



## Guide To Lubriplate® NSF H1 Registered Food Machinery Lubricants

Synthetic, Multi-Purpose,  
Food Machinery Grade Fluid Lubricants

Synthetic, High Temperature,  
Oven Chain Lubricants

Synthetic, Multi-Purpose,  
Food Machinery Grade Greases

USP Mineral Oil-Based,  
Food Machinery Grade Oils

USP Mineral Oil-Based,  
Food Machinery Grade Greases

Food Machinery Grade  
Spray Lubricants

Refrigeration Compressor Fluid

Cleaning and Flushing Fluid / Oil

Perma Automatic Lubricators



Nonfood Compounds  
H1 Registered  
ISO 21469 Certified



PAREVE



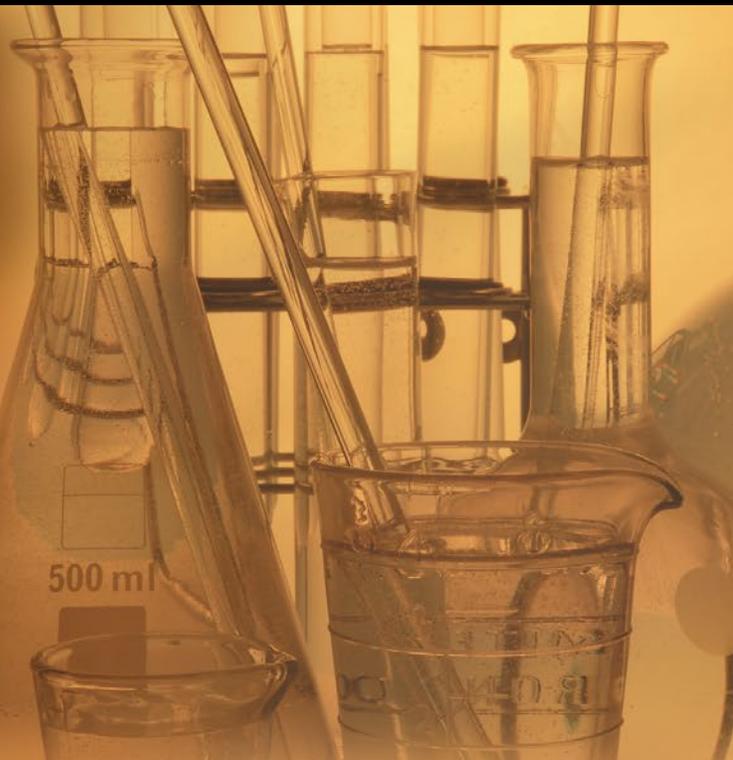
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See the NSF White Book™ for a complete list of registered / ISO 21469 certified products.

**Lubriplate® Lubricants**

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## ■ 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 Charts & Tags

Customized with your company logo, these color coded machinery charts and 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>

