



TM

# MOLYKOTE®

FROM DOW CORNING

**Proven, effective solutions for the oil & gas industry**

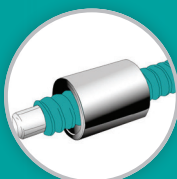


**GREASES | PASTES | OILS | COMPOUNDS | DISPERSIONS | ANTI-FRICTION COATINGS**



### GREASES

Solid to semisolid materials consisting of a lubricating fluid, thickening agent and additives. Used on rolling element bearings and other moving parts.



### PASTES

Greaselike materials containing a very high percentage of solid lubricants. Used for assembly and lubrication of highly loaded, slow-moving parts or threaded fasteners.

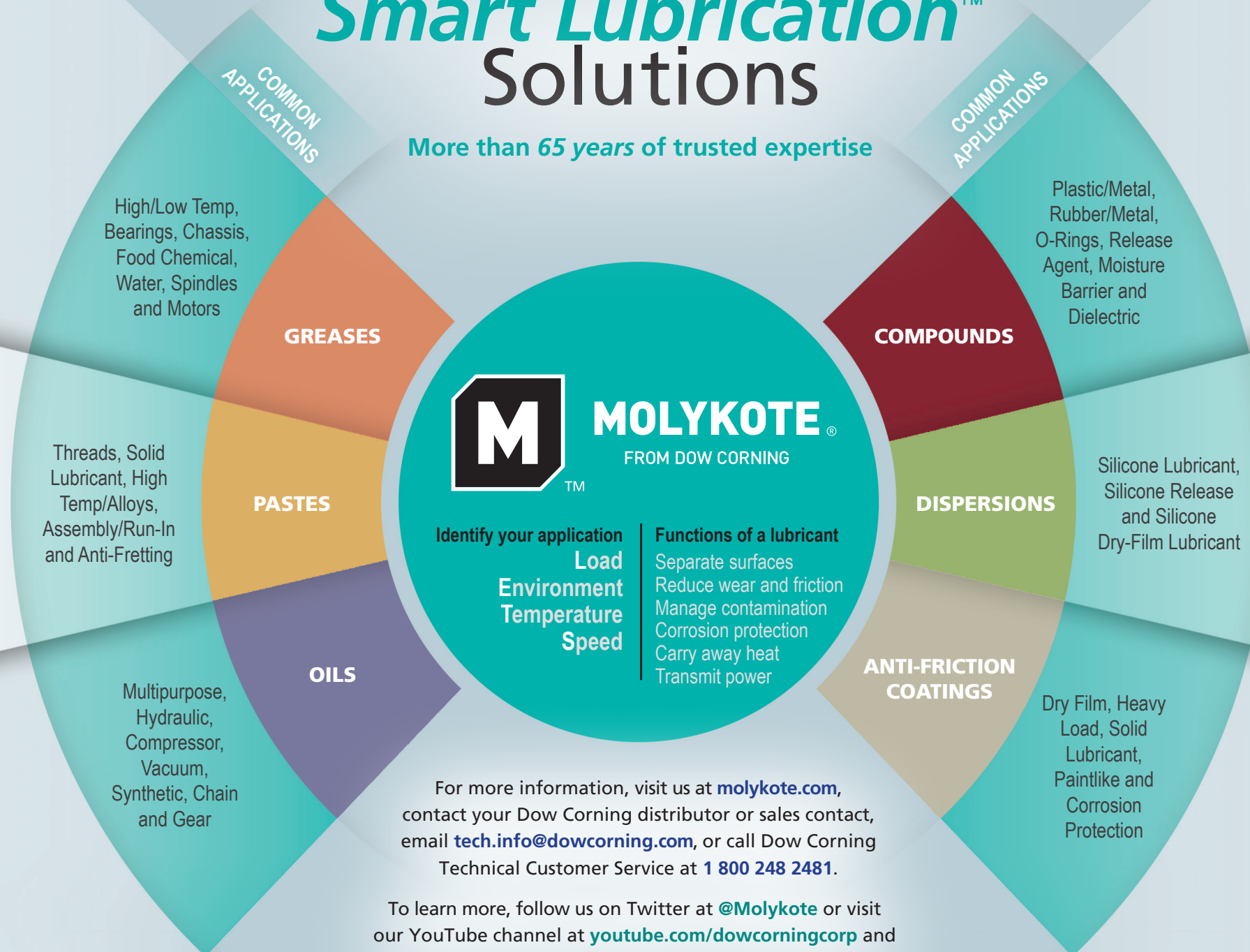


### OILS

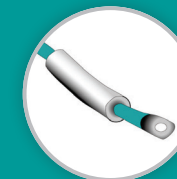
These lubricating fluids are fortified with carefully selected additives to provide optimum performance and service life while maximizing protection of the equipment and machinery they are designed to lubricate.

# Smart Lubrication<sup>TM</sup> Solutions

More than 65 years of trusted expertise

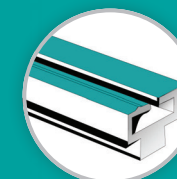


GREASES | PASTES | OILS | COMPOUNDS | DISPERSIONS | ANTI-FRICTION COATINGS



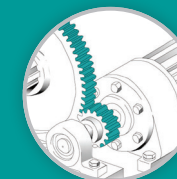
### COMPOUNDS

Greaselike materials composed of silicone fluids and silica fillers. Used for their sealing, dielectric and nonmetal-to-metal lubricating properties.



### DISPERSIONS

Finely divided solid lubricants suspended in lubricating fluid; preferred when it is necessary to apply lubricants in liquid form.



### ANTI-FRICTION COATINGS

"Lubricating paints"; when applied, these materials cure to form dry, solid lubricant coatings that are bonded to the surface.



