

# Product Information

## High Performance Lubricants

# *Molykote*<sup>®</sup> 55 O-Ring Lubricant

### FEATURES

- High oxidation resistance
- Wide service temperature range  
-65°C to +175°C (-85°F to +347°F)
- Good corrosion protection
- Compatible with many plastics and elastomers

### COMPOSITION

- Silicone oil
- Ester
- Lithium soap

### Silicone based grease for O-rings

### APPLICATIONS

- Dynamic lubrication between rubber and metal parts in pneumatic systems in aircraft, automotive and general industrial applications

### 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.

Method	Test	Unit	Result
	Color		Off-white
<b>Consistency, density, viscosity</b>			
	NLGI consistency class		approx. 2
ASTM D 217	Worked Penetration	mm/10	290
ISO 2811	Density at 20°C (68°F)	g/ml	0.96
DIN 51 562	Base oil viscosity at 25°C (77°F)	mm <sup>2</sup> /s	100
<b>Temperature</b>			
	Service temperature	°C	-65 TO +175
		°F	-85 TO +347
ASTM D 566	Drop point	°C	220
		°F	412
ASTM-D147880	Low temperature torque test at -65°C (-85°F)		
	Initial break-away torque	Nm	325x10 <sup>-3</sup>
	Torque after 20 minutes running time	Nm	35x10 <sup>-3</sup>
<b>Coefficient of friction</b>			
	Steel ball against plastic surface (POM) Ø ball = 12.7mm, load = 6.3N, v =10 mm/s, 24h, μ=		0.03
<b>Resistance</b>			
DIN 51 808	Oxidation resistance, pressure drop 100h, 99°C (210°F)	bar	0.1
<b>Corrosion protection</b>			
DIN 51 802	SKF-Emcor method - degree of corrosion		0
FED Std 791	Bleed, 24h at 150°C (302°F)	%	3.0
	Evaporation, 24h at 150°C (302°F)	%	1.4
ASTM D 1264	Water washout resistance	%	4.2

### DESCRIPTION

*Molykote*<sup>®</sup> 55 O-ring Lubricant is a silicone-based material that helps ensure positive lubrication and sealing by slightly swelling rubber O-rings and seals. This product is heat stable and oxidation resistant and is serviceable from approximately -65 to 175°C (-85 to 347°F).

### HOW TO USE

Apply grease in the normal way using a brush, grease gun or automatic lubricating system. *Molykote*<sup>®</sup> 55 O-ring Lubricant can be used in centralized lubrication systems. Do not mix with other greases.

## COMPATIBILITY

*Molykote*<sup>®</sup> 55 O-Ring Lubricant has been shown to swell natural rubber. However, compatibility of the lubricant may vary with the plasticizer content of specific materials (especially elastomers). Small-scale compatibility testing should be conducted prior to the use of this product in any application.

*Molykote*<sup>®</sup> 55 O-Ring Lubricant should not be used with the following materials unless thoroughly tested for your specific application:

- Silicone rubber (SR)
- Polycarbonate (PC)
- Acrylonitrile-butadiene-styrene (ABS)
- Liquid oxygen (or other strong oxidizers)

## HANDLING PRECAUTIONS

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 material safety data sheet is available on the Dow Corning website at [www.dowcorning.com](http://www.dowcorning.com). You can also obtain a copy from your local Dow Corning sales representative or Distributor or by calling your local Dow Corning Global Connection.

## USABLE LIFE AND STORAGE

When stored at or below 32°C (90°F), *Molykote*<sup>®</sup> 55 O-Ring Lubricant has a shelf life of 60 months from date of manufacture. Refer to product packaging for "Use By" date.

## PACKAGING

*Molykote*<sup>®</sup> 55 O-Ring Lubricant is supplied in 100-g tubes, 150-g tubes, 1-kg cans, 3.6-kg cans, 18.1-kg pails, 25-kg pails, and 181.4-kg drums. Not all sizes available in all geographies.

## 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.

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