# 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.



Nonfood Compounds  
H1 Registered  
ISO 21469 Certified



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 SYNXTREME 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	LUBRIPLATE PRODUCT	NSF REG. NUMBER	CLASS CODE
3H DIRECT	158254	3H, H1	FMO-350-AW (AEROSOL)	126089	H1	SEAMER OIL FG-100	142566	H1	SUPER FML-0	125742	H1
3H DIRECT (AEROSOL)	163497	3H, H1	FMO-500-AW	122664	H1	SEAMER OIL FG-150	143600	H1	SUPER FML-1	125740	H1
BARRIER FLUID 7	159078	H1	FMO-500-AW-OR	124778	H1	SFGO ULTRA 7	125679	H1	SUPER FML-2	125741	H1
BARRIER FLUID 22	159079	H1	FMO-900-AW	122675	H1	SFGO ULTRA 15	138420	H1	SUPER FML-2 (AEROSOL)	126087	H1
BARRIER FLUID 32	165031	H1	FMO-1100-AW	122687	H1	SFGO ULTRA 22	138421	H1	SYNCOOL-FG	149789	H1
BARRIER FLUID 46	165032	H1	FMO-1700-AW	122667	H1	SFGO ULTRA-22 (AEROSOL)	164195	H1	SYNCOMP AN-46	160052	H1
BARRIER FLUID 68	165033	H1	FMO-2400-AW	122671	H1	SFGO ULTRA 32	125680	H1, HT1	SYN FG DRILL & TAP	163171	H1
CLEARPLEX	152478	H1	FMO-3800-AW	122673	H1	SFGO ULTRA 46	125678	H1	SYN-FG SDO	163477	H1
CLEARPLEX -1	140575	H1	FP-150	126123	H1	SFGO ULTRA 68	125681	H1	SYN-FG SDO (AEROSOL)	164511	H1
CLEARPLEX -2	129940	H1	FP-150 (AEROSOL)	159263	H1	SFGO ULTRA 100	125682	H1	SYNFLUSH-FG	143394	H1
CS-FG EP-2	151136	H1	FP-150-L	126124	H1	SFGO ULTRA 150	125683	H1	SYN H-1 220	138317	H1
FG COOKER OIL	122669	H1	HTCL-FG 68	143869	H1	SFGO ULTRA 220	125539	H1	SYN HTF LIGHT	148083	H1, HT1
FGL-00	043532	H1	HTCL-FG 100	158230	H1	SFGO ULTRA 320	125540	H1	SYN MPFG-7	151874	H1
FGL-0	043531	H1	HTCL-FG 220	143870	H1	SFGO ULTRA 460	125541	H1	SYN POLY FG / HP-2/100	171029	H1
FGL-1	043534	H1	HTO SPECIAL	158929	H1, HT1	SFGO ULTRA 680	125542	H1	SYNXTREME ASAP	160559	H1
FGL-2	043536	H1	PAN DIVIDER OIL	139787	3H, H1	SFGO ULTRA 1000	125543	H1	SYNXTREME FG-0	137239	H1
FGL-CC	043530	H1	PDO LIGHT	142304	3H, H1	SFL-00	113092	H1	SYNXTREME FG-1	137238	H1
FG OIL DIRECT (AEROSOL)	163496	3H, H1	PGO-FGL 150	141192	H1	SFL-0	119618	H1	SYNXTREME FG-2	136212	H1
FG PROOFER CHAIN OIL	162776	H1	PGO-FGL 220	141193	H1	SFL-1	043677	H1	SYNXTREME FG-2 (AEROSOL)	155548	H1
FMO-45	122688	3H, H1	PGO-FGL 320	141194	H1	SFL-1/220	164877	H1	SYNXTREME FG-0/220	149637	H1
FMO-85	122674	3H, H1	PGO-FGL 460	141195	H1	SFL-2	113093	H1	SYNXTREME FG-1/220	142237	H1
FMO-200	122689	3H, H1	PGO-FGL 680	141196	H1	G. P. FG SILICONE (AEROSOL)	126086	H1	SYNXTREME FG-2/220	142239	H1
FMO-350	122666	3H, H1, HT1	PM-500	126122	H1	SILICONE FLUID FG-350	138305	H1	SYNXTREME FG-00/460	161738	H1
FMO-500	122672	3H, H1, HT1	PURE FLUSH	126121	H1	SPEC. COOKER CHAIN GREASE	120918	H1	SYNXTREME FG-0/460	161739	H1
FMO-85-AW	122670	H1	PURE TAC	043649	H1	SSO-FG-100	138390	H1	SYNXTREME FG-1/460	161740	H1
FMO-150-AW	132661	H1, HT1	PURE TAC LIGHT	141506	H1	SSO-FG-150	138391	H1	SYNXTREME FG-2/460	161741	H1
FMO-200-AW	122668	H1	RCO-68 FG	138533	H1	STO-FG	126120	H1	SYNXTREME FRH1-46	153704	H1
FMO-350-AW	122665	H1	SCL-H1/220	159109	H1	SUPER FGL-1 (AEROSOL)	126088	H1	SYNXTREME HT BN MAX	159285	H1

**SFGO Ultra Series:** 100% Synthetic Polyalphaolefin (PAO)-Based, High-Performance, Super 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. 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 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.

**SYNCOMP AN-46:** NSF H1 Registered, 100% Synthetic, Alkylated Naphthalene-Based Air Compressor Fluid.

Designed to provide high temperature and long-term lubrication with minimal deposit formation. Recommended for oil flooded rotary screw and Oil flooded rotary vane compressors.

**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.

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:** 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.

**SYN-FG SDO:** Synthetic Polyalkylene Glycol (PAG)-Based, Sugar Dissolving Oil.

This NSF H1 Registered fluid lubricant is designed to lubricate machine components exposed to sugar contamination while removing sugar deposits and preventing future sugar buildup.

**Barrier Fluids 7 thru 68:** Ultra-clean, 100% synthetic PAO-based fluids recommended for all types of mechanical seals. While NSF H1 registered food grade, they may be used for all applications requiring barrier fluid for mechanical seals. Available in ISO grade 7 - Part No. L0718-, ISO grade 22 - Part No. L0719-, ISO grade 32 - Part No. L0744-, ISO grade 46 - Part No. L0745- and ISO grade 68 - Part No. L0746-. Available in jugs, pails and drums. See page 26 for packaging information and package part number suffix.

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	22 / 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 10 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 10 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 10 for more information and package part number suffix.

SYNCOMP AN-46	L1030-	46	-	20	-	50 / 8	220 / 52	134	480°F / 249°C	520°F / 271°C	-45°F / -43°C
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\*SYNCOMP AN-46 is available in Pails, Drums. See page 10 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 10 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 10 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 10 for more information and package part number suffix.

