DOW CORNING

# Solutions from Dow Corning for Home Appliances



# Sealants & Lubricants for the Home Appliance Market

When it comes to providing safety, reliability, durability and compatibility for the home appliance market, designers and engineers around the world turn to Dow Corning for sealant and lubricant solutions.

Innovative technology is designed into every one of our products – from our *Dow Corning*<sup>®</sup> brand sealants and gaskets to our *Molykote*<sup>®</sup> brand lubricants, greases and anti-friction coatings. Every product is backed by our commitment to provide design and processing answers when you need them.

Our functionality testing, application engineering and equipment/ material integration provide you with a total systems solution. Our product range and engineering expertise make us the ideal partner for cooperation and development of projects for modified or new products.

- **Tailored approach** Dow Corning has global capabilities but can tailor a solution that can satisfy local needs.
- Environmentally friendly Our silicone-based products and lubricants do not contain heavy metals or unwanted chemicals.
- **Total solution** We offer a wide selection of sealants and specialty lubricants for all applications to help you make the right choice the first time.

As the global leader in silicon-based technology and with more than 60 years of experience as a silicone supplier, Dow Corning provides products, services and business solutions to meet your needs exactly. Whether you need to boost performance; lower costs; or increase customer satisfaction with your systems, modules and components, we have experts who can help.

When you select Dow Corning as your business partner, you get fully integrated application and engineering support, along with high-quality products and materials. From parts manufacturing to consulting to critical components' design, our experts can customize solutions that provide safety, reliability and durability for the home appliance market.

This guide will assist you in selecting the best sealant or lubricant for your specific application needs. Technical data sheets are available for all products.



**MOLYKOTE** FROM DOW CORNING





Smart Lubrication™

## Sealants

Even in harsh environments or extreme temperatures, many sealants from Dow Corning can meet your needs.

Sealants from Dow Corning are formulated using a variety of product technologies, each providing strengths and characteristics unique to its chemistry.

Silicon-based sealants from Dow Corning last longer and are more versatile than most organic polymer sealants. Our products offer exceptional performance characteristics and meet a wide variety of your industrial bonding and sealing needs.

Selecting the right product can help you lower costs by improving performance. Our technical experts can help you choose the right Dow Corning solution to enhance the value of your product. Let us know which product features are most important to your application. We can tailor our products and services according to your specific requirements.

Features of silicone sealants from Dow Corning include:

- Stability over a wide temperature range When fully cured, many of our products can be used at temperatures ranging from -85° to 599°F (-65° to 315°C).
- Weather resistance Our products provide high resistance to UV rays, radiation and weather to prevent hardening, cracking, crumbling, drying and becoming brittle.
- Chemical stability Our sealants do not readily degrade, even under long-term exposure to many chemicals and atmospheric pollutants.

