complex	2	Synthetic PAO	460	-35°F / -37°C	470°F / 243°C	>600°F / 316°C

\*SYNXTREME HD Series Greases are available in Cartridges, Pails, 1/4 Drums, Drums & Perma Lubricators. See pages 26 and 27 for more information and the package part number suffix.

SYN-LTR-2/460	L0169-	Lithium Complex	2	Synthetic PAO	460	-40°F / -40°C	400°F / 204°C	464°F / 240°C
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\*SYN-LTR-2/460 is available in Cartridges, Pails, 1/4 Drums & Drums. See page 26 for package part number suffix.

SYN-1600/00	L0299-	Lithium Complex	00	Synthetic PAO	460	-20°F / -29°C	350°F / 176°C	446°F / 230°C
SYN-1600	L0300-	Lithium Complex	0	Synthetic PAO	220	-40°F / -40°C	380°F / 193°C	500°F / 260°C
SYN-1601	L0301-	Lithium Complex	1	Synthetic PAO	220	-40°F / -40°C	400°F / 204°C	500°F / 260°C
SYN-1602	L0302-	Lithium Complex	2	Synthetic PAO	220	-30°F / -34°C	400°F / 204°C	500°F / 260°C

\*SYN-1600 Series Greases are available in Cartridges, Pails, 1/4 Drums, Drums & Perma Lubricators. See pages 26 and 27 for more information and the package part number suffix.

SYN-3000	L0317-	Lithium Complex + Moly	0	Synthetic PAO	220	-40°F / -40°C	300°F / 150°C	356°F / 180°C
SYN-3001	L0315-	Lithium Complex + Moly	1	Synthetic PAO	220	-40°F / -40°C	400°F / 204°C	464°F / 240°C
SYN-3002	L0316-	Lithium Complex + Moly	2	Synthetic PAO	460	-30°F / -34°C	400°F / 204°C	473°F / 245°C

\*SYN-3000 Series Greases are available in Cartridges, Pails, 1/4 Drums, Drums & Perma Lubricators. See pages 26 and 27 for more information and the package part number suffix.

SYN-EMB	L0335-	Lithium Complex	2	Synthetic PAO	100	-40°F / -40°C	400°F / 204°C	500°F / 260°C
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\*SYN-EMB is available in Cartridges, Pails, 1/4 Drums & Drums. See page 26 for package part number suffix.

SYN GR-132	L0336-	Lithium Complex	2	Synthetic PAO / Ester	22	-49°F / -45°C	300°F / 149°C	445°F / 230°C
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\*SYN-GR-132 is available in Cartridges, Pails, 1/4 Drums & Drums. See page 26 for package part number suffix.

# Petroleum Oil-Based, Multi-Purpose Greases

## 1500 Series: Lithium Complex Greases.

These multi-purpose lubricants can withstand higher temperatures than traditional lithium greases. They provide high film strength, excellent shear stability, long lubricant life, and exceptional anti-wear properties. 4 NLGI densities for a variety of applications.

## LTR-2: Heavy-Duty, Tacky, Red, Lithium Complex Grease.

This rugged, tacky, highly water resistant, extreme pressure grease can withstand higher temperatures than traditional lithium greases. Recommended for a wide variety of heavy-duty industrial, construction, quarry, aggregate and mining applications. Red in color.

## 1240 Series: Lithium-Polymer Type, Extreme Pressure Greases.

Highly water resistant and tacky, they are designed for applications where the grease is subjected to heavy pressure and shock loads. Available in 3 NLGI densities.

## No. 1444: Tacky, Aluminum Complex Type Grease.

Specifically formulated for heavy-duty construction and mining equipment. Excellent for slow to moderate speed bearings and chains that are subjected to heat, steam and water.

## No. 3000 and 3000-W: Tacky, Moly-Lithium Type, Extreme Pressure Greases.

Provides a durable, tenacious, adhesive film to protect against water, rust, and corrosive contaminants. Fortified with molybdenum disulfide for extreme pressure applications. 3000-W is for cold ambient temperatures. Recommended for all types of heavy equipment.

## 730 Series: High Performance, Aluminum Complex Type Greases.

This series provides high load carrying ability and anti-wear protection with high resistance to water, steam, and other corrosive action. Available in 3 NLGI densities for a wide range of applications and temperatures.

## No. 1200-2: Heavy-Duty, General Purpose, Lithium Type Grease.

This is an excellent, heavy-duty, general purpose, lithium type grease for both industrial and automotive applications. It provides a high film strength, great shear stability, anti-wear and extreme pressure additives.

## 630 Series: Multi-Purpose Lithium-Based Greases.

Traditionally popular general purpose greases. Available in 4 N.L.G.I. Densities for a wide range of applications.



LUBRIPLATE PRODUCT	*PRODUCT PART NO.	GREASE TYPE THICKENER	NLGI GRADE	BASE OIL TYPE	BASE OIL VIS. cSt @ 40° C	RECOMMENDED TEMPERATURE RANGE MINIMUM	RECOMMENDED TEMPERATURE RANGE MAXIMUM	ASTM DROP POINT
1500	L0163-	Lithium Complex	00	Petroleum Oil	200	-5°F / -21°C	275°F / 135°C	-
1550	L0164-	Lithium Complex	0	Petroleum Oil	200	-5°F / -21°C	350°F / 177°C	450°F / 232°C
1551	L0165-	Lithium Complex	1	Petroleum Oil	200	-5°F / -21°C	370°F / 188°C	470°F / 243°C
1552	L0166-	Lithium Complex	2	Petroleum Oil	200	0°F / -18°C	400°F / 204°C	500°F / 260°C
*1500 Series Greases are available in Pails, 1/4 Drums & Drums. No. 1551 & No. 1552 are also available in Cartridges and Perma Lubricators. See pages 26 and 27 for package part number suffix.								
LTR-2	L0167-	Lithium Complex	2	Petroleum Oil	460	5°F / -15°C	400°F / 204°C	505°F / 263°C
*LTR-2 is available in Cartridges, Pails, 1/4 Drums and Drums. See page 26 for more information and package part number suffix.								
1240	L0105-	Lithium Polymer	0	Petroleum Oil	237	5°F / -15°C	280°F / 138°C	400°F / 204°C
1241	L0104-	Lithium Polymer	1	Petroleum Oil	237	5°F / -15°C	290°F / 143°C	400°F / 204°C
1242	L0106-	Lithium Polymer	2	Petroleum Oil	237	15°F / -9°C	300°F / 149°C	425°F / 218°C
*1240 Series Greases are available in Cartridges, Tubs, Pails, 1/4 Drums, Drums and Perma Lubricators. See pages 26 and 27 for more information and package part number suffix.								
1444	L0227-	Aluminum Complex	2	Petroleum Oil	626	20°F / -7°C	400°F / 204°C	500°F / 260°C
*No. 1444 is available in Cartridges, Pails, 1/4 Drums & Drums. See page 26 for package part number suffix.								
3000	L0108-	Moly-Lithium	2	Petroleum Oil	237	15°F / -9°C	300°F / 149°C	450°F / 232°C
3000-W	L0107-	Moly-Lithium	1	Petroleum Oil	60	-30°F / -34°C	275°F / 135°C	375°F / 191°C
*3000 Series Greases are available in Cartridges, Tubs, Pails, 1/4 Drums, Drums and Perma Lubricators. See pages 26 and 27 for more information and package part number suffix.								
730-0	L0083-	Aluminum Complex	0	Petroleum Oil	151	-10°F / -23°C	375°F / 191°C	465°F / 241°C
730-1	L0084-	Aluminum Complex	1	Petroleum Oil	151	-10°F / -23°C	390°F / 199°C	540°F / 282°C
730-2	L0085-	Aluminum Complex	2	Petroleum Oil	151	-10°F / -23°C	400°F / 204°C	560°F / 293°C
*730 Series Greases are available in Tubs, Pails, 1/4 Drums, Drums and Perma Lubricators. No. 730-2 is also available in Cartridges. See page 26 and 27 for package part number suffix.								
1200-2	L0102-	Lithium 12 Hydroxy	2	Petroleum Oil	183	-10°F / -23°C	300°F / 149°C	400°F / 204°C
*1200-2 is available in Cartridges, Tubs, Pails, 1/4 Drums, Drums and Perma Lubricators. See pages 26 and 27 for more information and package part number suffix.								
630-AAA	L0068-	Lithium	0	Petroleum Oil	151	10°F / -12°C	265°F / 129°C	360°F / 182°C
630-AA	L0067-	Lithium	1	Petroleum Oil	135	5°F / -15°C	270°F / 132°C	380°F / 193°C
630-2	L0072-	Lithium	2	Petroleum Oil	135	5°F / -15°C	275°F / 135°C	380°F / 193°C
630-A	L0066-	Lithium	2.5	Petroleum Oil	135	5°F / -15°C	275°F / 135°C	390°F / 199°C
*630 Series Greases are available in Tubs, Pails, 1/4 Drums & Drums. 630-2 is available in Cartridges. 630-AA is available in tubes. 630-AA & 630-AAA are available in Permas. See page 26 & 27 for more information.								

## ■ Greases For Special Conditions / Applications

### SYNXTREME HT MAX PLUS: Ultra High Temperature PFPE Grease.

An advanced, fluorinated (PFPE) synthetic grease formulated to provide effective long-term lubrication to equipment exposed to temperatures in excess of 260°C (500°F). It is non-flammable, non-melting and chemically inert towards chemicals and fuels. Excellent compatibility with plastics and elastomers.

### High Temp: Multi-Purpose, High Temperature, Bentone Type Grease.

Multi-Purpose, for high temperature applications. Non-melt type, workable from 40°F / 4°C to 500°F / 260°C with frequent lube intervals.

### Low Temp: Anhydrous Calcium Based Grease For Cold Temperatures.

An excellent multi-purpose, low temperature grease. For applications down to -60°F / -51°C.

### 930 Series: Multi-Purpose, High Temperature, Bentone Type Greases.

Non-melt, bentone type greases formulated for higher temperature applications. 930-AA & 930-AAA are recommended for centralized/automatic greasing systems.

### MAG-00 and MAG-1: Lithium Polymer Type Greases For Wide Range Of Temperatures.

These multi-purpose greases have a wide operating temperature range for variety of applications. Both work well in centralized/automatic lubricating systems. MAG-00 is a semi-fluid type grease that can also be used effectively in leaking gearboxes.

### 100 & 130 Series: Calcium Type Greases.

These traditional greases are still available. Designed for plain bearings, cams, slides, and other light-duty applications where temperatures do not exceed 170°F / 77°C. No.105, NLGI 0, Pt. No. L0034-, No.107, NLGI 1, Pt. No. L0036-, No.110, NLGI 2.5, Pt. No. L0037-, No.115, NLGI 4, Pt. No. L0040-, No.130-AA, NLGI 1, Pt. No. L0044-, No.130-A, NLGI 3, Pt. No. L0043-.

\*100 & 130 Series Greases are available in Cans, Pails, 1/4 Drums & Drums. No. 105 & 130-AA are also available in Tubes. See page 26 for package part number suffix.



LUBRIPLATE PRODUCT	*PRODUCT PART NO.	GREASE TYPE THICKENER	NLGI GRADE	BASE OIL TYPE	BASE OIL VIS. cSt @ 40°C	RECOMMENDED TEMPERATURE RANGE MINIMUM	RECOMMENDED TEMPERATURE RANGE MAXIMUM	ASTM DROP POINT
SYNXTREME HT MAX PLUS	L0332-	PFPE	2	Perfluoropolyether PFPE	488	-4°F / -20°C	550°F / 288°C	>600°F / >316°C
*SYNXTREME HT MAX PLUS is available in 28 oz Cartridges Part No. L0332-002 and 60 lb Pails Part No. L0332-035. See page 26 for more information.								
HIGH TEMP	L0161-	Bentone	2	Petroleum Oil	497	40°F / 4°C	400°F / 204°C	NON-MELT
*HIGH TEMP is available in Cartridges, Tubs, Pails, 1/4 Drums, Drums & Permas. See page 26 & 27 for package part number suffix.								
LOW TEMP	L0172-	Anhydrous Calcium	1.5	Petroleum Oil	16	-60°F / -51°C	225°F / 107°C	280°F / 138°C
*Low Temp is available in Tubes, Cartridges, Tubs, Pails, 1/4 Drums and Drums. See page 26 for package part number suffix.								
930-AAA	L0098-	Bentone	0	Petroleum Oil	167	-0°F / -18°C	360°F / 182°C	NON-MELT
930-AA	L0096-	Bentone	1	Petroleum Oil	135	-0°F / -18°C	370°F / 188°C	NON-MELT
930-2	L0100-	Bentone	2	Petroleum Oil	135	5°F / -15°C	375°F / 191°C	NON-MELT
930-A	L0095-	Bentone	3	Petroleum Oil	135	5°F / -15°C	375°F / 191°C	NON-MELT
*930 Series Greases are available in Tubs, Pails, 1/4 Drums & Drums. 930-AA & 930-2 are also available in Cartridges. 930-AA is also available in Permas. See page 26 & 27 for package part number suffix.								
MAG-00	L0186-	Lithium 12 Hydroxy	00	Petroleum Oil	23	-60°F / -51°C	204°F / 116°C	340°F / 171°C
MAG-1	L0189-	Lithium 12 Hydroxy	1	Petroleum Oil	23	-60°F / -51°C	300°F / 149°C	375°F / 191°C
*MAG-00 is available in Bottles, Jugs, Pails, 1/4 Drums, Drums & Permas. MAG-1 is available in Cartridges, Cans, Pails, 1/4 Drums, Drums & Permas. See page 26 & 27 for package part number suffix.								

## ■ Greases For Gearing

### Gear Shield Series: Multi-Purpose, Lithium-Based, Open Gear Greases.

Made for all types of open/exposed gears. Gear Shield Extra Heavy is a thick, tacky and adhesive open gear grease for adverse conditions. Excellent fifth wheel lubricants.