SYN-FG SDO	L0570-	32	-	-	10	30 / 9	139 / 40	275	>450°F / 232°C	-	-65°F / -54°C
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\*SYN-FG SDO is available in 1 Gallon Jugs, 5 Pails, 55 Gallon Drums, Aerosol Spray Cans and Pump Spray Bottles. See page 10 for more information and package part number suffix.

**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. 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: 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 oils resist 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.

**FG Proofer Chain Oil: USP Mineral Oil-Based, Proofer Chain Lubricant.**

Designed specifically for bakery proofer chains, especially those operating in humid and/or wet environments. This product utilizes premium quality USP white mineral oils, advanced polymers, and a unique additive package to provide adhesiveness and excellent anti-wear capabilities.

**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
FMO-85 AW	L0880-	22	-	-	5W	21 / 4	102 / 40	107	345°F / 174°C	365°F / 185°C	-30°F / -34°C
FMO-150 AW	L0879-	32	-	-	10W	31 / 5	146 / 44	107	400°F / 204°C	450°F / 232°C	-20°F / -29°C
FMO-200 AW	L0881-	46	1	75	10	47 / 7	196 / 48	103	455°F / 235°C	490°F / 254°C	-15°F / -26°C
FMO-350 AW	L0882-	68	2	80	20	65 / 9	347 / 55	102	480°F / 249°C	515°F / 268°C	-10°F / -23°C
FMO-500 AW	L0883-	100	3	80	30	95 / 11	545 / 70	101	500°F / 260°C	555°F / 291°C	5°F / -15°C
FMO-900 AW	L0884-	150	4	90	40	164 / 16	856 / 83	102	475°F / 246°C	530°F / 277°C	5°F / -15°C
FMO-1100 AW	L0886-	220	5	90	50	207 / 18	1126 / 97	99	455°F / 235°C	510°F / 266°C	10°F / -12°C
FMO-1700 AW	L0887-	320	6	140	60	301 / 23	1730 / 120	96	440°F / 227°C	490°F / 254°C	10°F / -12°C
FMO-2400 AW	L0885-	460	7	140	70	429 / 30	2350 / 142	98	445°F / 229°C	490°F / 254°C	15°F / -10°C
FMO-3800 AW	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 10 and 11 for more information and package part number suffix.											
FMO-45	L0737-	10	-	-	-	10 / -	60 / -	-	347°F / 175°C	-	-24°F / -11.2°C
FMO-85	L0740-	15-22	-	-	5W	19 / 4	100 / 40	122	335°F / 168°C	370°F / 188°C	-45°F / -43°C
FMO-200	L0739-	46	1	75	10	41 / 6	200 / 47	105	405°F / 207°C	433°F / 223°C	-25°F / -32°C
FMO-350	L0741-	68	2	80	20	68 / 8	347 / 55	104	435°F / 224°C	490°F / 254°C	-10°F / -23°C
FMO-500	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 10 and 11 for more information and package part number suffix.											
FP-150	L0735-	460	7	140	70	367 / 25	1950 / 127	93	395°F / 202°C	455°F / 235°C	0°F / -18°C
FP-150L	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 10 for more information and package part number suffix.											
FG Cooker Oil	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 10 for more information and package part number suffix.											
Seamer Oil FG-100	L0908-	100	3	80	30	109 / 12	-	102	495°F / 257°C	545°F / 285°C	0°F / -18°C
Seamer Oil FG-150	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 10 for more information and package part number suffix.											
STO-FG	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 10 for more information and package part number suffix.											
PM-500	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 10 for more information and package part number suffix.											
Proofer Chain Oil	L0734-	100	3	80	30	103 / 12	510 / 67	108	410°F / 210°C	450°F / 232°C	-5°F / -21°C
*Proofer Chain Oil is available in Pails & Drums. See page 10 for more information and package part number suffix.											
PDO Light	L0853-	7	-	-	-	6.7 - 10.5	-	83	350°F / 177°C	-	-
Pan Divider Oil	L0747-	-	-	-	-	25	130 / 58	-	410°F / 210°C	-	0°F / -18°C
*PDO Light and Pan Divider Oil are available in Pails & Drums. See page 10 for more information and package part number suffix.											

\*H1 Class Lubricants are manufactured with ingredients that comply with FDA regulation 21 CFR 178.3570 for lubricants with incidental contact with the edible product.

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

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

Recommended for use on bakery oven chains and other oven chain applications. 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. 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.

### SYNXTREME HT BN MAX: 100% Synthetic, Polyol Ester (POE)-Based, Oven Chain Lubricant.

This ISO 220 polyol ester full synthetic fluid lubricant offers a high flash point of 575°F / 302°C. Lubricating solids provide additional lubrication up to 1000°F / 538°C. Extends lubrication interval and reduces lubricant consumption. Reduces oven drive motor amperage draw.

