

# MOLYKOTE

FROM DOW CORNING

High Performance Industrial Lubricants for Food and Beverage Processing



A complete line of industrial lubricants and fluids.

## One Trusted Source for All Your Lubricant Needs

For nearly 60 years, OEM designers, maintenance and materials engineers around the world have trusted the Molykote® brand for performance and expertise to solve or prevent virtually any plant lubrication problem. Molykote offers the most complete line of industrial lubricants and fluids available from any single supplier in the world.

## **Complete Line of Lubrication Products**

With Molykote, you get the most complete line of lubrication products available, including mineral oils, synthetic fluids, greases, pastes, anti-friction coatings and dispersions. These products help keep hydraulic systems, air compressors pumps, gearboxes, chain drives, refrigeration compressors and other plant mechanical systems operating at peak efficiency.

Molykote also offers a complete line of high-performance specialty hybricants that help reduce friction and wear, extend lubrication intervals and reduce maintenance and replacement costs in applications with performance requirements that cannot be met by conventional oils and greases. These products are formulated to withstand heavy loads; dirty, dusty or high moisture content environments; as well as a wide range of temperatures and speeds under extreme conditions.

# **Excellent Fit For Food and Beverage Processing**

Our Molykote High-Performance Industrial Fluids are particularly suited for plant operations in the food and beverage industry. Many Molykote products conform to requirements under NSF regulations, H-1 or H-2 designations of the U.S. Department of Agriculture (USDA), and many are kosher approved and have Ag Canada approvals.

## Resists emulsification

Traditional ails can retain dissolved water and emulsify with water, either of which can cause corrosion and lubrication-related breakdowns. But Molykote oils are molecularly engineered for maximum saturation, leaving no nucleation sites to bond with water. Combined with highly responsive additive technology (used at very low levels), Molykote oils inherently resist water throughout their life, making them a smart choice for lubrication in environments needing constant wash downs.

#### From freezer to oven

In addition, to meet the dramatic temperature variations from freezers to ovens, the product line includes H1 lubricants with operating temperature capabilities from -60°C to 150°C (-76°F to 302°F), and H2 lubricants with temperature capabilities from -60°C to 250°C (-76°F to 482°F). The product line also includes compounds, greases, pastes, anti-friction coatings and dispersions with temperature capabilities from -226°C to 1400°C (-375°F to 2550°F).

# **Molykote Industrial Lubricants**

## High Quality, Better Value

Molykote High Performance Industrial Lubricants provide superior performance for nearly every lubrication related requirement in your plant.

Molykote lubricants and fluids meet specifications over a wide temperature range due to the advanced technology of the base stocks. Oil drain intervals typically can be extended because these fluids survive high temperatures and continue to perform as originally specified, which reduces costs associated with oil consumption. In addition, contrary to conventional mineral oils, Molykote products do not contain many of the by-products that cause lubricant degradation. As a result, they help prevent buildup of "varnish" on internal parts, which helps extend equipment life and prevent costly cleaning of fouled components. All these factors add up to more continuous trouble-free operation and lower overall maintenance costs due to superior lubricant performance.

# Molykote High Performance Industrial Lubricating Fluids

Molykote synthetic oils are made by combining molecular "building blocks" to meet targeted performance specifications and to minimize impurities. Synthetic oils are formulated with next generation performance-enhancing additives. Molykote mineral oils are produced in a patented hydrocracking process, which ensures that they are nearly free of contaminants. Synthetic blends are composed of synthetic and mineral oil base stocks.



## **Hydraulic Oils**

Molykote hydraulic oils minimize formation of emulsions in contact with water due to the purity of the base fluid. They will generally perform successfully in hydraulic systems far longer than conventional hydraulic oils. Plants can gain significant savings from reduced oil consumption, reduced disposal cost, labor savings and fewer interruptions to production. These non-toxic oils are derived from hydrocracked or synthetic base stocks and can be used in systems designed for low pour point or high flash point mineral oils.

## **Compressor and Vacuum Pump Oils**

Molykote compressor and pump fluids are formulated to meet or exceed the performance of most comparable OEM fill requirements. These compressor and vacuum pump oils are compatible with mineral oils and systems designed for mineral oil lubrication. The Molykote service packages offers oil analysis to ensure that the right food product is used for each application and that product life is maximized.

#### Gearbox and Chain Oils

Molykote gearbox and chain lubricants help prevent v and process interruptions in power transmission's and components. Compared to conventional offs they also offer greater resistance to oxidation and stable p ance at high temperatures and under high loads. Molykote gearbox oils maximize fill intervals and mainta in viscosity characteristics at wide temperature range

## **Multi-Purpose Oils**

Molykote multi-purpose oils provide protection and lubrication for a wide range of moving components in industrial systems. Depending on the application, your Molykote representative can help select the right oil from a range of viscosities, additive packages and pour points.

## Bearing greases

Molykote high performance greases can be used to lubricate bearings, gears, chains and sliding mechanisms in food and beverage processing application and are suitable for lubrication points with low-to-high loads, moderate-to-high temperatures, and moderate-to-high speed applications.