### No. 176: Inorganic / Organic, Open Gear Grease for Centralized Systems. No Solvents.

This adhesive, semi-fluid grease is for all types of open gears lubricated by centralized systems. Provides good pumpability without the use of harmful solvents.



LUBRIPLATE PRODUCT	*PRODUCT PART NO.	GREASE TYPE THICKENER	NLGI GRADE	BASE OIL TYPE	BASE OIL VIS. cSt @ 40°C	RECOMMENDED TEMPERATURE RANGE MINIMUM	RECOMMENDED TEMPERATURE RANGE MAXIMUM	ASTM DROP POINT
Gear Shield	L0150-	Lithium / Asphalt	1	Petroleum Oil	237	15°F / -9°C	265°F / 129°C	350°F / 177°C
Gear Shield Hvy	L0151-	Lithium / Asphalt	2	Petroleum Oil	432	15°F / -9°C	275°F / 135°C	365°F / 185°C
Gear Shield X Hvy	L0152-	Lithium / Asphalt	3	Petroleum Oil	432	20°F / -7°C	275°F / 135°C	370°F / 188°C
*Gear Shield Series Greases are available in Tubs, Pails, 1/4 Drums & Drums. Gear Shield Extra Heavy is also available in Caulk Type Cartridges and Spray Cans. See page 26 for package part number suffix.								
No. 176	L0054-	Inorganic/Organic Combination	00	Petroleum Oil	313	25°F / -4°C	275°F / 135°C	NON-MELT
No. 176 is available in Pails, 1/4 Drums, Drums & Permas. See page 26 & 27 for package part number suffix.								

## Specialty Greases

**EMB - Electric Motor Bearing Grease:** This NLGI 2, lithium polymer type grease was developed specifically for the lubrication of high speed, electric motor bearings, fans and other high speed grease type ball and roller bearings. Part No. L0148-. Available in tubs, cartridges, pails, 1/4 drums and Perma lubricators. See pages 26 & 27 for Package Part Number Suffix.

**Poly HP-2:** Polyurea-thickened type grease is formulated with the highest quality paraffinic base oils available. Excellent for high-speed electric motor bearings and other industrial applications. Part No. L0191-. Available in pails, 1/4 drums and cartridges. See page 26 for package part number suffix.

**Power Hammer & Chisel Grease:** This Heavy-Duty, extreme pressure type, aluminum complex grease with moly, copper and graphite, is made for use on most types of heavy-duty power hammers. Greatly extends shaft and bushing life. Product Part No. L0190-. Available in cartridges, pails and 1/4 drums. See page 26 for package part number suffix.



**Aero:** This NLGI 1, lithium type, low temperature grease for cold temperature applications down to -60°F / -51°C. Provides low-torque start-up capability, excellent corrosion and oxidation resistance and wide compatibility with metals, plastic, and rubber. Excellent for garage door mechanisms. Part No. L0113-. Available in mini tubes, small tubes, cans, pails, 1/4 drums and drums. See page 26 for package part number suffix.

**X-357:** A special extreme pressure moly-fortified lubricant that penetrates and adheres, water resistant. Use on pintle hooks, slide axles, open gears, fifth wheels. Product Part No. L0149-. Available in pails, drums and spray cans. See page 26 for package part number suffix.

**No. 777:** This special grease lubricant has been approved by Ford Motor Co. specification ESF-M1C-26-A for use as a starter motor shaft lubricant. Also approved for starter drives on Evinrude / Johnson outboards. Product Part No. L0081-. See page 26 for packaging information.

**No. 107 Concrete Form Release:** This soft grease can easily be sprayed on form contact surfaces providing immediate release once the concrete is set. White in color, it will not stain the casting. Product Part No. L0036-. See page 26 for packaging information.

**DS-ES Electric Switch Lubricant:** Developed for the lubrication of electrical switch contacts. Used extensively in the automotive industry for switches, sockets, and wiring harness connectors. Excellent oxidation resistance and compatibility with metal, plastic and rubber. Product Part No. L0137-. Available in small tubes, tubs, pails, 1/4 drums and drums. See page 26 for package part number suffix.

**GR-132 Portable Tool Grease:** A light viscosity oil combined with a lithium combination thickener makes GR-132 ideal for applications where fluid friction must be kept to a minimum. Ideal for the small gear cases in portable tools. Product Part No. L0158-.

**Lithium Brick Grease:** This NLGI No. 6 grade lithium grease is recommended for open slot and open well type bearings where the brick grease rides directly on the bearing shaft. Package / Case 12 / 4 lb. Bricks, Part No. L0132-038.

**Lithplex Brick Grease:** This lithium complex type brick grease was developed to meet the lubrication requirements of open slot or open well type bearings commonly found at rock quarries and paper mills where the brick grease rides directly on the bearing shaft. The rotating motion of the bearing shaft wipes a film of lubricant onto the bearing surfaces keeping it properly lubricated. The 4 lb. bricks are easily cut into smaller pieces to place in the bearing opening. The size of the piece should be small enough to allow freedom of movement of the block while riding on the bearing surface. Its 525° F dropping point is a major advantage. Package / Case 12 / 4 lb. Bricks, Part No. L0133-038.

**No. 5555:** Semi-fluid, Anhydrous calcium type lubricant. Excellent for automatic lubricating systems operating in cold environments. Part Number L0109-. Available in bottles, jugs, pails, 1/4 drums and drums. See page 26 for package part number suffix.

**Neptune Launching Base Coat:** Used for many decades to launch virtually every type of ship from aircraft carriers to barges. This Base Coat will sustain loads of more than ten tons per square foot at 70°F. It is designed to be used in combination with Lubriplate Neptune Launching Slip Coat. Prior to application, the ways should be thoroughly dried. The Base Coat must be poured while hot and should be heated to a temperature sufficiently high so that it is in a liquid state at the point of application. Typically it is applied ¼" to ½" thick. After the base coat has hardened and cooled the Neptune Launching Slip Coat may then be applied. Packaging: 50 lb. Box, Part No. L0214-035 and 325 lb. Fiber Drums, Part No. L0214-040.

**Neptune Launching Slip Coat:** Designed to be applied over the hardened Neptune Base Coat layer. This Slip Coat is applied from the drum as is. It should not be heated prior to application. The Slip Coat is typically applied ¼" to ½" thick. The Slip Coat is orange in color making it distinguishable from the blue Base Coat. Packaging: 400 lb. Drums, Part No. L0215-040.

**SYNXTREME ASAP Anti-Seize Assembly Paste:** This is our premium anti-seize compound composed of a food grade, high-heat-resistant carrier fortified with rust and corrosion inhibitors and antioxidants. It is designed to lubricate and protect threaded connections and flanges at temperatures to 1,800°F (982°C) and under extreme load pressure conditions. Lubriplate Synxtreme ASAP does not separate. It is non-dripping, non-hardening, permits easy disassembly and removal of connection even after lengthy service or severe conditions. NSF H1 Registered. Packaged in 8 oz / 227 g "Brush In Cap" Cans, Part No. L0404-008.





## 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 CO <sub>2</sub> in 28 days or less
Readily Biodegradable (Pw1)	OECD 301B	Min 60% converted to CO <sub>2</sub> 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 CO <sub>2</sub> in 84 days
Non/Low Acute Toxicity LC50	US EPA LC50	Pass

## ECO-Responsible, Synthetic Fluids / Oils



### VGP COMPLIANCE STATEMENT

LUBRIPLATE BIO-SYNXTREME HF Series Hydraulic Fluids are Environmentally Acceptable Lubricants (EALs) according to the definitions and requirements of the US EPA 2013 Vessel General Permit, as described in VGP Section 2.2.9

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

These high performance hydraulic fluids are designed for demanding industrial and marine (VGP) 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). They do not break down to form sludge and they do not hydrolyze in the presence of water. They do not cause a sheen or discoloration on the surface of the water or adjoining shorelines. Rated "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. **(LUBRIPLATE HYDROFLUSH Recommended - See Page 9).**

### SYNXTREME AC Series: Polyolester (POE)-Based, 100% Synthetic Air 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: 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, Inherently Biodegradable, 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).

### BIO-SYNXTREME EGO-150: Environmentally Responsible, Ultimately Biodegradable (Pw1), Synthetic, Gear Oil.

This ultimately biodegradable, synthetic, gear oil is designed to be used in environmentally sensitive areas where demanding operating conditions are expected. It is recommended for a wide variety of gear box configurations including; helical, bevel helical and planetary gear reducers. It delivers outstanding extreme pressure and anti-wear performance and provides good thermal stability.

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 in 5 Gallon Pails and 55 Gallon Drums. See page 26 for more information and the package part number suffix.										
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 and 55 Gallon Drums. See page 26 for more information and the package part number suffix.										
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 Fluids are available in 5 Gallon Pails and 55 Gallon Drums. See page 26 for more information and the package part number suffix.										
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 available in 1 Gallon Jugs, 5 Gallon Pails and 55 Gallon Drums. See page 26 for more information and the package part number suffix.										
BIO-SYNXTREME EGO-150	L1027-	150	4	90	-	162 / 27	207	>410°F / >210°C	-	7°F / -14°C
*BIO-SYNXTREME EGO-150 is available in 5 Gallon Pails and 55 Gallon Drums. See page 26 for more information and the package part number suffix.										

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

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

These heavy-duty fluids are designed to perform in the most demanding hydraulic applications. They can withstand elevated temperatures and high pressures over extended periods. They provide 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. Free of zinc or silicone compounds.

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

Formulated with a "zinc-free" anti-wear additive system, these eco-friendly oils meet or exceed the performance requirements of conventional hydraulic oils while providing an additional level of environmental safety. Non-toxic to aquatic life, they exceed 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 available in 5 Gallon Pails and 55 Gallon Drums. See page 26 for more information and the package part number suffix.										
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
*Marine-Safe 32 through 68 is available in 5 Gallon Pails and 55 Gallon Drums. See page 26 for more information and the package part number suffix.										

## 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, 55 Gallon Drums and Spacecraft Bins. See page 26 for more information and the package part number suffix.										
UTF-BIO-BASED/GREEN	L1072-	46	1	75W	20	48 / 10	210	484°F / 251°C	-	-38°F / -39°C
*UTF-Bio-Based/Green is available in 5 Gallon Pails and 55 Gallon Drums. See page 26 for more information and the package part number suffix.										

### Biodegradable Penetrating Oil - Multi-Purpose Lubricating Fluid Spray:

See page 22 for information about this product.

## 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 (LC50). 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 TEMPERATURE RANGE MINIMUM	RECOMMENDED TEMPERATURE 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 is available in Cartridges (Package Pt. No. Suffix -098) and 120 lb Lined 1/4 Drums (Package Pt. No. Suffix -039).								

# Lubriplate® NSF H1 Registered, Food Grade Lubricants

Lubriplate's complete line of high-performance, NSF H1 Registered, Food Machinery Grade Lubricants is designed to provide total food processing and bottling plant lubrication capability. Manufactured under strict NSF/ISO 21469 Certified and ISO 9001 Registered quality assurance standards, these lubricants are formulated from the highest quality base stocks combined with state-of-the-art anti-wear additives. They deliver a number of significant, cost effective advantages as outlined on the chart below.

All Lubriplate H1 Lubricants are manufactured with ingredients that comply with FDA regulation 21 CFR 178.3570 for lubricants with incidental food contact. They meet NSF H1 safety standards and are authorized for use in federally inspected meat and poultry plants. Clean, safe and non-toxic, their use can eliminate lubrication as a critical control point in HACCP programs.



Select Lubriplate H1 Lubricants are formulated with LUBRI-ARMOUR® Anti-Microbial Additive. Developed to prevent the decomposition of lubricants caused by microorganisms, greases treated with LUBRI-ARMOUR® remain fresh and last longer in harsh food processing plant environments.



FEATURES	BENEFITS
<b>Advanced High-Performance Formulations</b>	Improved machinery life; decreased wear; reduced power consumption; extended lube intervals.
<b>NSF H1 Registered Products</b>	Assures compliance with USDA / FDA guidelines and HACCP programs.
<b>Multifunctional use</b>	Reduces, consolidates and simplifies lubricant inventories and reduces lubricant misapplication.
<b>Toll Free Technical Support 800-347-5343</b>	Quick response to your lubrication questions.
<b>Complimentary Plant Surveys</b>	Identify opportunities for lubricant inventory consolidation and improvements.
<b>No-charge Oil/Fluid and Grease Analysis</b>	Helps determine lubricant and/or machinery condition and corrective measures needed.

## F.D.A. CODES (CFR) FOR LUBRICANTS WITH INCIDENTAL FOOD CONTACT

<b>21.CFR 178.3570</b>	Ingredients used to manufacture H1 lubricants must comply with this code. / All Lubriplate H1 products comply with this code.
<b>21.CFR 178.3620</b>	Technical White Mineral Oil as a component of non-food articles intended for use in contact with food. / The FMO Series complies.
<b>21.CFR 172.878</b>	USP White Mineral Oil for direct contact with food. / Lubriplate FMO Series complies with this code.
<b>All of the mineral oil based products in the LUBRIPLATE H1 range are formulated with USP White Mineral Oil which is both the purest and highest quality base oil any manufacturer can use to formulate H1 lubricants.</b>	
<b>21.CFR 172.882</b>	Synthetic isoparaffinic hydrocarbons, i.e., PAO base stocks / Lubriplate SFGO Ultra Series, SFL Series and the SYNTAXREME FG Series.
<b>21.CFR 182</b> with 9 subheadings	Substances Generally Recognized As Safe, e.g., zinc oxide and tocopherols (Vitamin E.)