### SCL-H1/220: 100% Synthetic, Ester-Based, Oven Chain Lubricant.

Lower cost synthetic high-temperature chain lube. High flash point of 542°F. Low evaporation rate <5%. Reduces carbon buildup on chains. No harmful VOC's.

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 100	L0929-	100	3	85	-	102 / 13	-	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 10 for more information and package part number suffix.										
SYNXTREME HT BN MAX	L1018-	220	5	90	-	-	-	575°F / 302°C	-	-
*SYNXTREME HT BN MAX is available in 2.5 Gallon Jugs and Pails. See page 10 for more information and package part number suffix.										
SCL-H1/220	L1073-	220	5	90	-	214 / 22	-	542°F / 302°C	615°F / 324°C	-32°F / -35°C
*SCL-H1/220 is available in Drums. See page 10 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 POLY FG / HP-2/100: 100% Synthetic, Polyurea Thickened, NSF H1 Registered, Food Grade Grease.

Advanced technology formula delivers outstanding performance and increased oxidation stability. Recommended for electric motor bearings and other high-speed applications.



### SYNXTREME ASAP Anti-Seize Assembly Paste: NSF H1 Registered.

Premium anti-seize compound designed to lubricate and protect threaded connections and flanges at temperatures up to 1,800°F (982°C) and under extreme load pressure conditions. 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.

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 10 and 11 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-1/220	L0200-	Aluminum Complex	1	Synthetic PAO	220	-25°F / -31°C	350°F / 177°C	450°F / 232°C
SFL-2	L0198-	Aluminum Complex	2	Synthetic PAO	220	-25°F / -31°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 10 and 11 for more information and package part number suffix.								
SYN POLY FG / HP-2/100	L0260-	Poyurea	2	Alkylated Naphthalene	100	-4°F / -20°C	482°F / 250°C	483°F / 251°C
*SYN POLY FG / HP2/100 is available in Cartridges, Pails, 1/4 Drums and 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. 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. Contains 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.	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
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 10 and 11 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 10 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 10 and 11 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 10 and 11 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 10 and 11 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 10 for more information and package part number suffix.								



**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 spray can. Part No. L0882-063.

**SFGO Ultra-22 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. L0931-063.

**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.

**FG OIL DIRECT:** A direct contact spray oil manufactured with pure USP white mineral oil, FG Oil Direct is NSF H1 & 3H registered for use in food processing applications where there is direct contact with the edible product. 11 oz / 312 g aerosol can. Part No. L0727-063.

**3H DIRECT Spray:** A direct contact spray grease manufactured with pure USP white mineral oil, FG Oil Direct is NSF H1 & 3H registered for use in food processing applications where there is direct contact with the edible product. 11 oz / 312 g aerosol can. Part No. L0174-063.

**SYN-FG SDO Sugar Dissolving Oil:** This NSF H1 Registered fluid lubricant is designed to lubricate machine components exposed to sugar contamination while removing sugar deposits and preventing future sugar buildup. Available in 11 oz / 312 g aerosol can Part No. L0570-063 and 16 oz / 473 ml non-aerosol pump spray bottle Part No. L0570-067.

**FMO-85-AW Spray:** A multi-purpose Class H1 oil. Packed in 16 oz / 473 ml non-aerosol pump spray bottle. Part No. L0880-067.



■ **Refrigeration Compressor Fluid** NSF H1 Registered

**RCO-68FG:** NSF H1 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
RCO-68 FG	L0818-	68	30	62 / 10	325 / 59	142	390°F / 199°C	545°F / 285°C	-60°F / -51°C

RCO-68 FG is available in Pails & Drums. See page 10 for more information and package part number suffix.

■ **Cleaning, 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.

**Pure Flush:** This NSF H1 Registered, lubricating, flushing and cleaning 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.

