



DOW CORNING

Automotive and Transportation
Solutions



SMART LUBRICATION™ SOLUTIONS FOR VEHICLE EXTERIOR DESIGN

Smart science drives durable styling innovation



DESIGN FOR LIGHTWEIGHT STYLING DURABILITY

Meet your critical lubrication requirements for advanced vehicle exterior design with *Molykote*[®] brand specialty lubricants from Dow Corning, a wholly owned subsidiary of The Dow Chemical Company. With our in-depth expertise, a heritage of innovation, problem-solving collaboration and reliable global supply and technical support, these high-performance *Smart Lubrication*[™] solutions are precisely formulated and application-matched to help you achieve:

- **Energy efficiency** with reduced friction losses and increased wear control
- **Comfort and design** with enhanced smoothness and reduced noise and vibration
- **Safety** with added component reliability, less wear and more corrosion resistance
- **Sustainability** with increased process efficiency and durable component service life

Design for lightweight styling durability with a choice of *Molykote* brand *Smart Lubrication* solutions:

- **Greases** with special additives to resist water washout, evaporation or oxidation
- **Silicone compounds** for light-load lubricating and sealing in extreme temperatures
- **Anti-seize pastes** with high levels of lubricating solids for heavy loads and slow speeds
- **Anti-friction coatings** for clean, dry-film lubrication to control friction, wear and noise
- **Solids and powders** for plastics lubrication and specialized friction-control additives
- **Oils and dispersions** with performance additives in synthetic or mineral blends

INNOVATE WITH SMART SCIENCE

Proven, effective *Molykote* brand *Smart Lubrication* solutions can help you meet vehicle exterior design goals for durable styling innovation:

Reduce mass without compromising durability

- Sunroof, panoramic roof slides
- Sliding door, liftgate rails
- Adaptive front lighting systems (AFS) actuators and guides

Reduce squeaks, rattles and unwanted noise

- Mirrors, antennas
- Body-control actuators
- Windshield wiper motors and levers
- Control/release cables

Protect and lubricate vehicle security and access

- Door entry, latching and locking systems
- Hood, trunk, liftgate and sliding door opening and latching mechanisms



MOLYKOTE[®]
FROM DOW CORNING



SMART LUBRICATION™ SELECTION GUIDE: EXTERIOR APPLICATIONS

APPLICATION	DESIGN NEED	POTENTIAL SOLUTION(S)	PRODUCT HIGHLIGHTS
Actuators, Small Motors	Reduced friction, wear and noise	<i>Molykote</i> ® YM-102 Grease	Synthetic grease for lubrication of plastic components
		<i>Molykote</i> ® EM-50L Grease	Synthetic grease with good noise-damping properties
AFS Headlamp Actuator	Extended lubricant service life	<i>Molykote</i> ® L-8030 Lubricant	Solid lubricants in fluorinated solvent form quick-drying, nontacky lubricating film
Linear Guides and Slides	Reduced friction, wear and noise	<i>Molykote</i> ® AI-6159 Grease	Synthetic grease with good lubrication for glass-fiber-reinforced plastics
		<i>Molykote</i> ® G-1050 Grease	Synthetic grease with white solids beneficial for noise reduction
Locks, Latches and Levers	Protect against moisture, corrosion and seizure	<i>Molykote</i> ® D-708 Anti-Friction Coating	Heat-cured, PTFE-based AFC with excellent corrosion protection
		<i>Molykote</i> ® 3400A LF Anti-Friction Coating	Heat-cured, MoS ₂ -based AFC with excellent lubrication and corrosion protection
		<i>Molykote</i> ® D-7409 Anti-Friction Coating	Heat-cured, MoS ₂ -based AFC with excellent lubrication properties
Mirror and Door Assemblies	Reduce squeaks and rattles	<i>Molykote</i> ® EM-60L Grease	Synthetic grease suitable for low-temperature lubrication of plastics
Mirror Adjustment	Improve service life, wear and smoothness	<i>Molykote</i> ® E Paste	Synthetic paste with several types of special solid lubricants
		<i>Molykote</i> ® YM-103 Grease	Synthetic grease with good load-carrying capacity and wear resistance
Sunroof/Moonroof Guide Tracks	Reduced friction and wear; improved smoothness	<i>Molykote</i> ® G-1023 Grease	Synthetic grease with good lubricity for glass-fiber-reinforced plastics
		<i>Molykote</i> ® EM-50L Grease	Synthetic grease with good noise-damping properties
		<i>Molykote</i> ® PG-75 Grease	Semi-synthetic grease for plastic-plastic and plastic-metal combinations
Wiper System Motors	Extended lubricant service life	<i>Molykote</i> ® MI-60 Grease	Synthetic PAO-based grease with solid lubricants for excellent plastics lubricity
Wiper Lever System	Reduce wear and noise	<i>Molykote</i> ® 111 Silicone Compound	Translucent silicone with excellent water resistance
Control/Release Cables	Reduce friction, sticking and wear	<i>Molykote</i> ® 33 Light Extreme Low Temperature Grease	Silicone-based grease with excellent low-temperature resistance
		<i>Molykote</i> ® G-72 Plastic Grease	Silicone-based grease with good plastic compatibility
Door/Sunroof Weatherseals	Improved sealing with less wear and sticking	<i>Molykote</i> ® L-8030 Lubricant	Solid lubricants in fluorinated solvent form quick-drying, nontacky lubricating film
		<i>Molykote</i> ® D-96 Anti-Friction Coating	Water-based AFC for squeak and stick-slip elimination
Fasteners, Screws, Bolts	Improved assembly with proper tightening torque	<i>Molykote</i> ® D-7405 Anti-Friction Coating	Heat-cured AFC with solid lubricants for metal-plastic and metal-metal lubrication
		<i>Molykote</i> ® D-708 Anti-Friction Coating	Heat-cured, PTFE-based AFC with excellent corrosion protection

NOTE: These are proven, effective *Molykote*® brand *Smart Lubrication*™ solutions for vehicle exterior design. Contact your Dow Corning representative for product options to meet specialized requirements.



SUSTAINABLE DESIGN SOLUTIONS

Enhance your design sustainability with *Molykote* brand *Smart Lubrication* solutions from Dow Corning. To meet key exterior design needs, these advanced specialty lubrication technologies can be custom-formulated for specified performance characteristics, regulatory standards and process requirements. Raw materials include base oils such as silicone, mineral or polyalphaolefin (PAO); solid lubricants such as molybdenum disulfide (MoS₂) and polytetrafluoroethylene (PTFE); thickeners such as lithium; and various performance additives to inhibit rust, resist wear or withstand extreme pressure.

- *Molykote*[®] greases and anti-seize pastes add operating smoothness and reduce corrosion on sunroof guides, sliding door tracks and latching or locking mechanisms.
- *Molykote*[®] anti-friction coatings speed clean assembly, ensure proper tightening and add long rust prevention when used to pre-coat threaded fasteners.

SMART LUBRICATION SOLUTIONS FOR OTHER VEHICLE SYSTEMS

In addition to the *Molykote* brand *Smart Lubrication* solutions for vehicle exterior design featured in this selection guide, Dow Corning also offers proven, effective lubricants for these vehicle systems:

- Chassis and brakes
- Electrical
- Interior
- Powertrain

LEARN MORE: CONTACT US

To learn more about *Molykote* brand specialty lubricants and proven, effective *Smart Lubrication* solutions to drive handling performance innovation in vehicle exterior design, contact your Dow Corning Technical Representative, visit dowcorning.com/auto or send an email via [dowcorning.com/ContactUs](mailto:contact@dowcorning.com).

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