## NSF Registration Numbers and Category Codes for Lubriplate Food Machinery Lubricants.

LUBRIPLATE PRODUCT	NSF REG. NUMBER	CLASS CODE	LUBRIPLATE PRODUCT	NSF REG. NUMBER	CLASS CODE	LUBRIPLATE PRODUCT	NSF REG. NUMBER	CLASS CODE
3H DIRECT	158254	3H, H1	HTCL FG-68	143869	H1	SFL-00	113092	H1
CLEARPLEX	152478	H1	HTCL FG-220	143870	H1	SFL-0	119618	H1
CLEARPLEX -1	140575	H1	PAN DIVIDER OIL	139787	3H, H1	SFL-1	043677	H1
CLEARPLEX -2	129940	H1	PDO LIGHT	142304	3H, H1	SFL-2	113093	H1
CS-FG EP-2	151136	H1	PGO-FGL 150	141192	H1	GEN. PUR. FG SILICONE (AEROSOL)	126086	H1
FG COOKER OIL	122669	H1	PGO-FGL 220	141193	H1	SILICONE FLUID FG-350	138305	H1
FGL-00	043532	H1	PGO-FGL 320	141194	H1	SPECIAL COOKER CHAIN GREASE	120918	H1
FGL-0	043531	H1	PGO-FGL 460	141195	H1	SSO-FG-100	138390	H1
FGL-1	043534	H1	PGO-FGL 680	141196	H1	SSO-FG-150	138391	H1
FGL-2	043536	H1	PM-500	126122	H1	STO-FG	126120	H1
FGL-CC	043530	H1	PURE FLUSH	126121	H1	SUPER FGL-1 (AEROSOL)	126088	H1
FMO-45	122688	3H, H1	PURE TAC	043649	H1	SUPER FML-0	125742	H1
FMO-85	122674	3H, H1	PURE TAC LIGHT	141506	H1	SUPER FML-1	125740	H1
FMO-200	122689	3H, H1	RCO-68 FG	138533	H1	SUPER FML-2	125741	H1
FMO-350	122666	3H, H1, HT1	SEAMER OIL FG-100	142566	H1	SUPER FML-2 (AEROSOL)	126087	H1
FMO-500	122672	3H, H1, HT1	SEAMER OIL FG-150	143600	H1	SYNCOOL-FG	149789	H1
FMO-85-AW	122670	H1	SFGO ULTRA-7 (AEROSOL)	136601	H1	SYNFLUSH-FG	143394	H1
FMO-150-AW	132661	H1, HT1	SFGO ULTRA 7	125679	H1	SYN H-1 220	138317	H1
FMO-200-AW	122668	H1	SFGO ULTRA 15	138420	H1	SYN HTF LIGHT	148083	H1, HT1
FMO-350-AW	122665	H1	SFGO ULTRA 22	138421	H1	SYN MPFG-7	151874	H1
FMO 350 AW SPRAY	126089	H1	SFGO ULTRA 32	125680	H1, HT1	SYN ST HP H-1 SPECIAL SILICONE	142599	H1
FMO-500-AW	122664	H1	SFGO ULTRA 46	125678	H1	SYNTAXREME FG-0	137239	H1
FMO-500-AW-OR	124778	H1	SFGO ULTRA 68	125681	H1	SYNTAXREME FG-1	137238	H1
FMO-900-AW	122675	H1	SFGO ULTRA 100	125682	H1	SYNTAXREME FG-2	136212	H1
FMO-1100-AW	122687	H1	SFGO ULTRA 150	125683	H1	SYNTAXREME FG-2 (AEROSOL)	155548	H1
FMO-1700-AW	122667	H1	SFGO ULTRA 220	125539	H1	SYNTAXREME FG-0/220	149637	H1
FMO-2400-AW	122671	H1	SFGO ULTRA 320	125540	H1	SYNTAXREME FG-1/220	142237	H1
FMO-3800-AW	122673	H1	SFGO ULTRA 460	125541	H1	SYNTAXREME FG-2/220	142239	H1
FP-150	126123	H1	SFGO ULTRA 680	125542	H1	SYNTAXREME FRH1-46	153704	H1
FP-150-L	126124	H1	SFGO ULTRA 1000	125543	H1	SYNTAXREME HT MAX	153949	H1



**SFGO Ultra Series:** 100% Synthetic, NSF H1 Registered, High-Performance, Multi-Purpose Fluid Lubricants.

Formulated with 100% synthetic H1 fluids for a variety of demanding applications. They are outstanding lubricants for use under severe conditions subject to extremely high or low temperatures. They exhibit outstanding oxidation resistance and thermal stability capabilities. Recommended for air compressors, hydraulic systems, bearings, gearboxes, pumps and chains. Meets FDA 21 CFR 178.3570 and FDA 21 CFR 172.882 for applications where incidental contact with the edible product may occur. SFGO Ultra 220 and 460 pass 14 stages of the FZG Test. **Contains LUBRIPLATE's proprietary additive system AW/EP/FG ULTRA XTREMITY.**

**PGO-FGL Series:** Polyalkylene Glycol (PAG)-Based, Synthetic Gear Lubricants.

These extreme pressure lubricants are designed for use in helical, bevel helical, planetary and worm type gearboxes operating in the most demanding food manufacturing environments. Formulated with a high performance food grade additive package, these lubricants deliver outstanding protection against micropitting and wear as well as good corrosion protection and thermal stability.

**SYNCOOL FG:** NSF H1 Registered, 100% Synthetic, Polyglycolester (PGE) Air Compressor Fluid.

Recommended for use in high performance rotary screw and rotary vane air compressors where high operating temperatures are present. State of the art additives enhance its inherent outstanding performance characteristics. Readily biodegradable. NSF H1 registered, food machinery grade.

**SYNXTREME FRH1-46:** NSF H1 Registered, 100% Synthetic, FM Approved, Fire Resistant, Hydraulic Fluid.

A high performance hydraulic fluid designed for demanding industrial and food processing applications requiring fire resistance, and excellent anti-wear properties over wide temperature ranges. NSF H1 registered, this product complies with CFR 21, section 178.3570.



**SSO-FG 100 & SSO-FG 150:** 100% Synthetic Lubricants for Angelus and Zacmi Seamers and Canning Equipment.

These high quality, fully synthetic lubricants are designed for use in Angelus and Zacmi seaming/canning equipment and related applications. Formulated with premium additives, these high performance lubricants provide excellent anti-wear, anti-rust and anti-corrosion protection under extreme conditions encountered in the food processing industry such as water, steam and caustic solution wash downs.

**SYN MPFG-7:** NSF H1 Registered, 100% Synthetic, Polyalphaolefin (PAO) Based, Fluid Lubricant.

Recommended to lubricate plastic modular wear strips and sprockets; as a barrier fluid; and for applications where a low temperature fluid is required.

LUBRIPLATE PRODUCT	*PRODUCT PART NO.	ISO GRADE	AGMA NO.	SAE GEAR OIL NO.	SAE NO.	VISCOSITY cSt @40°C / 100°C	VISCOSITY SUS @100°F / 210°F	VISCOSITY INDEX	FLASH POINT	FIRE POINT	POUR POINT
SFGO Ultra-7	L0912-	7	-	-	5W	7 / 2	51 / 34	104	305°F / 152°C	400°F / 204°C	-65°F / -54°C
SFGO Ultra-15	L0930-	15	-	-	5W	16 / 4	89 / 39	122	405°F / 207°C	435°F / 224°C	-60°F / -51°C
SFGO Ultra-22	L0931-	22	-	-	5W	20 / 4	106 / 41	128	405°F / 207°C	430°F / 221°C	-65°F / -54°C
SFGO Ultra-32	L0915-	32	-	75	10	30 / 6	160 / 46	135	475°F / 246°C	515°F / 268°C	-58°F / -50°C
SFGO Ultra-46	L0916-	46	1	80	20	50 / 8	220 / 52	134	480°F / 249°C	520°F / 271°C	-45°F / -43°C
SFGO Ultra-68	L0917-	68	2	80	20	67 / 10	325 / 59	141	495°F / 257°C	530°F / 277°C	-45°F / -43°C
SFGO Ultra-100	L0983-	100	3	85	30	98 / 14	556 / 77	145	485°F / 252°C	520°F / 271°C	-43°F / -42°C
SFGO Ultra-150	L0984-	150	4	90	40	146 / 19	762 / 97	141	495°F / 257°C	525°F / 274°C	-43°F / -42°C
SFGO Ultra-220	L0985-	220	5	90	50	222 / 26	1088 / 128	146	520°F / 271°C	540°F / 282°C	-42°F / -41°C
SFGO Ultra-320	L0986-	320	6	140	60	318 / 34	1557 / 161	152	520°F / 271°C	545°F / 285°C	-40°F / -40°C
SFGO Ultra-460	L0987-	460	7	140	-	452 / 46	2143 / 211	159	480°F / 249°C	515°F / 268°C	-40°F / -40°C
SFGO Ultra-680	L0988-	680	8	250	-	623 / 57	3289 / 275	157	500°F / 260°C	545°F / 285°C	-45°F / -43°C
SFGO Ultra-1000	L0989-	1000	-	-	-	950 / 77	4900 / 372	157	500°F / 260°C	545°F / 285°C	-35°F / -37°C

\*SFGO Ultra Fluids are available in Jugs, Pails, 1/4 Drums & Drums. See page 26 for more information and package part number suffix.

PGO-FGL-150	L0810-	150	4	90	40	150 / 25	-	232	543°F / 284°C	-	-53°F / -47°C
PGO-FGL-220	L0811-	220	5	90	50	227 / 42	-	242	543°F / 284°C	-	-44°F / -42°C
PGO-FGL-320	L0812-	320	6	140	60	339 / 61	-	252	540°F / 282°C	-	-38°F / -39°C
PGO-FGL-460	L0813-	460	7	140	-	477 / 83	-	262	543°F / 284°C	-	-33°F / -36°C
PGO-FGL-680	L0815-	680	8	250	-	725 / 122	-	272	549°F / 287°C	-	-27°F / -33°C

\*All PGO-FGL Series Fluids are available in Jugs, Pails and Drums. PGO-FGL-460 is also available in Quart Bottles. See page 26 for more information and package part number suffix.

SYNCOOL FG	L0963-	46	-	20	-	41 / 10	-	178	530°F / 277°C	595°F / 313°C	-45°F / -43°C
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\*Syncool FG Fluid is available in Pails, Drums and Bulk Bins. See page 26 for more information and package part number suffix.

SYNXTREME FRH1-46	L1024-	46	-	20	-	50 / 10	-	176	594°F / 312°C	600°F / 316°C	-42°F / -41°C
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\*Synxtreme FRH1-46 Fluid is available in Pails, and Drums. See page 26 for more information and package part number suffix.

SSO-FG 100	L0956-	100	3	85	40	105 / 16	556 / 77	156	515°F / 268°C	560°F / 293°C	-65°F / -51°C
SSO-FG 150	L0957-	150	4	90	50	151 / 20	762 / 97	156	515°F / 268°C	560°F / 293°C	-60°F / -51°C

\*SSO-FG 100 and SSO-FG 150 are available in Drums. See page 26 for more information and package part number suffix.

SYN MPFG-7	L1008-	7	-	-	5W	6.67 / -	47.5 / 33	-	374°F / 190°C	-	-65°F / -54°C
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\*SYN MPFG-7 is available in Drums. See page 26 for more information and package part number suffix.

## ■ Synthetic, High-Temperature Oven Chain Lubricants NSF H1 Registered

### HTCL-FG 68 and HTCL-FG 220: 100% Synthetic, Polyol Ester (POE)-Based, Oven Chain Lubricants.

These 100% synthetic, Polyol Ester (POE)-Based fluids are specifically designed for use on oven chains in food manufacturing operations where incidental food contact is a possibility. Recommended for use on bakery oven chains and other oven chain applications, including; drying oven chains, tender frame chains, heat-treating chains and paint curing oven chains. The combination of an ashless additive system and the synthetic ester base provide protection against wear, rust, oxidation and corrosion. They eliminate carbon build-up on chains and help maintain a clean lubricated surface. HTCL-FG 68 can be fed through micro lube systems, spray systems, mist systems, drip bottle systems and can be hand applied. Free of harmful VOC's which pollute the atmosphere. Superior film strength reduces oil consumption and reduces smoke. High auto-ignition temperatures (>700°F / 371°C) reduce the risk of oven fires.

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
HTCL-FG 68	L0946-	68	2	80	-	68 / 11	-	575°F / 302°C	-	-
HTCL-FG 220	L0947-	220	5	90	-	224 / 20	-	575°F / 302°C	-	-

\*HTCL-FG 68 is available in Pails and Drums. HTCL-FG 220 is available in Jugs, Pails and Drums. See page 26 for more information and package part number suffix.

## ■ Synthetic Food Machinery Grade Greases NSF H1 Registered

### SYNXTREME FG-Series:

Synthetic, Calcium Sulfonate Complex, Food Machinery Grade Greases.

NSF H1 registered, high performance, multi-purpose, synthetic, food machinery grade greases. Provides long lasting, anti-wear and extreme pressure protection. Highly resistant to water and caustic solution wash downs. Provides excellent high and low temperature performance. SYNXTREME FG/220 and SYNXTREME FG/460 greases are formulated with a heavier (ISO 220 and ISO 460 Grade) base fluids and are recommended for equipment operating under high temperatures or extreme conditions.

SYNXTREME FG-Series Greases Contain LUBRI-ARMOUR Anti-Microbial Additive.



### SFL Series: Synthetic, Aluminum Complex, Food Machinery Grade Greases.

This series provides an exceptionally wide operating temperature range, high shear stability, excellent water resistance, and load carrying properties. For use in freezers and other cold temperature applications or in areas subject to both cold and elevated temperatures. Available in 4 densities for a variety of applications. Contains LUBRI-ARMOUR Anti-Microbial Additive.