# Interchange / Crossover Recommendations

## NSF H1 Registered, Food Processing Plant Application Recommendations

APPLICATIONS	LUBRIPLATE H1 PRODUCT*	APPLICATIONS	LUBRIPLATE H1 PRODUCT*
<ul style="list-style-type: none"> <li>GENERAL GREASING - NORMAL TEMPS</li> <li>HIGH TEMPERATURES</li> <li>LOW TEMPERATURES</li> </ul>	<p><b>SYNXTREME FG-2* or FGL-2*</b>  <b>SYNXTREME FG-2/220* or FGL-2*</b>  <b>SFL-1*</b></p>	<ul style="list-style-type: none"> <li>DRAFT &amp; VENTILATING FANS</li> <li>GREASE</li> <li>OIL</li> </ul>	<p><b>SYNXTREME FG-2* or FGL-2*</b>  <b>SFGO ULTRA-68* or FMO-350AW*</b></p>
<ul style="list-style-type: none"> <li>GENERAL OILING</li> </ul>	<p><b>SFGO ULTRA-68* or FMO-350AW*</b></p>	<ul style="list-style-type: none"> <li>STIRRUPS - BOTTLE FILLERS</li> </ul>	<p><b>STO-FG*</b></p>
<ul style="list-style-type: none"> <li>CENTRALIZED GREASING SYSTEMS</li> </ul>	<p><b>SYNXTREME FG-0* or FGL-0* or FGL-00*</b>  <b>SYNXTREME FG-2/220* or PURE TAC*</b></p>	<ul style="list-style-type: none"> <li>PEACH PITTERS - CHAIN DRIVES</li> </ul>	<p><b>SFGO ULTRA-100* or FP-150L* or FP-150*</b></p>
<ul style="list-style-type: none"> <li>SLIDES, CAMS, EXPOSED GEARS</li> </ul>	<p><b>SYNXTREME FG-2/220* or PURE TAC*</b></p>	<ul style="list-style-type: none"> <li>SEAMING ROLLS, SPINDLES, CHUCKS</li> </ul>	<p><b>SYNXTREME FG-1* or FGL-1*</b></p>
<ul style="list-style-type: none"> <li>CHAINS, CONVEYORS, WIRE ROPE</li> <li>MEDIUM TEMPERATURES</li> <li>HIGH TEMPERATURES</li> </ul>	<p><b>PGO-FGL-220* or FP-150L*</b>  <b>PGO-FGL-460*</b></p>	<ul style="list-style-type: none"> <li>COOKERS - CARRIER BEARINGS</li> </ul>	<p><b>SYNXTREME FG-2/220* or PURE TAC*</b></p>
<ul style="list-style-type: none"> <li>ENCLOSED GEAR CASES</li> <li>HELICAL GEARS</li> <li>WORM GEARS</li> </ul>	<p><b>SFGO ULTRA-220* or FMO-1100AW*</b>  <b>SFGO ULTRA-460* or FMO-2400AW*</b></p>	<ul style="list-style-type: none"> <li>COOKER VALVE LUBRICATION (MANZEL LUBRICATORS)</li> </ul>	<p><b>FOOD GRADE COOKER OIL*</b></p>
<ul style="list-style-type: none"> <li>HOT BRAKE BEARINGS</li> </ul>	<p><b>SYNXTREME FG-2/220* or PURE TAC*</b></p>	<ul style="list-style-type: none"> <li>CAN SEAMING &amp; CLOSING MACHINES (AUTOMATIC LUBRICATORS)</li> </ul>	<p><b>SSO-FG-100* SSO-FG-150* or SFGO ULTRA-100*</b>  <b>SEAMER OIL FG-100* or SEAMER OIL FG-150*</b></p>
<ul style="list-style-type: none"> <li>AIR COMPRESSORS RECIPROCATING</li> <li>AIR COMPRESSORS ROTARY SCREW</li> <li>REFRIGERATION COMPRESSORS</li> </ul>	<p><b>SFGO ULTRA-68* or SFGO ULTRA 100*</b>  <b>SFGO ULTRA-32* or SFGO ULTRA 46*</b>  <b>RCO-68 FG*</b></p>	<ul style="list-style-type: none"> <li>SIGHT FEED OILERS</li> </ul>	<p><b>SFGO ULTRA-100* or PM-500* or FP-150L*</b></p>
<ul style="list-style-type: none"> <li>AIR LINE SYSTEMS</li> </ul>	<p><b>SFGO ULTRA-22* or FMO-85AW*</b></p>	<ul style="list-style-type: none"> <li>ELECTRIC MOTOR BEARINGS</li> </ul>	<p><b>SYNXTREME FG-1* or FGL-1*</b></p>
<ul style="list-style-type: none"> <li>HYDRAULIC SYSTEMS - NORMAL TEMPS</li> <li>LOW TEMPERATURES</li> </ul>	<p><b>SFGO ULTRA-68* or FMO-350AW*</b>  <b>SFGO ULTRA-22* or FMO-85AW*</b></p>	<ul style="list-style-type: none"> <li>STEAM VALVES &amp; PEELERS</li> </ul>	<p>Consult LUBRIPLATE                      Tech Service 1-800-347-5343</p>
<ul style="list-style-type: none"> <li>HIGH SPEED BEARINGS</li> <li>GREASE</li> <li>OIL</li> </ul>	<p><b>SFL-1* or FGL-1*</b>  <b>SFGO ULTRA-32* or FMO-150AW*</b></p>	<ul style="list-style-type: none"> <li>SCRUBBERS</li> <li>GREASE FITTINGS</li> <li>CHAIN DRIVES</li> </ul>	<p><b>SYNXTREME FG-2/220* or FGL-2*</b>  <b>SFGO ULTRA-150* or FP-150L* or FP-150*</b></p>
<ul style="list-style-type: none"> <li>CHEMICAL &amp; CONDENSATE PUMPS</li> <li>GREASE</li> <li>OIL</li> </ul>	<p><b>SYNXTREME FG-2/220* or FGL-2*</b>  <b>SFGO ULTRA-68* or FMO-350AW*</b></p>	<ul style="list-style-type: none"> <li>FORKLIFTS</li> <li>WHEEL BEARINGS</li> <li>HYDRAULIC OIL</li> <li>CHAIN LIFTS</li> </ul>	<p><b>SYNXTREME FG-2* or PURE TAC*</b>  <b>SFGO ULTRA-68* or FMO-350AW*</b>  <b>SFGO ULTRA-100* or FP-150L*</b></p>
<ul style="list-style-type: none"> <li>VACUUM PUMPS</li> </ul>	<p><b>SFGO ULTRA-68* or SFGO ULTRA 100*</b></p>	<ul style="list-style-type: none"> <li>RUST PREVENTATIVE, LAYING UP</li> </ul>	<p><b>SFGO ULTRA-7* or FMO-350AW*</b></p>
		<ul style="list-style-type: none"> <li>CLEANSING &amp; FLUSHING FLUID / OIL</li> </ul>	<p><b>SYNFLUSH FG* or PURE FLUSH*</b></p>
		<ul style="list-style-type: none"> <li>PAN DIVIDER OIL</li> </ul>	<p><b>PAN DIVIDER OIL*</b></p>
		<ul style="list-style-type: none"> <li>LUBRIPLATE WHITE OILS</li> </ul>	<p><b>FMO SERIES*</b></p>