Product Family	Product(s)	Description	Features and Benefits	Recommended Applications
GREASES	<i>Molykote</i> ® G-4700 Extreme Pressure Synthetic Grease	Synthetic grease based on PAO base oil and lithium complex thickener; contains MoS <sub>2</sub> solids	Wide service-temperature range; compatible with many plastics and elastomers; excellent low-temperature torque	Multipurpose synthetic grease for bearings and gears; designed to handle extreme loads and applications involving vibration and/or shock-loading
	<i>Molykote</i> ® 3451 Fluoro-silicone Grease	Fluorosilicone-oil-based grease with PTFE thickener	Resistant to most solvents and chemicals; high oxidation resistance; wide service-temperature range (-40 to 230°C); high resistance to water and water washout	Suitable for friction contacts with heavy loads, particularly under unfavorable environmental influences; used on valves, mechanical seals and pumps, ball and socket joints, bearings, loading arms for ships, and vacuum-contained equipment
	<i>Molykote</i> ® G-1502 FM Synthetic Bearing and Gear Grease	Fully synthetic grease based on polyalphaolefin (PAO) base oil (ISO 220) and aluminum complex thickener	Excellent adhesion and resistance to water washout and spray-off	Suitable for applications where tacky grease is preferred or required, such as chains, cams, open gears, valves and sprockets where water wash-off is problematic or grease sling-off cannot be tolerated
	<i>Molykote</i> ® 1292 Long Life Bearing Grease	Fluorosilicone-oil-based grease with urea thickener	Long-term lubrication due to its extremely low tendency towards oxidation; high drop point (>250°C); wide service-temperature range (-40 to 200°C); high resistance to water and water washout; resistant to mineral oil, fuels and many chemicals	Suitable for high-temperature motor bearings; recommended for rolling elements and bearings; chemical and processing equipment
	<i>Molykote</i> ® HP-300 Grease	Fully fluorinated grease based on linear perfluoropolyether (PFPE) base oil and PTFE thickener	Superior resistance to chemicals and solvents; excellent stability at high temperatures; minimal degradation due to oxidation; long-term lubrication	Used under harsh conditions, such as low or high temperatures (-40 to 250°C), corrosives, solvents, liquefied natural gases, and high-vacuum conditions; has a higher viscosity index (VI) and performs at lower temperatures than branched PFPEs
	<i>Molykote</i> ® HP-870 Grease	Fully fluorinated grease based on branched perfluoropolyether (PFPE) base oil and PTFE thickener	Superior resistance to chemicals and solvents; excellent stability at high temperatures; minimal degradation due to oxidation; long-term lubrication	Used under harsh conditions, such as low or high temperatures (-20 to 250°C), corrosives, solvents, liquefied natural gases, and high-vacuum conditions; better wear protection under heavier loads and more rigid than linear PFPEs
PASTES	<i>Molykote</i> ® P-37 Paste	Ultrapure, metal-free lubricating compound containing zirconium dioxide	Used for stainless, austenite and high-nickel chromium steel alloy screws at high temperatures (1,400°C); excellent load-carrying capacity and seize protection; sulfur content of less than 250 ppm, with total halogen content (including Cl) of less than 200 ppm; does not contribute to stress corrosion cracking	Use on threaded connections to prevent seizure and damage during assembly and disassembly after high-temperature exposure; metal-free for use in stainless-steel applications and other high-alloy materials