### SYN ST High Performance H-1 Special: Food Machinery Grade Silicone Lubricant.

Manufactured with PTFE, this N.L.G.I. No. 3, silicone lubricant is compatible with most rubber and other non-silicone elastomers. Recommended for use on O-rings and seals on bottling, dairy, food processing and dispensing equipment. It is highly resistant to hot water, steam and alkaline solutions. This product is not compatible with oxygen (O2) and should not be recommended for any application where there is a possibility of this product coming in contact with any form of oxygen (both liquid and gas).

### SYNXTREME HT MAX: Ultra High Temperature, Perfluoropolyether PFPE-Based Grease.

An advanced, PTFE thickened, perfluoropolyether PFPE-based grease that is recommended for high-temperature applications up to 550°F / 288°C and applications where chemical inertness and solvent resistance is required. Provides extremely long service life and extended lubrication intervals. Chemically inert, it is unaffected by strong acids and bases and is not attacked by solvents including fuels. It is also effective for oxygen service applications.

LUBRIPLATE PRODUCT	*PRODUCT PART NO.	GREASE TYPE THICKENER	NLGI GRADE	BASE OIL TYPE	BASE OIL VIS. ISO cSt @ 40°C	RECOMMENDED TEMPERATURE RANGE MINIMUM	RECOMMENDED TEMPERATURE RANGE MAXIMUM	ASTM DROP POINT
SYNXTREME FG-0	L0307-	Calcium Sulfonate Complex	0	Synthetic PAO	100	-45°F / -43°C	390°F / 199°C	>600°F / 316°C
SYNXTREME FG-1	L0306-	Calcium Sulfonate Complex	1	Synthetic PAO	100	-45°F / -43°C	440°F / 227°C	>600°F / 316°C
SYNXTREME FG-2	L0305-	Calcium Sulfonate Complex	2	Synthetic PAO	100	-45°F / -43°C	450°F / 232°C	>600°F / 316°C
SYNXTREME FG-0/220	L0314-	Calcium Sulfonate Complex	0	Synthetic PAO	220	-40°F / -40°C	440°F / 227°C	>600°F / 316°C
SYNXTREME FG-1/220	L0311-	Calcium Sulfonate Complex	1	Synthetic PAO	220	-40°F / -40°C	440°F / 227°C	>600°F / 316°C
SYNXTREME FG-2/220	L0309-	Calcium Sulfonate Complex	2	Synthetic PAO	220	-40°F / -40°C	450°F / 232°C	>600°F / 316°C
SYNXTREME FG-00/460	L0324-	Calcium Sulfonate Complex	00	Synthetic PAO	460	-35°F / -37°C	410°F / 210°C	550°F / 288°C
SYNXTREME FG-0/460	L0322-	Calcium Sulfonate Complex	0	Synthetic PAO	460	-35°F / -37°C	450°F / 232°C	>600°F / 316°C
SYNXTREME FG-1/460	L0321-	Calcium Sulfonate Complex	1	Synthetic PAO	460	-35°F / -37°C	460°F / 238°C	>600°F / 316°C
SYNXTREME FG-2/460	L0320-	Calcium Sulfonate Complex	2	Synthetic PAO	460	-35°F / -37°C	470°F / 243°C	>600°F / 316°C

\*SYNXTREME FG Series Greases are available in Cartridges, Pails, 1/4 Drums, Drums & Perma Lubricators. See pages 26 and 27 for more information and package part number suffix.

SFL-00	L0195-	Aluminum Complex	00	Synthetic PAO	39	-60°F / -51°C	300°F / 149°C	400°F / 204°C
SFL-0	L0196-	Aluminum Complex	0	Synthetic PAO	39	-60°F / -51°C	325°F / 163°C	425°F / 218°C
SFL-1	L0197-	Aluminum Complex	1	Synthetic PAO	39	-60°F / -51°C	350°F / 177°C	450°F / 232°C
SFL-2	L0198-	Aluminum Complex	2	Synthetic PAO	219	-40°F / -40°C	400°F / 204°C	500°F / 260°C

\*SFL Series Greases are available in Cartridges, Pails, 1/4 Drums, Drums & Perma Lubricators. See pages 26 and 27 for more information and package part number suffix.

SYN-ST H-1 Spec	L0365-	PTFE	3	Silicone	500	-58°F / -50°C	300°F / 149°C	500°F / 260°C
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\*SYN ST High Performance H-1 Special is available in Tubes, Cartridges and Pails. See page 26 for more information and package part number suffix.

SYNXTREME HT MAX	L0331-002	PTFE	2	Perfluoropolyether PFPE	488	-4°F / -20°C	550°F / 288°C	>600°F / >316°C
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\*SYNXTREME HT MAX is available in Single Cartridges - Part No. L0331-002.

**FMO-AW Series: Multi-Purpose, Anti-Wear Fortified, Food Machinery Grade, USP White Mineral Oils.**

These super multi-purpose, anti-wear fortified, USP White mineral oil based lubricants are manufactured in ten ISO grades for a wide variety of applications. This series is also available in an orange color which helps in leak detection. FMO-1100AW and FMO-2400AW pass 12 stages of the FZG test. **Contains LUBRIPLATE's proprietary additive system AW/EP/FG ULTRA XTREMITY.**

**FMO Series 45 thru 500: Multi-Purpose, Direct Contact, USP White Mineral Oils. (NSF H1 & 3H Registered)**

These multi-purpose, pure USP white mineral oils offer the utmost in purity. They comply with FDA regulations 21.CFR 178-3570, 21.CFR 178-3620 and 21.CFR 172-878 and are NSF H1 & 3H registered for use in applications where there is direct contact with the edible product.

**FP-150 and FP-150L: Clear, Tacky, Multi-Purpose Oils.**

These clear, tacky, adhesive, NSF H1 Registered oils resist heavy water washdown and steam. For helical gearboxes, chains, linkages, cams, and slides and wherever a dripless, adhesive fluid lubricant is desired.

**Food Grade Cooker Oil: For Cookers and Sterilizers.**

This zinc free, NSF H1 Registered oil is designed for use in the Manzel Lubricators and Micro-valve systems found on most cookers and sterilizers used in canning operations and other applications involving high temperature and high humidity conditions. **Contains LUBRIPLATE's proprietary additive system AW/EP/FG ULTRA XTREMITY.**

**Seamer Oil FG Series: Food Grade, USP Mineral Oils For Can Seaming Equipment.**

These high performance, USP mineral oil-based, food grade seamer oils are specifically designed to lubricate can seaming machines with once-through oil systems as well as those that utilize oil re-circulating/filtration systems. Recommended for Angelus Seamer Models 61H, 120L, 121L, 140S & 180S.

**STO-FG Oil: For Bottle Filling Machines.**

A non-corrosive, NSF H1 Registered, food machinery grade oil for lubricating stirrups on bottle filling machines.

**PM 500 White Oil: Contains Emulsifying Agents.**

This oil contains emulsifying agents that wet the lubricated surfaces and provide an oily film. Used very successfully on pear machines.

**PDO Light and Pan Divider Oil: USP White Mineral Oils For Pan Divider Applications. (NSF H1 & 3H Registered)**

These oils meet and exceed FDA regulation 21 CFR 172.878 for direct contact with food. Recommended for pan divider oil applications.

LUBRIPLATE PRODUCT	*PRODUCT PART NO.	ISO VIS. GRADE	AGMA NO.	SAE GEAR OIL NO.	SAE NO.	VISCOSITY cSt @40°C / 100°C	VISCOSITY SUS @100°F / 210°F	VISCOSITY INDEX	FLASH POINT	FIRE POINT	POUR POINT
<b>FMO-85 AW</b>	L0880-	22	-	-	5W	21 / 4	102 / 40	107	345°F / 174°C	365°F / 185°C	-30°F / -34°C
<b>FMO-150 AW</b>	L0879-	32	-	-	10W	31 / 5	146 / 44	107	400°F / 204°C	450°F / 232°C	-20°F / -29°C
<b>FMO-200 AW</b>	L0881-	46	1	75	10	47 / 7	196 / 48	103	455°F / 235°C	490°F / 254°C	-15°F / -26°C
<b>FMO-350 AW</b>	L0882-	68	2	80	20	65 / 9	347 / 55	102	480°F / 249°C	515°F / 268°C	-10°F / -23°C
<b>FMO-500 AW</b>	L0883-	100	3	80	30	95 / 11	545 / 70	101	500°F / 260°C	555°F / 291°C	5°F / -15°C
<b>FMO-900 AW</b>	L0884-	150	4	90	40	164 / 16	856 / 83	102	475°F / 246°C	530°F / 277°C	5°F / -15°C
<b>FMO-1100 AW</b>	L0886-	220	5	90	50	207 / 18	1126 / 97	99	455°F / 235°C	510°F / 266°C	10°F / -12°C
<b>FMO-1700 AW</b>	L0887-	320	6	140	60	301 / 23	1730 / 120	96	440°F / 227°C	490°F / 254°C	10°F / -12°C
<b>FMO-2400 AW</b>	L0885-	460	7	140	70	429 / 30	2350 / 142	98	445°F / 229°C	490°F / 254°C	15°F / -10°C
<b>FMO-3800 AW</b>	L0888-	680	8	250	-	700 / 41	3864 / 198	98	425°F / 218°C	475°F / 246°C	20°F / -7°C
*FMO-AW Series Oils are available in Bottles, Jugs, Pails, 1/4 Drums, Drums & Perma Lubricators. See pages 26 and 27 for more information and package part number suffix.											
<b>FMO-45</b>	L0737-	5	-	-	-	4 / -	40 / -	-	265°F / 129°C	-	-45°F / -43°C
<b>FMO-85</b>	L0740-	15-22	-	-	5W	19 / 4	100 / 40	122	335°F / 168°C	370°F / 188°C	-45°F / -43°C
<b>FMO-200</b>	L0739-	46	1	75	10	41 / 6	200 / 47	105	405°F / 207°C	433°F / 223°C	-25°F / -32°C
<b>FMO-350</b>	L0741-	68	2	80	20	68 / 8	347 / 55	104	435°F / 224°C	490°F / 254°C	-10°F / -23°C
<b>FMO-500</b>	L0742-	100	3	80	30	109 / 12	545 / 70	101	510°F / 266°C	555°F / 290°C	0°F / -18°C
*FMO Series Oils are available in Bottles, Jugs, Pails, 1/4 Drums, Drums & Perma Lubricators. See pages 26 and 27 for more information and package part number suffix.											
<b>FP-150</b>	L0735-	460	7	140	70	367 / 25	1950 / 127	93	395°F / 202°C	455°F / 235°C	0°F / -18°C
<b>FP-150L</b>	L0736-	100	3	80	30	103 / 12	510 / 67	108	410°F / 210°C	450°F / 232°C	-5°F / -21°C
*FP-150 and FP-150L are available in Jugs, Pails, 1/4 Drums & Drums. See page 26 for more information and package part number suffix.											
<b>FG Cooker Oil</b>	L0701-	150	4	90	40	155 / 16	795 / 82	104	475°F / 246°C	525°F / 274°C	5°F / -15°C
*FG Cooker Oil is available in Drums. See page 26 for more information and package part number suffix.											
<b>Seamer Oil FG-100</b>	L0908-	100	3	80	30	109 / 12	-	102	495°F / 257°C	545°F / 285°C	0°F / -18°C
<b>Seamer Oil FG-150</b>	L0909-	150	4	90	40	151 / 14	-	99	450°F / 232°C	540°F / 282°C	0°F / -18°C
*Seamer Oil FG-100 and Seamer Oil FG-150 is available in Drums. See page 26 for more information and package part number suffix.											
<b>STO-FG</b>	L0863-	68	2	80	20	67 / 13	340 / 70	105	425°F / 218°C	485°F / 252°C	-15°F / -26°C
*STO-FG is available in Pails & Drums. See page 26 for more information and package part number suffix.											
<b>PM-500</b>	L0192-	100	3	80	30	101 / 11	560 / 64	86	420°F / 216°C	485°F / 252°C	-5°F / -21°C
*PM-500 is available in Pails, 1/4 Drums & Drums. See page 26 for more information and package part number suffix.											
<b>PDO Light</b>	L0853-	7	-	-	-	6.7 - 10.5	-	83	350°F / 177°C	-	-
<b>Pan Divider Oil</b>	L0747-	15	-	-	5W	15.6	85 / 38	-	375°F / 190°C	-	10°F / -12°C
*PDO Light and Pan Divider Oil are available in Pails & Drums. See page 26 for more information and package part number suffix.											

**FGL Series:**

High Performance, Multi-Purpose, Aluminum Complex, Food Grade Greases.

Designed to meet the demands of food and beverage industry plant engineers who want NSF H1 Registered greases to totally replace H2 greases. Fortified with anti-wear, anti-rust and anti-corrosion additives which combine to yield excellent shear stability, load carrying capability and resistance to water and caustic wash down. Available in four NLGI densities for a variety of applications. FGL-CC is for centralized/automatic lubrication systems on high speed can closing equipment. **Lubriplate FGL Series Greases Contain LUBRI-ARMOUR Anti-Microbial Additive.**



**CS-FG EP-2:**

High-Performance, Calcium Sulfonate Complex, Food Grade Grease.

This high-performance, multi-purpose, calcium sulfonate complex thickened grease offers superior protection from rust and corrosion, excellent resistance to water wash off and outstanding high-temperature properties. NSF H1 Registered. **Contains LUBRI-ARMOUR Anti-Microbial Additive.**

**FML Series:**

Multi-Purpose, Anhydrous Calcium, Food Grade Greases.

These very popular, white, multi-purpose greases have been leaders in the food processing industry for years. Available in 3 NLGI grades for a wide variety of applications. NSF H1 Registered. **Contains LUBRI-ARMOUR Anti-Microbial Additive.**

**PURE TAC and PURE TAC LIGHT:**

Tacky, Adhesive, Aluminum Complex, Food Grade Greases.

These tacky, adhesive, highly water resistant, NSF H1 Registered greases are designed for applications subjected to chemically treated water, heat and steam. For all types of medium to slow speed bearings, open gears and hydrostatic cooker chains. **PURE TAC and PURE TAC LIGHT Contain LUBRI-ARMOUR Anti-Microbial Additive.**

**CLEARPLEX Series:**

Clear, Multi-Purpose, Aluminum Complex, Food Grade Greases.