Petroleum Based Product

Synthetic Based Product

\*NSF H1 Registered (Food Machinery Grade)

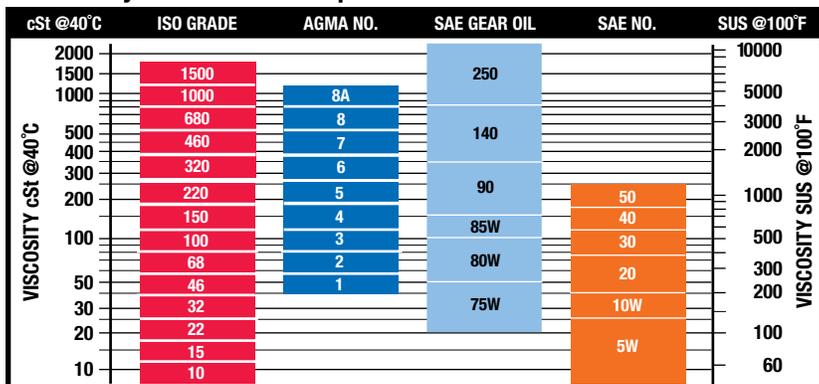
## Lubriplate H1 Class Synthetic Fluid Interchange Recommendations

EXXON / MOBIL	ISO GRADE	LUBRIPLATE H1	EXXON / MOBIL	ISO GRADE	LUBRIPLATE H1
SHC 524	32	SFGO ULTRA 32*	SHC CIBUS 32	32	SFGO ULTRA 32*
SHC 525	46	SFGO ULTRA 46*	SHC CIBUS 46	46	SFGO ULTRA 46*
SHC 526	68	SFGO ULTRA 68*	SHC CIBUS 68	68	SFGO ULTRA 68*
SHC 624	32	SFGO ULTRA 32*	SHC CIBUS 150	150	SFGO ULTRA 150*
SHC 626	68	SFGO ULTRA 68*	SHC CIBUS 220	220	SFGO ULTRA 220*
SHC 627	100	SFGO ULTRA 100*	SHC CIBUS 320	320	SFGO ULTRA 320*
SHC 629	150	SFGO ULTRA 150*	SHC CIBUS 460	460	SFGO ULTRA 460*
SHC 630	220	SFGO ULTRA 220*	MOBILGEAR SHC 150	150	SFGO ULTRA 150*
SHC 632	320	SFGO ULTRA 320*	MOBILGEAR SHC 220	220	SFGO ULTRA 220*
SHC 634	460	SFGO ULTRA 460*	MOBILGEAR SHC 320	320	SFGO ULTRA 320*
SHC 636	680	SFGO ULTRA 680*	MOBILGEAR SHC 460	460	SFGO ULTRA 460*
SHC 639	1000	SFGO ULTRA 1000*	MOBILGEAR SHC 680	680	SFGO ULTRA 680*