# **Molykote High Performance Industrial Lubricants**

## Benefits to Food & Beverage **Processing Plants**

- Reduce amount of lubricant suppliers
- Extend interval between lubricant change
- Reduce labor for scheduled and unscheduled maintenance
- Simplify record keeping for Hazard Analysis and Critical Control Point (HACCP)
- Extend lifetime of compress
- Reduce the need for periodic costly internal cleaning of compressors
- Standardize plant use of food-grade fluids and **lubricants**

## Other Molykote Lubricant Types

**Types** Lubricating Technology

MO, PAO, Ester, PIB, Silicone, Greases

Silicone

Fluorosilicones, PFPE

Compounds

**Pastes** Graphite, MOS<sub>2</sub>, PTFE, Metallic Oxides

Dry-Film Lubricants Graphite, MOS2, PTFE, Silicone Wax

Dispersions

Dispersions, MO, PAO, Ester, PIB, PAG

Reference: DE: Diester

MO: Mineral Oil

MOS<sub>2</sub>: Molybdenum Disulfide

PAO/MO: Polyalphaolefin/Mineral Oil

PAG: Polyalkylene Glycol Polyolester

PAO: Polyalphaolefins PFPE: Perfluoropolyether

PIB: Polyisobutene

PTFE: Polytetrafluoroethylene

Molykote Industrial Lubricants											
Category/Number	Prope	Properties									
	NSF/USDA Category Code	ISO VG	Visco 40°C	osity, cSt 100°C	VI	Pour P °F	oint °C	Flash °F	Point °C	Density 20°C, g/ml	Base Oil
Hydraulic Oils											
L-0532FG	H-1	32	31.	2 5.3	103	0.0	-18	420	216	0.857	MO
L-0346FG	H-1	46	44.	5 6.6	99	-6.0	-21	425	218	0.860	MO
L-0368FG	H-1	68	66.	0 8.3	94	5.0	-15	460	238	0.867	MO
L-1346FG	H-1	46	43.	1 7.1	110	-6.0	-21	430	221	0.854	PAO/MO
L-1368FG	H-1	68	61.	1 9.3	139	-6.0	-21	520	271	0.841	PAO/MO
Chain Oils											
L-0460FG	H-1	68	66.	0 8.3	100	10.0	-12	465	240	0.858	МО
L-1468FG	H-1	68	65.	8 9.8	131	-65.0	-54	520	271	0.830	PAO
Air Compressor Oils										<b>)</b> `	
L-1232FG	H-1	32	30.	2 5.7	138	-76.0	-60	465	241	0.826	PAO
L-1246FG	H-1	46	30. 47.		138		-42	475	246	0.829	PAO
	11-1	40	47.	0 7.9	130	-44.0	-42	475	240	0.029	FAO
Ammonia Compressor Oils											
L-0660PS	H-2	68	69.	0 9.0	100	-38.0	-39	440	227	0.870	MO
Vacuum Pump Oils							$\mathcal{L}$				
L-1668FG	H-1	68	63.	1 9.0	113	0.0	18	445	229	0.856	PAO/MO
Special Purpose Fluids											
L-1605FG	H-1	5	5.	3 2.0	124	-76.0	-60	335	168	0.800	PAO
Gearbox Oils											
L-0115FG	H-1	150	150	4 15.4	100	-0.4	-18	500	260	0.860	MO/PB
L-0122FG	H-1	220	219	1 20.0	100		-10	490	254	0.860	MO/PB
L-0146FG	H-1	460	441.		107	0.0		490	254	0.880	MO/PB
L-1115FG	H-1	150	134.		122		-39	435	224	0.850	PAO/MO
L-1122FG	H-1	220	197.		142		-33	440	227	0.850	PAO/MO
L-1146FG	H-1	460	380.		147	-33.0		545	285	0.852	PAO
	11-1	<b>/</b>	300.	Z J7.Z	147	-33.0	-30	343	200	0.032	170
Multi-purpose Oils										-	
L-0510FG	4-1	100	105.		103	5.0		495	257	0.866	MO
L-0532FG	H-1	32	31.	2 5.3	103	0.0	-18	420	216	0.857	MO
Extreme Pressure Greases	NSF/USDA Category Code	Viscosity at 40°C (104F)		NLGI Class		4-Ball EP weld load,N		Drop °F	Point °C	Density 20°C, g/ml	Base Oil
G-0050	H-1	70 cst		0		> 2,940		> 420	> 216	0.890	MO
G-0051	H-1	70 cst		1		> 2,940		> 450	> 232	0.890	MO
G-0052	H-1	115 cst		2		> 2,940		> 475	> 246	0.890	MO
G-4500	H-1	110 cst		2		> 3,100		> 518	> 270	0.840	PAO
G-4501	H-1	110 cst		1		> 3,100		> 475	> 246	0.830	PAO
HP 300	H-1	160 cst		2		> 3,300		None		2.000	PFPE
	NSF/USDA Category Code	Coefficient of S		Solid Lube		4-Ball EP Tem		mperature Range		Density 20°C, g/ml	Base Oil
Assembly Paste		*Erichsen Screw Test									
P1900	H-1	0.1	١	White Solid	S	3,200	-22 1	o 572 -:	30 to 300	1.110	МО
Other Spray Oils											
Food Grade Spray	This odorless, tasteless H1 mineral oil spray for food processing equipment is easy to use, offers good penetration, and corrosion protection										
Molykote 316 Silicone Release Spray	Useful in applications where a heat stable, H1 release agent is needed to minimize sticking, or provide lightweight lubrication										



### **How To Contact Us**

For nearly 60 years, OEM designers, maintenance and materials engineers, around the world have trusted the Molykote® brand for performance and expertise to solve or prevent lubrication problems. Molykote solutions are available through a distributor network of more than 3,000 channel painners around the globe. To learn more about our extensive product and service offering, visit www.molykote.com or email industrial@dowcorning.com.

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