Manufactured with a non-zinc oxide anti-wear additive, these aluminum complex thickened, NSF H1 registered greases are engineered for use in plain and anti-friction bearings in the food processing and beverage processing industry. CLEARPLEX-1 is excellent for the lubrication systems of high speed can seaming and closing equipment. CLEARPLEX is available in 4 oz tubes and is an excellent pre-lube for assembly of machinery, bearings, O-rings, seals, gaskets, guides, sliding surfaces, valves, etc. **All CLEARPLEX Series greases contain LUBRI-ARMOUR Anti-Microbial Additive.**



**3H DIRECT:**

NSF H1 & 3H Registered, Direct Contact, Food Grade Grease.

3H DIRECT food machinery lubricant is NSF H1 & 3H registered for use in applications where there is direct contact with the edible product.

LUBRIPLATE PRODUCT	*PRODUCT PART NO.	GREASETYPE THICKENER	NLGI GRADE	BASE OIL TYPE	BASE OIL VIS. cSt @ 40°C	RECOMMENDED TEMPERATURE RANGE MINIMUM	RECOMMENDED TEMPERATURE RANGE MAXIMUM	ASTM DROP POINT
FGL-00	L0226-	Aluminum Complex	00	USP White Mineral Oil	120	-0°F / -18°C	300°F / 149°C	410°F / 210°C
FGL-CC	L0229-	Aluminum Complex	0/00	USP White Mineral Oil	120	-10°F / -23°C	350°F / 177°C	450°F / 232°C
FGL-0	L0230-	Aluminum Complex	0	USP White Mineral Oil	120	-0°F / -18°C	335°F / 168°C	435°F / 224°C
FGL-1	L0231-	Aluminum Complex	1	USP White Mineral Oil	120	-0°F / -18°C	360°F / 182°C	460°F / 238°C
FGL-2	L0232-	Aluminum Complex	2	USP White Mineral Oil	160	10°F / -12°C	400°F / 204°C	515°F / 268°C
*FGL Series greases are available in Tubs, Cartridges, Pails, 1/4 Drums, Drums & Perma Lubricators. See pages 26 and 27 for more information and package part number suffix.								
CS-FG EP-2	L0138-	Calcium Sulfonate Complex	2	USP White Mineral Oil	105	10°F / -12°C	400°F / 204°C	600°F / 316°C
*CS-FG EP-2 is available in Cartridges, Pails, 1/4 Drums & Drums. See page 26 for more information and package part number suffix.								
FML-0	L0143-	Anhydrous Calcium	0	USP White Mineral Oil	144	10°F / -12°C	190°F / 88°C	280°F / 138°C
FML-1	L0144-	Anhydrous Calcium	1	USP White Mineral Oil	144	10°F / -12°C	200°F / 93°C	285°F / 141°C
FML-2	L0145-	Anhydrous Calcium	2	USP White Mineral Oil	144	10°F / -12°C	200°F / 93°C	285°F / 141°C
*FML Series greases are available in Tubs, Cartridges, Pails, 1/4 Drums, Drums & Perma Lubricators. See pages 26 and 27 for more information and package part number suffix.								
PURE TAC	L0236-	Aluminum Complex	2	USP White Mineral Oil	1187	20°F / -7°C	400°F / 204°C	520°F / 271°C
PURE TAC LT.	L0235-	Aluminum Complex	1.5	USP White Mineral Oil	600	10°F / -12°C	388°F / 198°C	446°F / 230°C
*PURE TAC & PURE TAC LIGHT are available in Cartridges, Pails, 1/4 Drums & Drums. PURE TAC is available in Perma Lubricators. See pages 26 and 27 for package part number suffix.								
CLEARPLEX	L0353-082	Aluminum Complex	1	USP White Mineral Oil	100	0°F / -18°C	360°F / 182°C	465°F / 240°C
CLEARPLEX-1	L0350-	Aluminum Complex	1	USP White Mineral Oil	100	0°F / -18°C	360°F / 182°C	465°F / 240°C
CLEARPLEX-2	L0351-	Aluminum Complex	2	USP White Mineral Oil	150	10°F / -12°C	400°F / 204°C	450°F / 232°C
*CLEARPLEX is available in 4 oz Tubes Pt. No. L0353-082, CLEARPLEX-1 and 2 are available in Cartridges, Pails, 1/4 Drums, Drums & Perma Lubricators. See pages 26 and 27 for package part number suffix.								
3H DIRECT	L0174-	Inorganic	2	USP White Mineral Oil	75	20°F / -7°C	400°F / 204°C	>500°F / >260°C
*3H DIRECT is available in Cartridges. See page 26 for more information and package part number suffix.								

## ■ Food Machinery Grade Spray Lubricants NSF H1 Registered

### SYNXTREME FG-2 Spray:

A multi-purpose, synthetic, high temperature, extreme pressure, water resistant, NSF H1 registered food machinery lubricant. Provides long lasting protection against friction, wear and corrosion.

**Contains LUBRI-ARMOUR Anti-Microbial Additive.**  
11 oz / 312 g aerosol can. Part No. L0305-063.

**FGL-1 Spray:** A NSF H1 lubricant in handy, easy to use spray can. Quick and clean applications. Fortified with anti-wear, anti-rust, and anti-corrosion additives.

**Contains LUBRI-ARMOUR Anti-Microbial Additive.**  
11 oz / 312 g aerosol can. Part No. L0231-063.



**FMO-350-AW Spray:** A multi-purpose, Anti-wear fortified, food machinery oil, in easy to apply spray can. For use where a Class H1 oil is required. Packed in 12 oz / 340 g aerosol can. Part No. L0882-063.

**SFGO Ultra-7 Spray:** A multi-purpose, synthetic, chain and penetrating fluid spray lubricant, for use on bottling, dairy and food processing machinery. For chains, slides, tools and general lubrication. 11 oz / 312 g aerosol can. Part No. L0912-063.

**Food Grade Silicone Lubricant:** A multi-purpose, H1 registered, silicone lubricant for use on bottling, dairy and food processing machinery. For slides, chains, O-rings, rubber seals and general lubrication. Packed in 9 OZ. / 269 g spray can. Part No. L0723-063.

**FP-150 Spray:** An NSF H1 registered food grade fluid lubricant for numerous general oiling applications at food, beverage and pharmaceutical processing facilities. It is a clear, thick/tacky adherent fluid especially suitable for proofer oven chains. 11 oz / 312 g aerosol can. Part No. L0735-063.

**Super FML-2 Spray:** A Class H1 white lubricant in handy, easy to use spray can. For use in food processing operations where a Class H1 lubricant is required. **Contains LUBRI-ARMOUR Anti-Microbial Additive.** 11 oz / 312 g aerosol can. Part No. L0145-063.

**FMO-85-AW Spray:** A multi-purpose Class H1 oil. Packed in 14 oz / 414 ml non-aerosol pump spray bottle. Part No. L0880-067.

## ■ Cleansing, Flushing and Lubricating Fluid / Oil NSF H1 Registered

**Syn Flush FG:** A 100% synthetic, modern technology product designed to clean various pieces of equipment where a switch from an H2 to an NSF H1 Registered product is required. Costly downtime can be avoided as it cleans internally without unit tear down. It is compatible with Synthetic Polyalphaolefin, Polyolesters, Di-esters, Polyalkylene Glycols (PAGs) as well as mineral based fluids; therefore it may be used when switching from many types of fluids without leaving behind incompatible residue. NSF H1 Registered. Product Part No. L0961-. Available in bottles, pails & drums. See page 26 for package part number suffix.

**Pure Flush:** This NSF H1 Registered, lubricating, flushing and cleansing oil is to be used along with the existing lubricant to clean equipment without dismantling. It can be used to clean and flush bearings, gear cases, hydraulic systems, centralized lubricating systems, air lines, chains and air tools. It is fully compatible with petroleum based lubricants and most petroleum compatible synthetics. Product Part No. L0816-. Available in bottles, jugs, pails, 1/4 drums & drums. See page 26 for package part number suffix.

## ■ Food Machinery Oils Class H2\*\*

**No. 72-C Oil:** Class H2\*\* oil, for use as a steam peeler oil as it provides an oiliness film which prevents chatter.

**No. 78 Cooker Oil:** For use in Manzel lubricators for A-B cookers and sterilizers, FMC cookers. Corrosion and oxidation resistant.

**STO-4 Oil:** Special, non-corrosive oil for lubricating stirrups on bottle filling machines. Class H2.\*\*

LUBRIPLATE PRODUCT	*PRODUCT PART NO.	ISO GRADE	AGMA NO.	SAE GEAR OIL NO.	SAE NO.	VISCOSITY cSt @40°C / 100°C	VISCOSITY SUS @100°F / 210°F	VISCOSITY INDEX	FLASH POINT	FIRE POINT	POUR POINT
72-C	L0703-	150	4	90	40	151 / 13	750 / 75	110	490°F / 254°C	520°F / 271°C	15°F / -9°C
78	L0700-	150	4	90	40	164 / 15	850 / 82	99	475°F / 246°C	565°F / 296°C	-20°F / -29°C
STO-4	L0860-	46	1	75	20	45 / -	255 / 47	70	320°F / 160°C	370°F / 188°C	-30°F / -34°C

\*All H-2 Class Oils are available in Drums. No. 78 and STO-4 are also available in Pails. See page 26 for package part number suffix.

## Multi-Purpose Spray Lubricants

### Chain & Cable Fluid - Penetrating Oil:

A superior, cleansing, non-gumming penetrating oil for wire rope, chains, cables and general lubrication. Prevents rust and corrosion and protects brightwork. Loosens rusty nuts and bolts. Excellent drilling, tapping, and sawing oil. 11 OZ. / 312 g. spray can. Part No. L0135-063.

### Gear Shield Extra Heavy:

A tough, tacky, extreme pressure, water resistant grease developed for lubrication of open gears, slides, pins and other applications where an adhesive lubricant is needed. Excellent for fifth wheel applications. 11 OZ. / 312 g. spray can. Part No. L0152-063.

### Spray Lube `A` White Lithium Grease:

A multi-purpose, white lithium-based lubricant of medium density. Sprays like fluid, congeals to a grease. Excellent for latches, locks, hinges, battery terminals and other hardware. 11 OZ. / 312 g. spray can. Part No. L0034-063.

### X-357 - Extreme Pressure Lubricant:

An extreme pressure lubricant that penetrates and adheres. Water resistant and unaffected by temperature extremes. For use on pintle hooks, slide axles, open gears, fifth wheels. Contains moly-disulfide. Packed in 11 OZ. / 312 g. spray can. Part No. L0149-063.

### ECO-FRIENDLY Biodegradable Penetrating Oil Multi-Purpose Lubricating Fluid:

An environmentally friendly, biodegradable, USDA certified 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.



### Marine & Auto Guard:

Multi-purpose penetrating oil. An excellent "wet start" product. Spray on wet plug wires and distributor cap. Excellent moisture displacement properties. Prevents rust and corrosion. Excellent fogging oil. 12 OZ. / 340 g. spray can. Part No. L0774-063.

### Oil Well In a Bottle™:

An excellent multi-purpose, penetrating oil ideal for slides, hinges, rollers, cables, frozen nuts and bolts. Prevents rust and corrosion. Moisture displacing agent works on wet ignition for "wet start." Packed in 14 OZ. / 414 ml. non-aerosol, hand pump, spray bottle. Part No. L0188-067.

### NSF H1 Registered, Food Machinery Grade Spray Lubricants:

See page 21 for information on these lubricants.



## Metalworking Fluids

### Metalworking Fluid Aerosol:

A specially developed product for metalworking operations. Excellent for drilling, tapping, sawing, and grinding. Packed in handy 11 OZ. / 312 g. spray can. Part No. L0185-063.

**Darl No. 2 Cutting Oil:** Multi-purpose dark cutting oil for all types of machining operations on a wide range of metals including steel, copper, brass, and aluminum. \*Product Part No. L0520-.

**No. 405 Dark Cutting Oil:** A Heavy-duty, dark cutting oil recommended for difficult machining operations. Excellent for high carbon steels, alloys, and stainless steels. Not recommended for brass, bronze, copper, or aluminum. \*Product Part No. L0587-.

**Flokool XX Cutting Oil:** Multi-purpose cutting oil for high speed machining operations. Appears transparent on the workpiece and will drain off the completed parts quickly. Not recommended for brass, bronze, or copper. \*Product Part No. L0530-.

**No. 35 Soluble Oil:** Multi-purpose, water soluble cutting oil. Forms a milky white emulsion that does not readily decompose. \*Product Part No. L0576-.

**Cut-n-Cool:** Heavy duty, water soluble cutting oil fortified with both sulfur and chlorine which delivers substantially longer tool life, improved finish, and more accurate cuts. May stain brass, bronze, and copper if not cleaned off work shortly after use. \*Product Part No. L0514-.



## ■ Automotive Lubricants

### Lubriplate No. 105 Motor Assembly Grease:

A smooth light-bodied grease which contains a **zinc-oxide anti-wear additive** made especially for motor assembly and engine rebuilding. This product prevents "Dry Start." It provides necessary lubrication during initial start up before the motor oil has circulated. Prevents damage from scuffing scoring and friction. Protects freshly machined engine parts from rust and corrosion. Packed in 10 oz / 284 g plastic tube. Part No. L0034-094.

### Wheel Bearing Grease:

A superior, long lasting, water resistant, extreme pressure, wheel bearing grease. Available in 16 oz. Plastic Tubs, Part No. L0220-004, as well as 6 lb Tubs, Pails, 1/4 Drums and Drums. See page 26 for package part number suffix.