KLUBER	ISO GRADE	LUBRIPLATE H1	KLUBER	ISO GRADE	LUBRIPLATE H1	KLUBER	ISO GRADE	LUBRIPLATE H1
KLUBEROIL 4UH1-100	100	SFGO ULTRA 100*	KLUBERSYNTH UH-1 6-150	150	PGO FGL-150*	KLUBERSYNTH GH 6-150	150	PGO-FGL-150*
KLUBEROIL 4UH1-150	150	SFGO ULTRA 150*	KLUBERSYNTH UH-1 6-220	220	PGO FGL-220*	KLUBERSYNTH GH 6-220	220	PGO-FGL-220*
KLUBEROIL 4UH1-220	220	SFGO ULTRA 220*	KLUBERSYNTH UH-1 6-320	320	PGO FGL-320*	KLUBERSYNTH GH 6-320	320	PGO-FGL-320*
KLUBEROIL 4UH1-320	320	SFGO ULTRA 320*	KLUBERSYNTH UH-1 6-460	460	PGO FGL-460*	KLUBERSYNTH GH 6-460	460	PGO-FGL-460*
KLUBEROIL 4UH1-460	460	SFGO ULTRA 460*	KLUBERSYNTH UH-1 6-680	680	PGO FGL-680*	KLUBERSYNTH GH 6-680	680	PGO-FGL-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

## ■ 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	TUBES <sup>(1) (2)</sup> NET WT. VARIES BY PRODUCT	SPRAYS <sup>(3)</sup> NET WT. VARIES BY PRODUCT	CARTRIDGES 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	PAIL 35 LB / 15.9 kg 5 GAL / 18.9 L
Food Grade Fluids / Oils	-	-063	-	-	-	-054	-057	-060
*Food Grade Greases	-092 / -082	-063	-098	-004	-005	-054	-	-035
<b>Package Specifications</b>								
Case Quantity	12	12	40	12	4	12	4	1
Aprox. Dimensions / Inches	-	11x8.5x8	19.5x11.5x10.5	16x12x4.5	16x16x8	13x9.5x9	14.5x10x10.5	12x15
Avg. Gross Shipping Weight	-	12 lbs / 5.4 kg	-	-	-	26 lbs / 11.8 kg	26 lbs / 11.8 kg	40 lbs/18.1 kg
*Avg. Gross Shipping Weight	-	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	38 lbs/17.2 kg

(1) SYN ST H-1 SPECIAL is available in 13 OZ. Tubes, 12 to a case. Part Number L0365-092. See page 5 for more information.

(2) CLEARPLEX is available in 4 OZ. Tubes, 12 to a case. Part Number L0353-082. See page 7 for more information.

(3) FMO-85AW is available 14 OZ. / 414 ml. non-aerosol, hand pump, spray bottle. Part Number L0880-067. See Page 8 for details.

\*Items Sold By Weight. Other Items Sold by Volume.



PRODUCT / PACKAGE AVG. NET WT. / CONTENTS PACKAGE PART NO. SUFFIX	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 -	VISCO DRUM 2800 LB / 1270 kg 379 GAL / 1435 L	VISCO DRUM 3800 LB / 1724 kg 500 GAL / 1893 L
Food Grade Fluids / Oils	-061	-062	-070	-072	-	-
*Food Grade Greases	-039	-040	-042	-072	-041	-041
<b>Package Specifications</b>						
Aprox. Dimensions / Inches	15x27	23.5x35	48x48x51	-	45.5x53.5x76.5	45.5x53.5x88
Avg. Gross Shipping Weight	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	134 lbs/60.8 kg	465 lbs/211 kg	2600 lbs/1179 kg	-	3800 lbs/1724 kg	4900 lbs/2223 kg

## ■ Perma Automatic Lubricators

### Select Lubriplate H1 Food Grade Lubricants are now available pre-filled in 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.



