

# Product Information

## High Performance Lubricants

# *Molykote*® 111

## Silicone compound

### FEATURES

- Good resistance to most chemicals
- Wide service temperature range (-40°C to 200°C)
- Low vapor pressure
- Low volatility
- Excellent water resistance

### COMPOSITION

- Silicone oil
- Inorganic thickener
- Additives

### Valve lubricant and sealant

### APPLICATIONS

- Lubrication for control and pressure plug valves, water softener and faucet valves.
- Sealant for vacuum and pressure systems.
- Sealant for outdoor equipment (also shipboard) subject to washing and harsh environmental exposure: meters, electrical service entrance and underground connections.
- Damping medium for dash pots in electrical and electronic equipment.
- Chemical barrier coating.
- Used as an anti-stick and sealant for transformer gasket and equipment enclosures. It prevents gaskets from sticking to metal and resists weathering and water washout.
- Rubber and plastic O-rings, gaskets and seals.

### TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

Standard*	Parameter	Unit	Value
	Physical nature		Stiff compound
	Color		White to light Grey; translucent
ISO 2137	Penetration unworked	mm/10	170 to 230
ISO 2137	Penetration; worked 60, max	mm/10	260
CTM 0033A	Bleed 24 hours/200°C (392°F), max	%	.5
CTM 0033A	Evaporation 24 hours/200°C (392°F), max	%	2.0
	Melting point	°C	None
		°F	None

\* CTM: Corporate Test Method, copies of CTMs are available on request.  
ISO: International Standardisation Organisation

### HOW TO USE

#### How to apply

MOLYKOTE 111 Silicone Compound can be applied by hand, specially designed automated equipment, brushing or wiping. Certain designs of grease guns may seize up; test prior to use.

A thinner consistency can be achieved

by dispersing in solvents such as xylene, mineral spirits and methyl ethyl ketone. MOLYKOTE 111 Silicone Compound can then be applied by brushing, dipping or spraying.

MOLYKOTE 111 Silicone Compound should not be applied to any surface which will be painted or finished. Such coatings may not

adhere to the silicone-treated surface. If contaminated by a silicone coating, parts can be wiped or washed with solvent, washed with detergent, or immersed in an alcoholic potassium hydroxide solution and then rinsed in clear water before painting.

#### **Solubility**

MOLYKOTE 111 Silicone Compound is insoluble in water, methanol, ethanol, or mineral oil, and soluble in Chlorothene NU®\*, perchloroethylene, mineral spirits and methyl ethyl ketone. The greater the consistency (lower penetration value), the lower the solubility of the specific silicone compound. The suitability of the particular solvent should be based on testing prior to regular use. Flammability and toxicological properties should be important considerations in the choice of a solvent.

#### **Chemical resistance**

MOLYKOTE 111 Silicone Compound is not greatly affected by mineral oils, vegetable oils or air. It is generally resistant to dilute acids and alkalines, and to most aqueous solutions.

MOLYKOTE 111 Silicone Compound is quite resistant to a wide variety of organic and inorganic chemicals. Because each application may vary in chemical composition, pressure, flow velocity, relubrication requirements and equipment design, it is recommended that the silicone compound be tested before adopting for regular use.

MOLYKOTE 111 Silicone Compound is not to be used with liquid oxygen and should not be used in applications requiring LOX compatibility.

#### **HANDLING PRECAUTIONS**

MOLYKOTE 111 Silicone Compound may cause temporary discomfort when in direct contact with eyes. In case of eye contact, flush eyes with water.

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED.

BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE FROM YOUR LOCAL DOW CORNING SALES REPRESENTATIVE.

#### **USABLE LIFE AND STORAGE**

When stored at or below 20°C (68°F) in the original unopened containers, this product has a usable life of 60 months from the date of production.

#### **PACKAGING**

This product is available in different standard container sizes. Detailed container size information should be obtained from your nearest Dow Corning sales office or Dow Corning distributor.

#### **LIMITATIONS**

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

#### **HEALTH AND ENVIRONMENTAL INFORMATION**

To support Customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, [www.dowcorning.com](http://www.dowcorning.com) or consult your local Dow Corning representative.

#### **LIMITED WARRANTY INFORMATION - PLEASE READ CAREFULLY**

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that Dow Corning's products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow Corning's sole warranty is that the product will meet the Dow Corning sales specifications in effect at the time of shipment.

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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**DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.**

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