### Special Auto Marine Grease:

A super multi-purpose, high temperature, water repellent, extreme pressure grease for automotive and marine uses. Available in 16 oz. Tubs Part No. L0206-004 and Cartridges Part No. L0206-098.

### No. 105 General Purpose Grease In Small Tubes:

The original white grease in handy tubes. Ideal for locks, latches, hinges, wiper mechanisms, speedometer cables, or anywhere you need a light-bodied, grease type lubricant. Available in 1.75 oz. Tubes Part No. L0034-086 and 3/8 oz. Mini-Tubes (Blister Pack) Part No. L0034-079.

### No. 110 Brake Lubricant:

This water repellent grease is designed for the contact points where the brake shoes rest on the backing plate and for the automatic adjusters inside the brake assembly. Product Part No. L0037- Available in Tubs, Pails, 1/4 Drums and Drums.



## ■ Motor Oils and Transmission Fluids

LUBRIPLATE makes available heavy-duty/high detergent motor oils for gasoline and diesel vehicles packaged in drums, pails, jugs and quarts. Five grades of non-detergent motor oils are available. Automatic transmission fluids are also available.

Call us at 1-800-733-4755 to learn more.



# General Application Recommendations

Lubriplate lubricants have been designed to deliver unsurpassed performance in a wide variety of applications, thus reducing the need to carry large inventories of application specific lubricants. Listed below are lubricants that will cover most general requirements. For additional information, contact your local Lubriplate Distributor, Lubriplate District Manager (listed on back cover) or call our Sales and Service Hotline at (800)733-4755.

▶ For specific OEM approvals, OEM recommendations and field history product usage reports, contact our OEM Specialist, Ellen Girard at: 908-489-7355 or EGirard@lubriplate.com.

## General Application Recommendations

APPLICATIONS	NORMAL TEMPERATURES	HIGH TEMPERATURES	LOW TEMPERATURES
GENERAL GREASE	1200-2 / SYN-1602	HIGH TEMP / 1552 SYNXTREME HD-2/220 / SYNXTREME HT MAX*	MAG-1 / SYN-1601
GENERAL OIL	SPO-233 / SYN-LUBE-100	SPO-266 / SYN-LUBE-320	SPO-233 / SYN-LUBE-100
CENTRALIZED SYSTEMS / GREASE	930-AAA / 630-AAA / SYN-1600	930-AAA / SYNXTREME HD-0	MAG-00 / 1550
CENTRALIZED SYSTEMS / OIL	SPO-233 / SYN-LUBE-100	SPO-277 / SYN-LUBE-460	SPO-222 / SYN-LUBE-68
GEARBOXES (HELICAL, SPUR)	SPO-255 / SYN-LUBE-220	SPO-MG / SYN-LUBE-320	SPO-244 / SYN-LUBE-150
GEARBOXES (WORM)	SPO-277 / SYN-LUBE-460	SPO-288 / SYN-LUBE-680	SPO-MG / SYN-LUBE-320
OPEN GEARS	GEAR SHIELD X-HVY / SYNXTREME HD-2/220	GEAR SHIELD X-HVY / SYNXTREME HD-2/220	GEAR SHIELD X-HVY / SYNXTREME HD-2
HYDRAULIC EQUIPMENT	HO-1 / HO-2 / SYN-LUBE-68	HO-2A / SYN-LUBE-100	LOW POUR HO / SYN-LUBE-22
AIR COMPRESSORS (RECIPROCATING)	SYN LUBE 100 / SYNAC-100	SYNAC-150	SYNAC-100
AIR COMPRESSORS (ROTARY SCREW)	SYN-LUBE-46	SYN-LUBE-46	SYN-LUBE-32
HIGH SPEED BEARINGS (OIL)	HO-0 / SYN-LUBE-32	SPO-233 / SYN-LUBE-100	No. 1 / SYN-LUBE-32
HIGH SPEED BEARINGS (GREASE)	EMB / POLY HP-2 / SYN GR-132	1552 / POLY HP-2 / SYN EMB	MAG-1 / GR-132 / SYN GR-132
LOW SPEED BEARINGS (OIL)	SPO-244 / SYN-LUBE-150	SPO-255 / SYN-LUBE-220	SPO-233 / SYN-LUBE-100
LOW SPEED BEARINGS (GREASE)	1242 / 1552 / SYN-1602	HIGH TEMP / 1552 / SYNXTREME HD-2/220	MAG-1 / SYN-1601
WHEEL BEARINGS (GREASE)	1552 / SYNXTREME HD-2	1552 / SYNXTREME HD-2	1552 / SYNXTREME HD-2
SLIDES / CAMS	1241 / 1242 / SYN-1602	1444 / SYN-3002	MAG-1 / SYN-3001
MIST SYSTEMS	SYN-LUBE-100	SYN-LUBE-100	Rock Drill Oil 10R / SYN-LUBE-32
WIRE ROPE / CABLES / CHAINS	Chain & Cable Fluid / SFGO ULTRA-7*	Chain & Cable Heavy / SFGO ULTRA-150*	Chain & Cable Fluid / SFGO ULTRA-32*
RUST / CORROSION PREVENTION	Chain & Cable Fluid / SFGO ULTRA-7*	Chain & Cable Fluid / SFGO ULTRA-7*	Chain & Cable Fluid / SFGO ULTRA-7*
ENGINE REBUILDING	No. 105	No. 105	No. 105
MOLY GREASE (MOS <sub>2</sub> )	3000 / SYN-3002	3000 / SYN-3002	3000W / SYN-3001
REFRIGERATION COMPRESSORS	RCO 68 FG* (Consult Lubriplate)	RCO 68 FG* (Consult Lubriplate)	RCO 68 FG* (Consult Lubriplate)

## NSF H1 Registered, Food Processing Plant Application Recommendations

APPLICATIONS	LUBRIPLATE H1 PRODUCT*	APPLICATIONS	LUBRIPLATE H1 PRODUCT*
• GENERAL GREASING - NORMAL TEMPS HIGH TEMPERATURES LOW TEMPERATURES	SYNXTREME FG-2* or FGL-2* SYNXTREME FG-2/220* or FGL-2* SFL-1*	• DRAFT & VENTILATING FANS GREASE OIL	SYNXTREME FG-2* or FGL-2* SFGO ULTRA-68* or FMO-350AW*
• GENERAL OILING	SFGO ULTRA-68* or FMO-350AW*	• STIRRUPS - BOTTLE FILLERS	STO-FG*
• CENTRALIZED GREASING SYSTEMS	SYNXTREME FG-0* or FGL-0* or FGL-00*	• PEACH PITTERS - CHAIN DRIVES	SFGO ULTRA-100* or FP-150L* or FP-150*
• SLIDES, CAMS, EXPOSED GEARS	SYNXTREME FG-2/220* or PURE TAC*	• SEAMING ROLLS, SPINDLES, CHUCKS	SYNXTREME FG-1* or FGL-1*
• CHAINS, CONVEYORS, WIRE ROPE MEDIUM TEMPERATURES HIGH TEMPERATURES	PGO-FGL-220* or FP-150L* PGO-FGL-460*	• COOKERS - CARRIER BEARINGS	SYNXTREME FG-2/220* or PURE TAC*
• ENCLOSED GEAR CASES HELICAL GEARS WORM GEARS	SFGO ULTRA-220* or FMO-1100AW* SFGO ULTRA-460* or FMO-2400AW*	• COOKER VALVE LUBRICATION (MANZEL LUBRICATORS)	FOOD GRADE COOKER OIL*
• HOT BRAKE BEARINGS	SYNXTREME FG-2/220* or PURE TAC*	• CAN SEAMING & CLOSING MACHINES (AUTOMATIC LUBRICATORS)	SSO-FG-100* SSO-FG-150* or SFGO ULTRA-100* SEAMER OIL FG-100* or SEAMER OIL FG-150*
• AIR COMPRESSORS RECIPROCATING AIR COMPRESSORS ROTARY SCREW REFRIGERATION COMPRESSORS	SFGO ULTRA-68* or SFGO ULTRA 100* SFGO ULTRA-32* or SFGO ULTRA 46* RCO-68 FG*	• SIGHT FEED OILERS	SFGO ULTRA-100* or PM-500* or FP-150L*
• AIR LINE SYSTEMS	SFGO ULTRA-22* or FMO-85AW*	• ELECTRIC MOTOR BEARINGS	SYNXTREME FG-1* or FGL-1*
• HYDRAULIC SYSTEMS - NORMAL TEMPS LOW TEMPERATURES	SFGO ULTRA-68* or FMO-350AW* SFGO ULTRA-22* or FMO-85AW*	• STEAM VALVES & PEELERS	Consult LUBRIPLATE Tech Service 1-800-347-5343
• HIGH SPEED BEARINGS GREASE OIL	SFL-1* or FGL-1* SFGO ULTRA-32* or FMO-150AW*	• SCRUBBERS GREASE FITTINGS CHAIN DRIVES	SYNXTREME FG-2/220* or FGL-2* SFGO ULTRA-150* or FP-150L* or FP-150*
• CHEMICAL & CONDENSATE PUMPS GREASE OIL	SYNXTREME FG-2/220* or FGL-2* SFGO ULTRA-68* or FMO-350AW*	• FORKLIFTS WHEEL BEARINGS HYDRAULIC OIL CHAIN LIFTS	SYNXTREME FG-2* or PURE TAC* SFGO ULTRA-68* or FMO-350AW* SFGO ULTRA-100* or FP-150L*
• VACUUM PUMPS	SFGO ULTRA-68* or SFGO ULTRA 100*	• RUST PREVENTATIVE, LAYING UP	SFGO ULTRA-7* or FMO-350AW*
		• CLEANSING & FLUSHING FLUID / OIL	SYNFLUSH FG* or PURE FLUSH*
		• PAN DIVIDER OIL	PAN DIVIDER OIL*
		• LUBRIPLATE WHITE OILS	FMO SERIES*



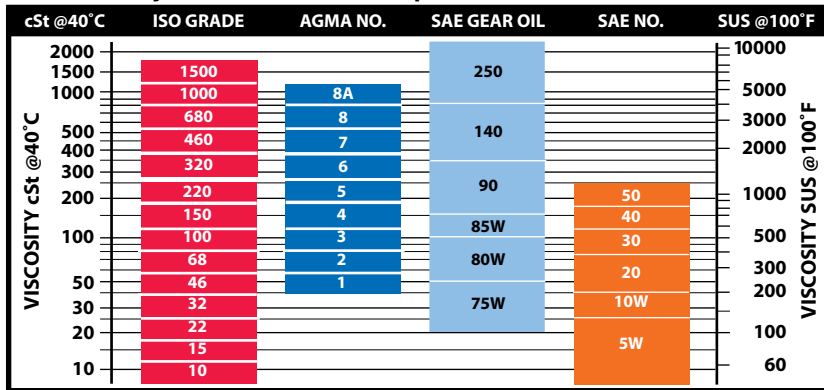
# Interchange / Crossover Recommendations

EXXON / MOBIL	ISO GRADE	LUBRIPLATE	EXXON / MOBIL	ISO GRADE	LUBRIPLATE
SHC 524	32	SYN LUBE 32	SHC CIBUS 32	32	SFGO ULTRA 32*
SHC 525	46	SYN LUBE 46	SHC CIBUS 46	46	SFGO ULTRA 46*
SHC 526	68	SYN LUBE 68	SHC CIBUS 68	68	SFGO ULTRA 68*
SHC 624	32	SYN LUBE 32	SHC CIBUS 150	150	SFGO ULTRA 150*
SHC 626	68	SYN LUBE 68	SHC CIBUS 220	220	SFGO ULTRA 220*
SHC 627	100	SYN LUBE 100	SHC CIBUS 320	320	SFGO ULTRA 320*
SHC 629	150	SYN LUBE 150	SHC CIBUS 460	460	SFGO ULTRA 460*
SHC 630	220	SYN LUBE 220	MOBILGEAR SHC 150	150	SYN LUBE HD 150
SHC 632	320	SYN LUBE 320	MOBILGEAR SHC 220	220	SYN LUBE HD 220
SHC 634	460	SYN LUBE 460	MOBILGEAR SHC 320	320	SYN LUBE HD 320
SHC 636	680	SYN LUBE 680	MOBILGEAR SHC 460	460	SYN LUBE HD 460
SHC 639	1000	SYN LUBE 1000	MOBILGEAR SHC 680	680	SYN LUBE HD 680

KLUBER	ISO GRADE	LUBRIPLATE	KLUBER	ISO GRADE	LUBRIPLATE	KLUBER	ISO GRADE	LUBRIPLATE
KLUBEROIL 4UH1-100	100	SFGO ULTRA 100*	KLUBERSYNTH UH-1 6-150	150	PGO FGL-150*	KLUBERSYNTH GH 6-150	150	PGO-150
KLUBEROIL 4UH1-150	150	SFGO ULTRA 150*	KLUBERSYNTH UH-1 6-220	220	PGO FGL-220*	KLUBERSYNTH GH 6-220	220	PGO-220
KLUBEROIL 4UH1-220	220	SFGO ULTRA 220*	KLUBERSYNTH UH-1 6-320	320	PGO FGL-320*	KLUBERSYNTH GH 6-320	320	PGO-320
KLUBEROIL 4UH1-320	320	SFGO ULTRA 320*	KLUBERSYNTH UH-1 6-460	460	PGO FGL-460*	KLUBERSYNTH GH 6-460	460	PGO-460
KLUBEROIL 4UH1-460	460	SFGO ULTRA 460*	KLUBERSYNTH UH-1 6-680	680	PGO FGL-680*	KLUBERSYNTH GH 6-680	680	PGO-680
KLUBEROIL 4UH1-680	680	SFGO ULTRA 680*						

Before changing to Lubriplate PGO and PGO-FGL fluids, the sump must be drained.