	<i>Molykote</i> ® P-40 Metal-Free Adhesive Lubricating Paste	Metal-free paste containing white solids and PTFE	Excellent adhesion; good corrosion protection; good water resistance; good anti-fretting; metal-free; low water-pollution class	Suitable for threaded connections in high-moisture applications; resists water wash-off
	<i>Molykote</i> ® 1000 Solid Lubricant Paste	Multipurpose paste containing copper, graphite and white solids	High load-carrying capacity; enables nondestructive dismantling; coefficient of friction unchanged in the area of oiled bolts, even after several bolt retightenings and loosening; good corrosion protection	Suitable for bolted joints subjected to elevated temperatures (maximum 650°C) and to corrosive effects
	<i>Molykote</i> ® DX Paste	Paste containing solid PTFE lubricants	Good water resistance and water-wash resistance; excellent protection against galling; anti-fretting corrosion	Suitable for sliding surfaces and friction contacts exposed to heavy loads
	<i>Molykote</i> ® G-Rapid Plus Solid Lubricant Paste	Lubricating paste containing MoS <sub>2</sub> , graphite and white solids	Low friction coefficient; prevents seizure and scoring; reduces formation of fretting corrosion	Low friction coefficient for assembly and running-in of metallic components; suitable for threaded connections and press-fit production of all types of machine elements; running-in lubricant for new machines and gears
	<i>Molykote</i> ® Cu-7439 Plus High Temperature Copper Paste	Multipurpose paste containing copper	Excellent adhesion to metal surfaces; good load-carrying capability; extremely tacky; excellent protection against fretting corrosion and corrosion due to high temperature; excellent protection against water wash-off	Suitable for flange seals, adjuster screws and threaded connections; used in refineries, petrochemical facilities and marine vehicles
OILS	<i>Dow Corning</i> ® 510 Fluid <i>Dow Corning</i> ® 550 Fluid <i>Dow Corning</i> ® 710 Fluid	100% polyphenylmethyldimethylsiloxane	Thermal stability; chemical inertness; low flammability; good compressibility; excellent heat transfer; high viscosity index	Base oil for high-temperature ball-bearing greases; lubricating oil for high-temperature instruments
	<i>Dow Corning</i> ® FS-1265 Fluid	100% active fluorosilicone fluid	Resists oxidation, harsh chemicals and fuels; wide service-temperature range (-40 to 204°C); excellent fire and flash resistance; high viscosity index	Lubricating oil in vacuum pumps handling reactive greases, in high- and low-temperature bearings, and in bearings subjected to washing by fuels or solvents; lubricating bearings and valves in the presence of harsh conditions and extreme temperatures
	<i>Molykote</i> ® L-12XX Synthetic Compressor and Vacuum Pump Oil	Fully synthetic PAO oil	Wide service-temperature range; broad compatibility; fully synthetic base oil; ISO viscosity ranges from 32 to 100	Rotary screw vacuum pumps and compressors designed to operate on ISO 32 to 100 rust and oxidation (R&O) oil
	<i>Molykote</i> ® L-1510 Compressor and Vacuum Pump Oil <i>Molykote</i> ® L-1568 Compressor and Vacuum Pump Oil	Fully synthetic PAO oil	Formulated to meet or exceed the performance of all comparable OEM fill products ( <i>Molykote</i> ® L-1510 Compressor and Vacuum Pump Oil for ISO 100 and <i>Molykote</i> ® L-1568 Compressor and Vacuum Pump Oil for ISO 68)	Used in harsh chemical environments, such as where HCl and methyl chloride are present; lubricant used for flooded screw compressors and vacuum pumps in process gas applications; recommended for process gas oil and nonair/nonhydrocarbon gas compression
