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**MOLYKOTE**®

FROM DOW CORNING

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

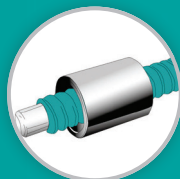


**GREASES | PASTES | OILS | COMPOUNDS | DISPERSIONS | ANTI-FRICTION COATINGS**



### 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.

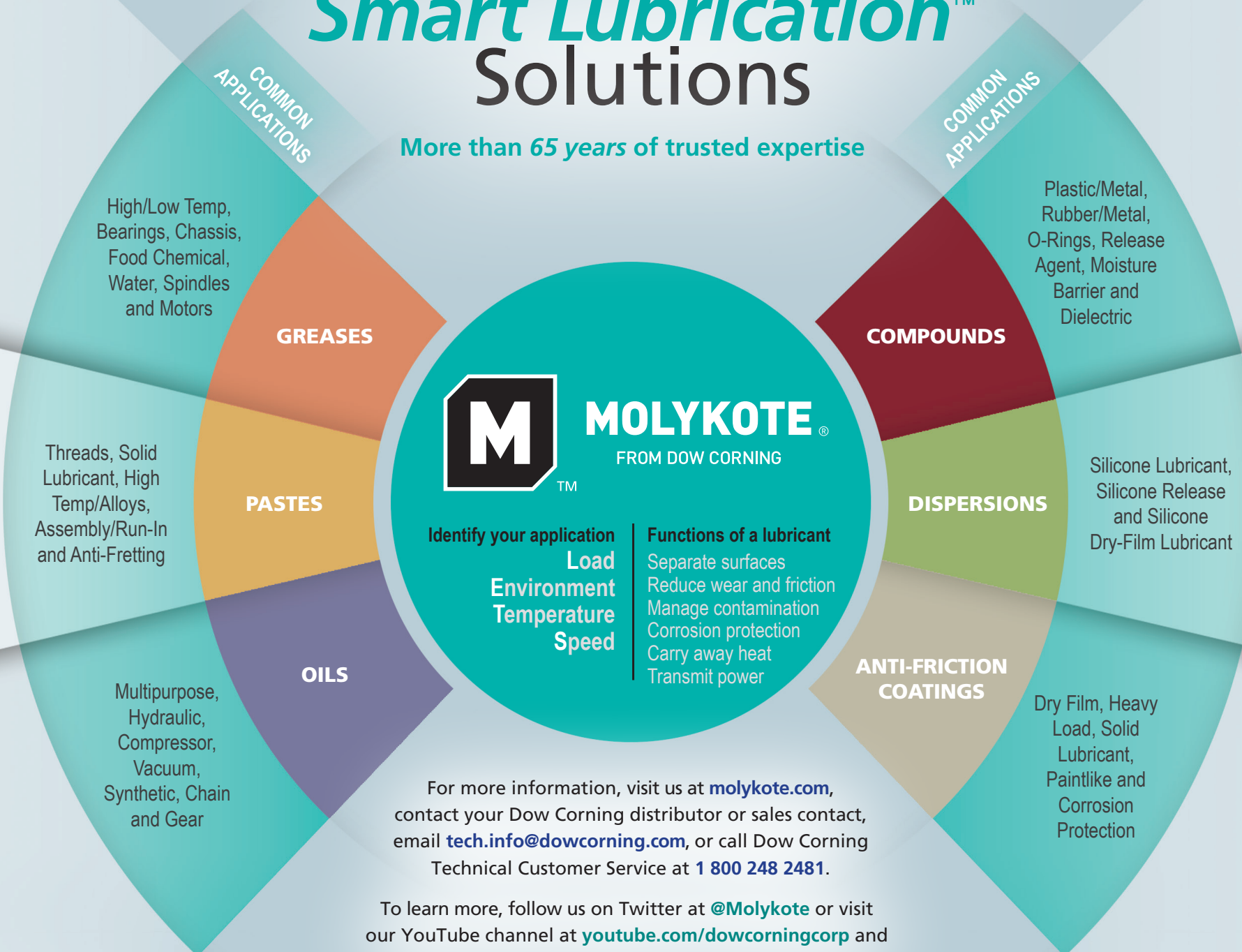


### OILS

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™ Solutions

More than 65 years of trusted expertise

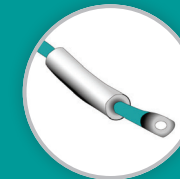


For more information, visit us at [molykote.com](http://molykote.com), contact your Dow Corning distributor or sales contact, email [tech.info@dowcorning.com](mailto:tech.info@dowcorning.com), or call Dow Corning Technical Customer Service at 1 800 248 2481.

To learn more, follow us on Twitter at [@Molykote](https://twitter.com/Molykote) or visit our YouTube channel at [youtube.com/dowcorningcorp](https://youtube.com/dowcorningcorp) and select the playlist called "Molykote -- Smart Lubrication."

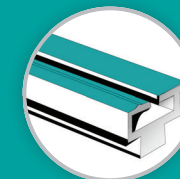


GREASES | PASTES | OILS | COMPOUNDS | DISPERSIONS | ANTI-FRICTION COATINGS



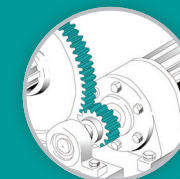
### COMPOUNDS

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<br><i>Dow Corning</i> ® 550 Fluid<br><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<br><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   |
|                        | <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   |
| COMPOUNDS              | <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   |
|                        | <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   |
| DISPERSIONS            | <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   |
| ANTI-FRICTION COATINGS | <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  |
|                        | <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).



**Images:** Front cover – AV11273; Page 2 – AV16996, AV16999, AV16997; Page 3 – AV17000, AV17001, AV17002, Inside – AV12315

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AGP14246

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