## Oil Viscosity Classification Comparisons



## NLGI Grease Classifications

NLGI NUMBER	DESCRIPTION	WORKED PENETRATION
000	SEMI-FLUID	445 - 475
00	SEMI-FLUID	400 - 430
0	VERY-SOFT	355 - 385
1	SOFT	310 - 340
2	MEDIUM SOFT	265 - 295
3	MEDIUM	220 - 250
4	HARD	175 - 205
5-6	VERY HARD	85 - 160

## OEM / Lubriplate Air Compressor Fluid Interchange / Crossover Recommendations

ATLAS-COPCO	LUBRIPLATE	GARDNER DENVER	LUBRIPLATE	INGERSOLL-RAND	LUBRIPLATE
GA-8K	Syn Lube 46	AEON 9000 SP	Syn Lube 46	XHP-505	Syn Lube 68
HD Roto Fluid or HD Roto Fluid Plus	Syn Lube 46	AEON 9000 TH	Syn Lube 68	XL-T-30	Syn Lube 100
Roto Extend	Syn Lube 46	AEON PD	Syn Lube 220	SL-200 (for oil free)	AC-1
Roto Z	Syn Lube 68	AEON PD-XD	Syn Lube 320	SSR Ultra Coolant	Syncool or Syncool FG*
Roto Injection Fluid	AC-1	AEON PD FG	SFGO Ultra 220*	SSR Ultra Plus Coolant	SynXtreme AC-32
GA-4K	AC-1	AEON PG	Syncool or Syncool FG*	Techrol Gold	Syncool or Syncool FG*
GA-OK	Synac 32	AEON 2000	AC-1	Original SSR Coolant	Synac 68
GA-FG	SFGO Ultra 32*	AEON 4000	AC-1	XL-700	Synac 100
Paroil M	Syn Lube 46	AEON 500	AC-2A	XL-740 HT	Synac 150
COMPAIR	LUBRIPLATE	AEON AC-HC	AC-2A	T-30 Select or All Season Select	Synac 100
Hydrovane 2000	Synac 100	AEON CL	Synac 46	SSR H-1 F	SFGO Ultra 32*
CN 300	Synac 100	AEON AC-5Y	Synac 100	FG Coolant	SFGO Ultra 46*
CS 100	Synac 32	AEON 5000	Synac 100	PALATEK	LUBRIPLATE
CS 500 XL	Synac 46	AEON 6000 FG	SFGO Ultra 46*	Palasyn 45	Syn Lube 46
CS 5000 XL	Synac 68	AEON AC-FG	SFGO Ultra 100*	Pallube 32	Syncool or Syncool FG*
CS 200	Synac 68	AEON B-30	SFGO Ultra 100*	Palatek AFX 32	SynXtreme AC-32
CS 300	Synac 100	AEON B-40	SFGO Ultra 150*	Palaextra	SynXtreme AC-46
CS 400	Synac 150	LEROI	LUBRIPLATE	Palatek Food Grade 32	SFGO Ultra 32*
CSX 20	SFGO Ultra 46*	SSL-46 or SSL-46 Plus	Syn Lube 46	QUINCY	LUBRIPLATE
KAESER	LUBRIPLATE	SSL-32	AC-0	Quincy PG Ester 46	Syncool or Syncool FG*
Sigma 8000 S-320	Syn Lube 32	SSL-38	AC-1	QuinSyn PG	Syncool or Syncool FG*
Sigma 8000 S-460	Syn Lube 46	SSL-50 (Semi-Synthetic)	AC-1 or Syn Lube 46	QuinSyn	Syn Lube 46
Sigma 8000 S-680	Syn Lube 68	SSL-CN SAE 30	AC-2	QuinSyn Plus	Syn Lube 46
Sigma 4000 M-460 (Semi-Synthetic)	AC-1 or Syn Lube 46	SSL-46 FG	SFGO Ultra 46*	QuinSyn Edge	Syn Lube 46
Sigma 4000 M-100 (Semi-Synthetic)	AC-2A or Syn Lube 100	Cleaner	Synflush or Synflush FG*	QuinSyn HP	SynXtreme AC-46
Sigma 4000 M-150 (Semi-Synthetic)	AC-3 or Syn Lube 150	SULLAIR	LUBRIPLATE	QuinSyn Endure	SynXtreme AC-46
325 R	Synac 32	LLL-4-32	Syn Lube 32	QuinSyn XP	SynXtreme AC-68
466 R	Synac 46	LLL-4-46	Syn Lube 46	QuinSyn Flex	Synac 46
687 R	Synac 68	LLL-4-100	Syn Lube 100	QuinSyn FG	SFGO Ultra 46*
Sigma 8000 S-100	Synac 100	LLL-4-150	Syn Lube 150	QuinSyn FG-46	SFGO Ultra 46*
Sigma 8000 S-150	Synac 150	SRF 2-8000	Syn Lube 32	QuinSyn Flushing Oil	Synflush or Synflush FG*
150P	AC-2A	Sullube	Syncool or Syncool FG*	CURTIS TOLEDO	LUBRIPLATE
175 P	AC-3	Sullair AW F 32	AC-0	RS 12,000	SynXtreme AC-46
Sigma 8000 FG	SFGO Ultra 46*	SRF-1/4000	AC-1	RS-4000 FG	SFGO Ultra 46*

# ■ Packaging Containers

The chart below indicates Lubriplate's packaging availability and the corresponding Package Part Number Suffix.

**How To Generate Part Numbers** - Add the desired Package Part Number Suffix, shown here, to the end of the Product Part Number. Product Part Numbers for each product can be found on the product specification charts found on the previous pages.

**Not all products are available in every package size.**  
See package availability for each product at the bottom of the product specification charts.

**Large Bulk Container Bins** - Contact your Lubriplate representative or call 800-733-4755 for information and product availability.



PRODUCT / PACKAGE AVG. NET WT. / CONTENTS PACKAGE PART NO. SUFFIX	MINI TUBES <sup>(1)</sup> 3/8 OZ / 10.6 g	SMALL TUBES 1.75 OZ / 50 g	TUBES 10 OZ / 284 g	SPRAY CANS <sup>(3)</sup> NET WT. VARIES BY PRODUCT	CARTRIDGES <sup>(4)</sup> NET WT. VARIES BY PRODUCT	SM. TUBS 16 OZ / 454 g	TUBS 6 LBS / 2.72 kg	BOTTLES 1 QUART / 946 ml 2 LB / .907 kg	JUGS 1 GAL / 3.79 L 7 LB / 3.18 kg
Synthetic Fluids	-	-	-	-063	-	-	-	-	-057
Air Compressor Fluids / Oils	-	-	-	-	-	-	-	-054	-057
Hydraulic Oils	-	-	-	-	-	-	-	-	-057
*Greases	-078 or -079 <sup>(1)</sup>	-086	-092	-063	-098	-004	-005	-	-
*Petroleum Based Gear Oils	-	-	-092	-	-	-	-	-013	-007
*Specialty Greases	-078 or -079 <sup>(1)</sup>	-086	-	-063	-098	-004	-005	-	-
Specialty Oils & Fluids	-	-	-	-	-	-	-	-054	-057
Food Grade Fluids / Oils	-	-	-	-063	-	-	-	-054	-057
*Food Grade Greases	-	-	-	-063	098	-004	-005	-	-
Motor Oils / Trans. Fluids	-	-	-	-	-	-	-	-054	-
Metalworking Fluids / Oils	-	-	-	-063	-	-	-	-	-057

Package Specifications									
Case Quantity	72 or 36 <sup>(1)</sup>	36	36	12	40	12	4	12	4
Aprox. Dimensions / Inches	8x5x5 or 9x7x8.5	6x6x7	13x12.5x11.5	11x8.5x8	19.5x11.5x10.5	16x12x4.5	16x16x8	13x9.5x9	14.5x10x10.5
Avg. Gross Shipping Weight	-	-	-	12 lbs / 5.4 kg	-	-	-	26 lbs / 11.8 kg	26 lbs / 11.8 kg
*Avg. Gross Shipping Weight	2.5 lbs or 1.25 lbs	5 lbs / 2.3 kg	29 lbs / 13.2 kg	12 lbs / 5.4 kg	44 lbs / 20 kg	14.5 lbs / 6.6 kg	29 lbs / 13 kg	27 lbs / 12 kg	34 lbs / 15.4 kg

- (1) MINI TUBES - No. 105 and Aero Mini Tubes are packaged on Blister Pack Cards, 36 to a case (Package Part No. Suffix -079). All other Mini Tubes are sold in bulk, 72 to a case (Package Part No. Suffix -078).  
 (2) CLEARPLEX is available in 4 OZ. Tubes, 12 to a case. Part Number L0353-082. See page 20 for more information.  
 (3) Oil Well In a Bottle & FMO-85AW are available 14 OZ. / 414 ml. non-aerosol, hand pump, spray bottle. Package part number -067.  
 (4) GEAR SHIELD EXTRA HEAVY is available in 10 1/2 OZ. / 297g caulk type cartridges, 40 to a case. Part No. L0152-000.



PRODUCT / PACKAGE AVG. NET WT. / CONTENTS PACKAGE PART NO. SUFFIX	PAIL 35 LB / 15.9 kg 5 GAL / 18.9 L	QTR DRUM 120 LB / 54 kg 16 GAL / 60.5 L	FULL DRUMS 420 LB / 191 kg 55 GAL / 208 L	SPACEKRAFT 2450 LB / 1111 kg 330 GAL / 1249 L	PASSPORT BIN - 275 GAL / 1040 L	VISCO DRUM 2800 LB / 1270 kg 379 GAL / 1435 L	VISCO DRUM 3800 LB / 1724 kg 500 GAL / 1893 L
Synthetic Fluids	-060	-061	-062	-070	-072	-	-
Air Compressor Fluids / Oils	-060	-061	-062	-070	-072	-	-
Hydraulic Fluids / Oils	-060	-061	-062	-070	-072	-	-
*Greases	-035	-039	-040	-042	-072	-041	-041
*Petroleum Based Gear Oils	-035	-039	-040	-042	-072	-	-
*Specialty Greases	-035	-039	-040	-042	-072	-041	-041
Specialty Oils / Fluids	-060	-061	-062	-070	-072	-	-
Food Grade Fluids / Oils	-060	-061	-062	-070	-072	-	-
*Food Grade Greases	-035	-039	-040	-042	-072	-041	-041
Motor Oils / Trans. Fluids	-060	-	-062	-070	-072	-	-
Metalworking Fluids / Oils	-060	-061	-062	-070	-072	-	-

Package Specifications							
Aprox. Dimensions / Inches	12x15	15x27	23.5x35	48x48x51	-	45.5x53.5x76.5	45.5x53.5x88
Avg. Gross Shipping Weight	40 lbs/18.1 kg	134 lbs/60.8 kg	445 lbs/202 kg	2600 lbs/1179 kg	-	3800 lbs/1724 kg	4900 lbs/2223 kg
*Avg. Gross Shipping Weight	38 lbs/17.2 kg	134 lbs/60.8 kg	465 lbs/211 kg	2600 lbs/1179 kg	-	3800 lbs/1724 kg	4900 lbs/2223 kg

# Perma Automatic Lubricators

Perma automatic lubricators provide clean, safe, reliable and consistent machinery lubrication around the clock. They are fully programmable and deliver the right amount of lubricant consistently, day after day, week after week. A wide range of types and sizes are available to meet your exact needs. All come pre-filled, ready to install. They save time and labor costs and provide a safer workplace environment.

Only select products are available in Perma Lubricators. Check the bottom of chart for lubricant availability.

Part Numbers - Add the desired Perma Package Part Number Suffix listed on the chart to the end of the desired Lubriplate Product Part Number.