	<i>Molykote</i> ® L-1605FM Synthetic Barrier Fluid	Fully synthetic PAO oil	ISO 5 oil; no additives	Barrier fluid used on mechanical seals
	<i>Molykote</i> ® L-1668FM Compressor and Vacuum Pump Oil	Fully synthetic PAO oil	ISO 68 oil with a rust and oxidation (R&O) additive package	High-performance lubricating oil for compressors and vacuum pumps
	<i>Molykote</i> ® L-4640 Synthetic Compressor Flush Fluid	Diester-based oil	ISO 32 to 46 with a corrosion inhibitor package	Used when converting from one base oil to another; dissolves sludge and varnish
	<i>Molykote</i> ® L-4646 Compressor and Vacuum Pump Oil	Synthetic polyolester (POE) base oil	ISO 46 oil with a rust and oxidation (R&O) additive package	High-performance lubricating oil for compressors used at elevated temperatures
COMPOUNDS	<i>Dow Corning</i> ® M Gear Oil Additive	Dispersion of MoS <sub>2</sub> in mineral oil	Extreme-pressure lubrication additive for petroleum oils; high load-carrying capacity at slow speeds; compatible with mineral oil gear oils and SHC	Typical applications include serving as an additive to oil-lubricated gears, bearings, machine tools and metalworking; used in extreme-pressure applications
	<i>Molykote</i> ® 111 Compound	General-purpose compound of silicone oil and inorganic thickener with heavy consistency	Provides a noncuring moisture barrier; wide service-temperature range (-40 to 200°C); excellent water resistance; compatible with many plastics and elastomers; low vapor pressure; low volatility; meets several global standards for water contact	Sealant for outdoor equipment (also shipboard) subject to washing and harsh environmental exposure; lubricant for use on valves and most elastomer O-rings, gaskets and seals
	<i>Molykote</i> ® 55 O-Ring Grease	Silicone-oil-based grease with lithium thickener	Excellent oxidation resistance; good corrosion protection; wide service-temperature range (-65 to 175°C)	Compatible with most O-ring materials (nonsilicone) and elastomers used in valve assemblies; helps ensure positive lubrication and sealing by swelling the O-ring
	<i>Dow Corning</i> ® 4 Electrical Insulating Compound	Compound of inert silica filler and polydimethyl silicone fluid	High dielectric strength; low volatility; moisture-resistant; good thermal oxidation and chemical stability; highly water-repellent	Used as a seal and lubricant for cable connectors, battery terminals, rubber door seals, switches, and rubber and plastic O-rings and as an assembly lubricant for various metal/plastic and metal/rubber combinations
	<i>Dow Corning</i> ® High-Vacuum Grease	Compound of silicone oil and silica fillers	Stiff, nonmelting silicone lubricating material; reduces wear in plastic/metal and rubber/metal contacts; low volatility; excellent resistance to water, chemicals, and high and low temperatures	Seals and lubricates chemical-processing equipment; used in reduced outgassing at high-vacuum conditions
ANTI-FRICTION COATINGS	<i>Dow Corning</i> ® 340 Heat Sink Compound	Silicone compound containing zinc oxide	Noncuring and nonflowing thermally conductive compound	Suitable for thermal coupling of electrical/electronic devices to heat sinks