Sealant Applications	Application	Part	Recommended Products
	Steam iron	<ul> <li>Steam chamber adhesive, seal</li> <li>Sole plate adhesive, seal</li> </ul>	XIAMETER <sup>®</sup> ADH-6066 Adhesive, <i>Dow Corning</i> <sup>®</sup> 736 Heat Resistant Sealant ▲, <i>Dow Corning</i> <sup>®</sup> Q3-3379 Flowable Adhesive/Sealant, XIAMETER <sup>®</sup> 3-6458 A&B Kit
	Oven	<ul> <li>Door window adhesive, seal</li> </ul>	XIAMETER <sup>®</sup> ADH-6045 Adhesive, <i>Dow Corning</i> <sup>®</sup> 3-6096 Adhesive, <i>Dow Corning</i> <sup>®</sup> Q3-3526 Base and Catalyst Adhesive Sealant
	Washing machine	<ul><li>Tub seal</li><li>Water pump seal</li><li>Water distributor seal</li></ul>	<i>Dow Corning</i> <sup>®</sup> 7091 Adhesive Sealant, <i>Dow Corning</i> <sup>®</sup> 3-8159 RF Silicone Foam <b>▲</b>
	Dishwasher	<ul><li>Steam generator seal</li><li>Water pump seal</li></ul>	Dow Corning® Q3-3379 Flowable Adhesive/Sealant, Dow Corning® AS7096N
	Ceramic hob	<ul> <li>Frame to kitchen desk foam seal</li> <li>Glass to frame adhesive, seal</li> </ul>	XIAMETER <sup>®</sup> 3-8119 RF A&B Kit, <i>Dow Corning</i> <sup>®</sup> 732 Multi-Purpose Sealant ▲, <i>Dow Corning</i> <sup>®</sup> Q3-1566 Heat Resistant Sealant ▲, <i>Dow Corning</i> <sup>®</sup> Q3-3526 Base and Catalyst Adhesive Sealant
	Refrigerator	<ul> <li>Plastic/plastic, plastic/metal seam seal</li> <li>Silicone rubber gasket adhesive</li> </ul>	Dow Corning <sup>®</sup> 732 Multi-Purpose Sealant ▲, Dow Corning <sup>®</sup> 737 Neutral Cure Sealant ▲, Dow Corning <sup>®</sup> 7091 Adhesive Sealant
	Coffee pot	<ul> <li>Plastic/plastic, plastic/metal seam seal</li> <li>Heating plate seal</li> <li>Seal for electrical parts</li> </ul>	<i>Dow Corning</i> <sup>®</sup> 9-1363 Industrial Assembly Adhesive Sealant ▲
	Microwave oven	<ul> <li>Door window adhesive, seal</li> </ul>	<i>Dow Corning</i> ® 732 Multi-Purpose Sealant ▲, <i>Dow Corning Toray</i> SE 9592 HT ▲

Those products marked with a "**A**" are sold via the XIAMETER<sup>®</sup> Web-enabled business model from Dow Corning, which offers high-quality, reliable standard silicone products online, at market-based prices. Visit **www.xiameter.com** to order these products or to learn more.

Product availability may vary by region, so please check with your local Dow Corning contact.

- Good bond strength Our products provide good adhesion to a wide variety of industrial materials, including glass, ceramics and wood masonry; painted surfaces; and many metals and plastics.
- Electrical properties Designed for a variety of applications, our products can be used in various electrical and electronic applications, including devices that are thermally cycled over a wide temperature range.
- Low flammability In fire conditions, silicone adhesives/sealants resist burning. Many products comply with UL flammability standards.

When you specify a Dow Corning product for your home appliance application, you receive a solution backed by the world leader in silicone technology with more than 60 years of expertise and innovations.

### Performance Requirements

- Resistance against heat, hot water and water vapor
- Good adhesion to aluminum, die cast aluminum and stainless steel
- Resistance against heat (up to 250°C)
- Good adhesion to glass, enamel, painted metal and stainless steel
- Good adhesion to metals and engineering plastics
- Resistance against water and detergent
- Anti-shake resistance
- Good adhesion
- Resistant to water and high temperature
- Heat and hot-water resistance
- Good adhesion to plastics, metals and silicone rubber
  Good adhesion/flexible bond at low temperatures
- High green strength, good adhesion
- Heat resistance
- Detergent resistance
- Heat resistance
- Good adhesion to glass and painted metal

# Lubricants

When you select Dow Corning as your preferred lubricant supplier, you get access to our extensive offering of *Molykote* lubricants, specialty greases, pastes, anti-friction coatings, oils and dispersions, as well as unmatched application expertise.

*Molykote* lubricants can be used in situations requiring high pressure or in extreme temperatures, where you have vibration and shock loads, or between sliding surfaces operating under heavy loading. Also, many of our lubricants are food-grade certified.

*Molykote* lubricants are designed to perform optimally on a variety of substrates, including metals, elastomers and engineered polymers. Regardless of the scope and scale of lubrication support you require, we can provide the exact combination of products and services that you need to succeed.

Simply put, the right lubricant for a moving part can mean the difference between high performance and failure.