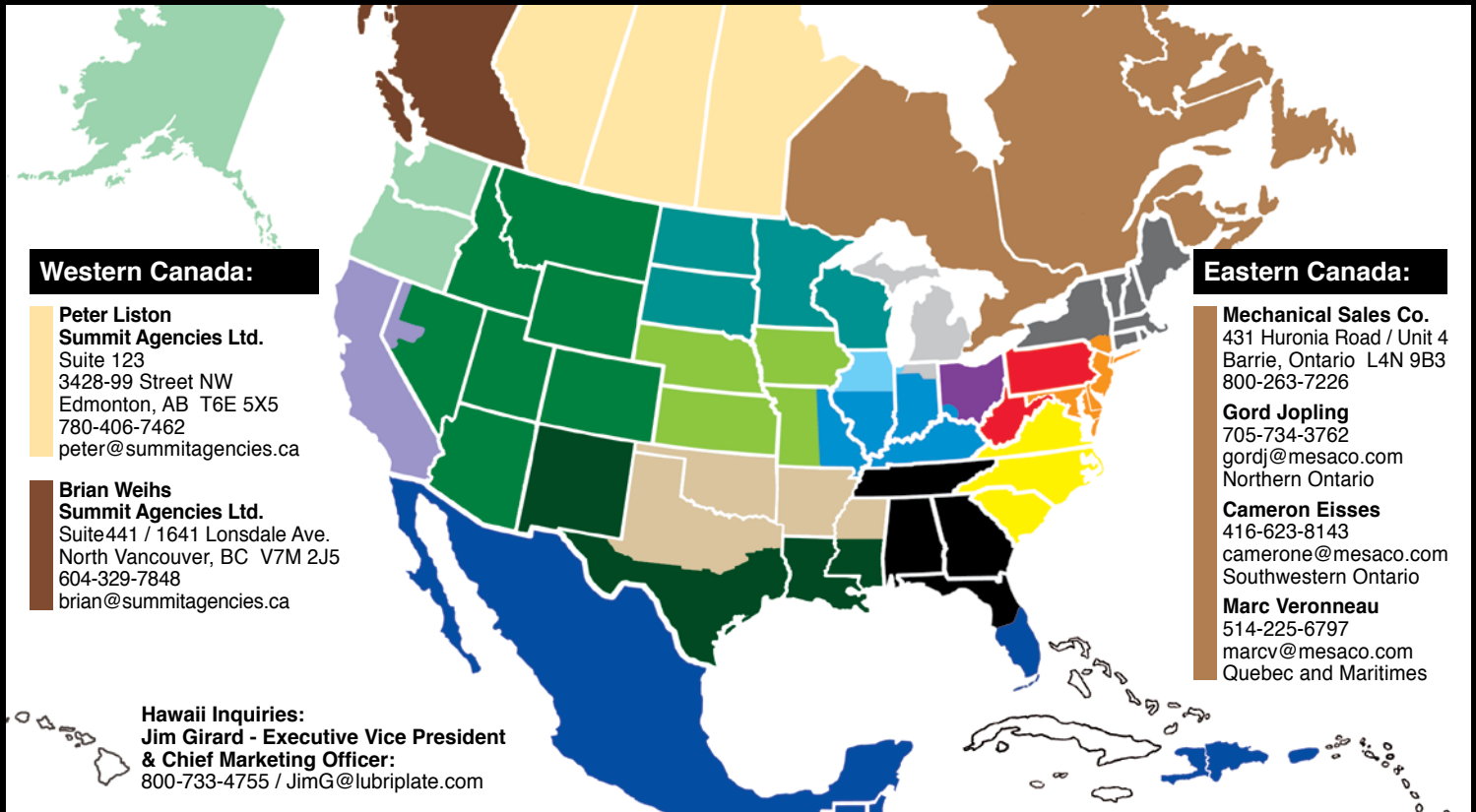
PERMA MODEL	VOLUME SIZE	OUTPUT RATE	PRESSURE BUILD-UP	FEATURES / DETAILS	PERMA PACKAGE PART NO. SUFFIX
CLASSIC	120 cc	1 Month (Activator Screw)	65 PSI	Metal Housing	-101
CLASSIC	120 cc	3 Month (Activator Screw)	65 PSI	Metal Housing	-103
CLASSIC	120 cc	6 Month (Activator Screw)	65 PSI	Metal Housing	-106
CLASSIC	120 cc	12 Month (Activator Screw)	65 PSI	Metal Housing	-112
FUTURA	120 cc	1 Month (Activator Screw)	65 PSI	Transparent Plastic Housing	-201
FUTURA	120 cc	3 Month (Activator Screw)	65 PSI	Transparent Plastic Housing	-203
FUTURA	120 cc	6 Month (Activator Screw)	65 PSI	Transparent Plastic Housing	-206
FUTURA	120 cc	12 Month (Activator Screw)	65 PSI	Transparent Plastic Housing	-212
FLEX	60 cc	1 to 12 Mo. Programmable (Dial Select)	73 PSI	Transparent Plastic Housing - Control Dial on Top	-230
FLEX	125 cc	1 to 12 Mo. Programmable (Dial Select)	73 PSI	Transparent Plastic Housing - Control Dial on Top	-231
NOVA	130 cc	Programmable Electronic (Push Button)	90 PSI	LCD Display, Integrated Temperature Compensation	-130
NOVA LC REFILL KIT	130 cc	-	-	Refill Kit - Includes Pre-Filled NOVA LC Unit	-131
STAR VARIO S2	60 cc	1, 3, 6, 12 Mo. Programmable	75 PSI	LCD Display, Push Button Settings, Battery Operated	-460
STAR VARIO S2	120 cc	1, 3, 6, 12 Mo. Programmable	75 PSI	LCD Display, Push Button Settings, Battery Operated	-412
STAR VARIO S2	250 cc	1, 3, 6, 12 Mo. Programmable	75 PSI	LCD Display, Push Button Settings, Battery Operated	-425
STAR CONTROL	60 cc	1, 3, 6, 12 Mo. Programmable	75 PSI	PLC Controlled / 12-30 Volts DC	-560
STAR CONTROL	120 cc	1, 3, 6, 12 Mo. Programmable	75 PSI	PLC Controlled / 12-30 Volts DC	-512
STAR CONTROL	250 cc	1, 3, 6, 12 Mo. Programmable	75 PSI	PLC Controlled / 12-30 Volts DC	-525
STAR LC REFILL KIT	60 cc	-	-	Refill Kit - Includes Pre-Filled LC Unit - Battery Pack	-660
STAR LC REFILL KIT	120 cc	-	-	Refill Kit - Includes Pre-Filled LC Unit - Battery Pack	-612
STAR LC REFILL KIT	250 cc	-	-	Refill Kit - Includes Pre-Filled LC Unit - Battery Pack	-625
PRO	250 cc	1 Day to 24 Mo. Programmable	360 PSI	Battery Operated	-725
PRO	500 cc	1 Day to 24 Mo. Programmable	360 PSI	Battery Operated	-750
PRO MP-6	250 cc	1 Day to 24 Mo. Programmable	360 PSI	Battery Operated, 1-6 Lubrication Points	-726
PRO MP-6	500 cc	1 Day to 24 Mo. Programmable	360 PSI	Battery Operated, 1-6 Lubrication Points	-756
PRO C	250 cc	Based on 100 Machine Hours	360 PSI	PLC Controlled / 12-30 Volts DC	-825
PRO C	500 cc	Based on 100 Machine Hours	360 PSI	PLC Controlled / 12-30 Volts DC	-850
PRO C MP-6	250 cc	Based on 100 Machine Hours	360 PSI	PLC Controlled / 12-30 Volts DC, 1-6 Lubrication Points	-826
PRO C MP-6	500 cc	Based on 100 Machine Hours	360 PSI	PLC Controlled / 12-30 Volts DC, 1-6 Lubrication Points	-856
PRO LV REFILL KIT	250 cc	-	-	Refill Kit - Includes Pre-Filled LV Unit - Battery Pack	-925
PRO LV REFILL KIT	500 cc	-	-	Refill Kit - Includes Pre-Filled LV Unit - Battery Pack	-950

## LUBRIPLATE PRODUCTS AVAILABLE IN PERMA LUBRICATORS

<b>PETROLEUM-BASED GREASES</b>	<b>No. 176</b> Pt. No. L0054-, <b>630-AA</b> Pt. No. L0067-, <b>630-AAA</b> Pt. No. L0068-, <b>730-0</b> Pt. No. L0083-, <b>730-1</b> Pt. No. L0084-, <b>730-2</b> Pt. No. L0085-, <b>930-AA</b> Pt. No. L0096-1200-2 Pt. No. L0102-, <b>1240</b> Pt. No. L0105-, <b>1241</b> Pt. No. L0104-, <b>1242</b> Pt. No. L0106-, <b>1444</b> Pt. No. L0227-, <b>1551</b> Pt. No. L0165-, <b>1552</b> Pt. No. L0166-3000 Pt. No. L0108-, <b>EMB</b> Pt. No. L0148-, <b>HIGH TEMP</b> Pt. No. L0161-, <b>MAG-00</b> Pt. No. L0186-, <b>MAG-1</b> Pt. No. L0189-, <b>X-357</b> Pt. No. L0149-
<b>SYNTHETIC GREASES</b>	<b>POLY HP-2</b> Pt. No. L0191-, <b>SYN-1600</b> Pt. No. L0300-, <b>SYN-1601</b> Pt. No. L0301-, <b>SYN-1602</b> Pt. No. L0302-, <b>SYN-3001</b> Pt. No. L0315-, <b>SYN-EMB</b> Pt. No. L0335- <b>SYNXTREME HD-1</b> Pt. No. L0402-, <b>SYNXTREME HD-2</b> Pt. No. L0401-, <b>SYNXTREME HD-2/220</b> Pt. No. L0312-
<b>OILS**</b>	<b>CHAIN &amp; CABLE FLUID</b> Pt. No. L0135-, <b>CHAIN &amp; CABLE HEAVY</b> Pt. No. L0136-, <b>SPO-222</b> Pt. No. L0242-, <b>SPO-233</b> Pt. No. L0243-,
<b>FOOD GRADE GREASES NSF H1</b>	<b>CLEARPLEX-2</b> Pt. No. L0351-, <b>FGL-0</b> Pt. No. L0230-, <b>FGL-1</b> Pt. No. L0231-, <b>FGL-2</b> Pt. No. L0232-, <b>FML-1</b> Pt. No. L0144-, <b>FML-2</b> Pt. No. L0145-, <b>PURE TAC</b> Pt. No. L0236-
<b>SYNTHETIC FG GREASES NSF H1</b>	<b>SFL-00</b> Pt. No. L0195-, <b>SFL-0</b> Pt. No. L0196-, <b>SFL-1</b> Pt. No. L0197-, <b>SYNXTREME FG-0</b> Pt. No. L0307-, <b>SYNXTREME FG-1</b> Pt. No. L0306-, <b>SYNXTREME FG-2</b> Pt. No. L0305-
<b>FOOD GRADE OILS** NSF H1</b>	<b>FMO-85-AW</b> Pt. No. L0880-, <b>FMO-200-AW</b> Pt. No. L0881-, <b>FMO-350-AW</b> Pt. No. L0882-
<b>SYNTHETIC FG FLUIDS** NSF H1</b>	<b>SFGO ULTRA 32</b> Pt. No. L0915-, <b>SFGO ULTRA 220</b> Pt. No. L0985-, <b>SYN-H1-220</b> Pt. No. L0779-

\*\*Lubriplate Oils and Fluids are not available in Perma PRO Series Lubricators.

# District Managers and Specialists



## Western Canada:

**Peter Liston**  
**Summit Agencies Ltd.**  
 Suite 123  
 3428-99 Street NW  
 Edmonton, AB T6E 5X5  
 780-406-7462  
 peter@summitagencies.ca

**Brian Weihs**  
**Summit Agencies Ltd.**  
 Suite 441 / 1641 Lonsdale Ave.  
 North Vancouver, BC V7M 2J5  
 604-329-7848  
 brian@summitagencies.ca

## Eastern Canada:

**Mechanical Sales Co.**  
 431 Huronia Road / Unit 4  
 Barrie, Ontario L4N 9B3  
 800-263-7226

**Gord Jopling**  
 705-734-3762  
 gordj@mesaco.com  
 Northern Ontario

**Cameron Eisses**  
 416-623-8143  
 camerone@mesaco.com  
 Southwestern Ontario

**Marc Veronneau**  
 514-225-6797  
 marc@mesaco.com  
 Quebec and Maritimes

**Hawaii Inquiries:**  
**Jim Girard - Executive Vice President**  
**& Chief Marketing Officer:**  
 800-733-4755 / JimG@lubriplate.com

## Western Region District Managers

## Central Region District Managers

## Eastern Region District Managers

**Douglas J. Smith**  
 449 S Barkvine Way  
 Star, ID 83669  
 360-488-3382  
 dsmith@lubriplate.com

**Chris Qualizza**  
 407 Prairie Stone Drive  
 Lodi, WI 53555  
 262-339-3659  
 cqualizza@lubriplate.com

**Chris Franzoni**  
 21653 Kendyl Court  
 Macomb, MI 48044  
 586-530-6922  
 cfranzoni@lubriplate.com

**Ed Blank Jr.**  
 29008 Greystone Drive  
 Millbury, OH 43447  
 419-320-0899  
 ERBlank@lubriplate.com

**Chris Kniestedt**  
 34 Franklin Street / Unit 133  
 Nashua, NH 03064  
 603-484-5262  
 ckniestedt@lubriplate.com

**Dan O'Brien**  
 1359 East Skyview Drive  
 Salt Lake City, UT 84124  
 801-550-0383  
 dobrien@lubriplate.com

**Brian Joens**  
 2378 SE Preserve Ct.  
 West Des Moines, IA 50265  
 bjoens@lubriplate.com  
 515-320-1012

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

**Tom Martin**  
 1742 Bowmansville Rd  
 Mohnton, PA 19540  
 717-844-2002  
 tmartin@lubriplate.com

**John Girard**  
 104 5th Avenue / Apt. 2  
 Belmar, NJ 07719  
 908-675-6889  
 johng@lubriplate.com

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

**Roger Thostenson**  
 1329 Auburn Place  
 Plano, TX 75093  
 972-998-0344  
 rthostenson@lubriplate.com

**Jeff Seymour**  
 2602 Spyglass Drive  
 Valparaiso, IN 46383  
 219-921-6800  
 js Seymour@lubriplate.com

**David Roberts**  
 939 Gallier Place.  
 St. John's, FL 32259  
 407-760-7933  
 droberts@lubriplate.com

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

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

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

## Specialists:

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

**Vice President, Sales:**  
**Steve Morrow -**  
 Office: 973-589-9150  
 Cell: 973-722-6516  
 SMorrow@lubriplate.com

**Vice President - Corporate**  
**Technical Director :**  
**Sib Hamid -**  
 419-691-2491  
 SHamid@lubriplate.com

**General Manager Toledo Operations:**  
**Rudy Agosti - 419-691-2491**  
 ragosti@lubriplate.com

**Assistant Vice President, Domestic**  
**Sales and Service Inquiries:**  
**Tim Cusack - 800-733-4755**  
 TimC@lubriplate.com

**Vice President, Internal Sales**  
**Operations:**  
**Paul McCluskey - 800-733-4755**  
 paulm@lubriplate.com

**National Accounts Manager.**  
**Don Wrocklage -**  
 314-614-7488  
 dwrocklage@lubriplate.com

**Domestic Sales Director Toledo:**  
**Todd Baumgartner - 419-691-2491**  
 tbaumgartner@lubriplate.com

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

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

**Perma Lubricators Specialist:**  
**Connor Cusack -**  
 800-733-4755  
 ccusack@lubriplate.com

**Quality Manager:**  
**Stan Baer - 419-691-2491**  
 sbaer@lubriplate.com

**Director of Information Technology:**  
**Dan Moroses - 973-465-5737**  
 DanM@lubriplate.com

## Lubriplate Lubricants Company

129 LOCKWOOD STREET / NEWARK, NJ 07105 / PHONE 800-733-4755 / FAX 800-347-5329  
 TOLEDO, OH OFFICE / PHONE 419-691-2491 / FAX 800-347-5348