	<i>Molykote</i> ® L-0501 Lubricant	Penetrating oil and lubricant; available in liquid and aerosol forms	Contains anti-wear additive and is low-volatility for longer-term lubrication than conventional penetrating oils; excellent corrosion protection	Multipurpose penetrating lubricant for loosening rusted parts; stopping squeaks; and providing corrosion protection, water displacement and long-term lubrication
	<i>Molykote</i> ® C-40 High Temperature Chain Lubricant	Low-viscosity dispersion of graphite in polyalkylene glycol (PAG)	Lubricates at high temperatures (350 to 1000°F); penetrates inaccessible areas, carrying solid lubricating-graphite particles to the point where lubrication films are required	Lubricating loaded chains, conveyors and bearings at elevated temperatures
	<i>Molykote</i> ® 3402-C LF Anti-Friction Coating	Air-curing dry-film lubricant containing MoS <sub>2</sub> and proprietary binder	Fast drying and curing at room temperature; excellent corrosion protection; high pressure and wear resistance; excellent load-carrying capacity	Durable anti-friction coating that can have fast drying and curing
	<i>Molykote</i> ® D-321 R Anti-Friction Coating	Air-curing dry-film lubricant containing MoS <sub>2</sub> and proprietary binder; available in aerosol form	Fast air-drying and curing; will not attract contaminants	Aerosol delivery allows for lubrication of hard-to-reach spaces; excellent for lubrication of parts that experience high initial wear when breaking in new or rebuilt equipment
ANTI-FRICTION COATINGS	<i>Molykote</i> ® 3400A Anti-Friction Coating	Heat-curing dry-film lubricant containing MoS <sub>2</sub> , white solids and epoxy binder	High load-carrying capacity; excellent adhesion to metals; high resistance to oils and fuels; best corrosion protection of heat-cured AFCs	Suitable for permanent lubrication with simultaneous corrosion protection of friction contacts involving high loads and low speeds, such as threaded connections; used wherever oils or greases cannot be used for technical reasons or are undesirable due to risk of soiling
	<i>Molykote</i> ® D-7409 Anti-Friction Coating	Heat-curing dry-film lubricant with MoS <sub>2</sub> , graphite and polyamide-imide binder	Outstanding lubrication coupled with corrosion protection; high load-carrying capacity; high wear resistance; high-temperature resistance; resistant to oil, grease and solvents; avoidance of fretting corrosion	Suitable for highly stressed sliding areas with low sliding speeds, oscillating movements or intermittent operations; for permanent lubrication at high temperatures and in the presence of fuels and oils
	<i>Molykote</i> ® D-708 Anti-Friction Coating	Heat-curing dry-film lubricant containing PTFE and epoxy binder	Cured film has an operating temperature range of -60 to 240°C; low coefficient of friction; outstanding corrosion protection	Protection of metal/metal and metal/plastic pairings under low to medium loads



## Learn More

*Molykote*® brand lubricants are available through a global network of distributors. And Dow Corning has Lubricant Expertise Centers strategically located worldwide to provide you with expert technical service and support.

Our specialty lubricants include greases, anti-seize pastes, multi-purpose oils, specialty compounds, dispersions, anti-friction coatings and more. Learn about our extensive product and service offering by visiting [molykote.com](http://molykote.com).



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