The *Molykote*<sup>®</sup> line of specialty lubricants for appliance components includes:

- Greases Thick or semi-fluid dispersions of a thickening agent in a lubricating liquid. High-performance greases are designed for dynamic metal-to-metal, metal-to-rubber, metal-to-plastic and plastic-to-plastic applications. Most greases are based on synthetic formulations that have excellent resistance to thermal degradation. Many are fortified with solid lubricant additive technology to provide effective lubrication under extreme load conditions. High-performance fluorinated greases are designed for extended service at higher temperatures and higher loads, as well as in harsh chemical environments.
- **Pastes** High concentrations of solid lubricants dispersed in oil for convenient application. These lubricants have high concentrations of solid lubricants blended in various bases. They are

used where a high concentration of solid lubricant is required, such as initial run-in and areas exposed to high loads.

- Anti-friction coatings Paint-like products that contain submicron-sized particles of solid lubricants instead of coloring pigment, dispersed through carefully selected resin blends and solvents. After curing, the coating forms a dry lubricating film that can help prevent corrosion and is aesthetically pleasing. Anti-friction coatings are ideal for applications involving dusty environments or for inaccessible areas containing parts that need long-term lubrication.
- Semi-dry lubricant Clear dispersions that contain fluorinated solid lubricants and slight amounts of fluorinated oil mixed into non-flammable solvent. These lubricants dry quickly after a thin layer is applied.

Part	Recommended Products	Performance Requirements
<ul> <li>Bearing and gear lubrication</li> </ul>	Molykote <sup>®</sup> HP-500 Grease	High-temperature resistance
Door hinge	<i>Molykote</i> <sup>®</sup> D-708 Anti-Friction Coating	<ul><li>Noise canceling</li><li>Heat resistance</li><li>Good aesthetics</li></ul>
Blade lubrication and protection	Molykote® 557 Silicone Dry Film Lubricant	• Dry film
Plastic joint lubrication	<i>Molykote</i> <sup>®</sup> PD-910 Lubricant	<ul><li>Plastic compatibility</li><li>Clean lubricant</li></ul>
Switch spring lubrication	<i>Molykote</i> <sup>®</sup> G-5032 Grease, <i>Molykote<sup>®</sup></i> 316 Silicone Release Spray	<ul><li>High-temperature resistance</li><li>Water resistance</li></ul>
<ul> <li>Refrigerator plastic shelf and tray lubrication</li> </ul>	<i>Dow Corning</i> <sup>®</sup> 7 Additive, <i>Molykote<sup>®</sup></i> EM-50L Grease	<ul><li>Low-temperature resistance</li><li>Good feel</li></ul>
Bearing lubrication in food machines	<i>Molykote</i> <sup>®</sup> G-0052 White E.P. Bearing Grease, <i>Molykote</i> <sup>®</sup> G-4500 Multi-Purpose Synthetic Grease and Aerosol Spray	<ul><li>Food grade</li><li>High speed</li></ul>
Bearing and gear lubrication	Molykote <sup>®</sup> G 68 Plastic Gear Grease	<ul><li>Plastic compatibility</li><li>White</li></ul>
<ul> <li>Bearing and gear lubrication</li> </ul>	<i>Molykote</i> <sup>®</sup> G-0010 Grease	<ul><li>Long-life grease</li><li>Extreme-pressure lubrication</li><li>Shear resistant</li></ul>
<ul> <li>Bearing and gear lubrication</li> </ul>	<i>Molykote</i> <sup>®</sup> G-0010 Grease	<ul><li>Long-life grease</li><li>Extreme-pressure lubrication</li><li>Shear resistant</li></ul>

### How To Contact Us

To learn more about our extensive product and service offerings, visit **dowcorning.com** or **molykote.com** or email **industrial@dowcorning.com**.

## Global Presence. Local Support.

Dow Corning's global presence enables you to develop specifications centrally while providing consistent high-quality products and services locally. Through our global sales, application engineering, product development, and manufacturing and delivery capabilities, our quality is consistent around the globe. This also enables a more effective and efficient product customization process – no matter where you are located!

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Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

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