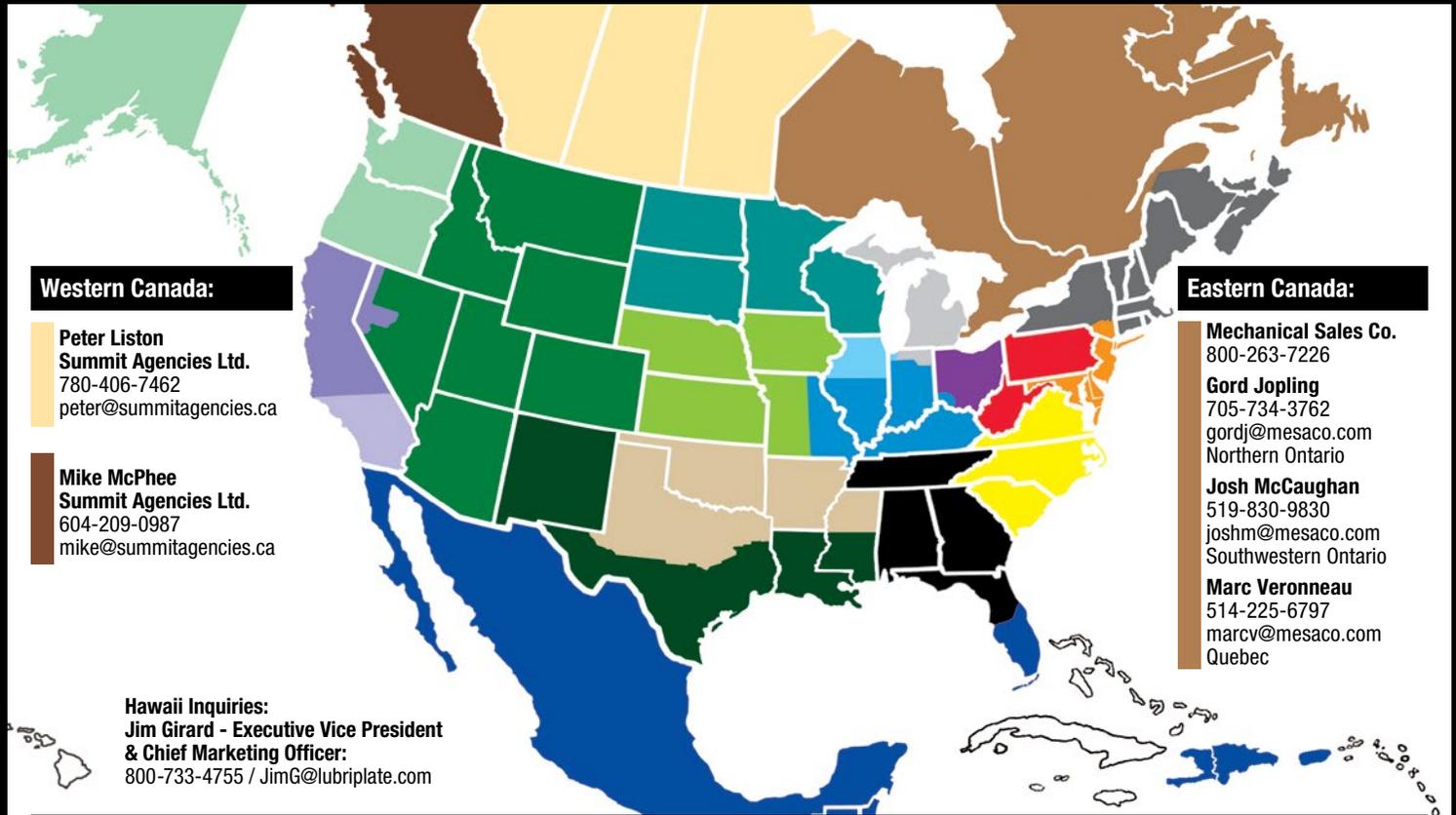
PERMA MODEL	VOLUME SIZE	OUTPUT RATE	PRESSURE BUILD-UP	FEATURES / DETAILS	PERMA PACKAGE PART NO. SUFFIX
CLASSIC	120 cc	1 Month (Activator Screw)	65 PSI	Metal Housing	-101
CLASSIC	120 cc	3 Month (Activator Screw)	65 PSI	Metal Housing	-103
CLASSIC	120 cc	6 Month (Activator Screw)	65 PSI	Metal Housing	-106
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
PERMA ULTRA	500 cc	1, 2, 3 ... 12 months / 1, 2, 3 ... 26 weeks	Up to 725 PSI	Bluetooth Enabled, High-Pressure, Wide Temp Range	-350
PERMA ULTRA	1000 cc	1, 2, 3 ... 12 months / 1, 2, 3 ... 26 weeks	Up to 725 PSI	Bluetooth Enabled, High-Pressure, Wide Temp Range	-300
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 H1 PRODUCTS AVAILABLE IN PERMA LUBRICATORS

FOOD GRADE GREASES NSF H-1	CLEARPLEX-2 Pt. No. L0351-, FGL-0 Pt. No. L0230-, FGL-1 Pt. No. L0231-, FGL-2 Pt. No. L0232-, FML-1 Pt. No. L0144-, FML-2 Pt. No. L0145-, PURETAC Pt. No. L0236-
SYNTHETIC FG GREASES NSF H-1	SFL-00 Pt. No. L0195-, SFL-0 Pt. No. L0196-, SFL-1 Pt. No. L0197-, SYNXTREME FG-0 Pt. No. L0307-, SYNXTREME FG-1 Pt. No. L0306-, SYNXTREME FG-2 Pt. No. L0305-
FOOD GRADE OILS** NSF H-1	FMO-85-AW Pt. No. L0880-, FMO-200-AW Pt. No. L0881-, FMO-350-AW Pt. No. L0882-
SYNTHETIC FG FLUIDS** NSF H-1	SFGO ULTRA 32 Pt. No. L0915-, SFGO ULTRA 220 Pt. No. L0985-, SYN-H1-220 Pt. No. L0779-

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

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