

# Product Information

## High Performance Lubricants

DOW CORNING

## Molykote® 3452 Chemical Resistant Valve Lubricant

### FEATURES & BENEFITS

- Low evaporation
- High oxidation resistance
- Wide service temperature range, -30°C to +230°C (-22°F to +446°F)
- High resistance to water and water washout
- Resistant to most solvents and chemicals
- Compatible with many plastics and elastomers

### COMPOSITION

- Fluorosilicone oil
- PTFE thickener

Lubricating and sealing grease for metal/metal, metal/plastic and metal/elastomer combinations involving slow movements and heavy loadings over very wide temperature ranges, particularly under unfavorable environmental influences.

### APPLICATIONS

- Suitable for the above friction contacts and service conditions.
- Successfully used on valves, mechanical seals and pumps, ball-and socket-joints, bearings, on loading arms for ships and vacuum contained equipment.

### 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.

Test*	Property	Unit	Result
	Color		White
<b>Consistency, density, viscosity</b>			
DIN 51 818	NLGI consistency class		2-3
ASTM D217	Penetration, worked 60	mm/10	240-280
ISO 2811	Density at 20°C (68°F)	g/ml	1.47
	Base oil viscosity at 40°C (104°F)	mm <sup>2</sup> /s	5100
	Base oil viscosity at 100°C (212°F)	mm <sup>2</sup> /s	650
<b>Temperature</b>			
	Service temperature	°C	-30 to +230
		°F	-22 to +446
ISO 2176	Drop point	°C	300
		°F	570
ASTM-D1478 Low temperature torque test at -30°C (-22°F)			
	Initial break-away torque	Nm	537 x 10 <sup>-3</sup>
	Torque after 20 minutes running time	Nm	118 x 10 <sup>-3</sup>
<b>Load-carrying capacity, wear protection, service life</b>			
Four -ball tester (EP)			
ASTM D 2596	Weld load	N	4400
DIN 51 350 pt.4	Almen-Wieland machine OK load	N	15500
	Frictional force with OK load	N	3500

## TYPICAL PROPERTIES (continued)

Test*	Property	Unit	Result
<b>Resistance</b>			
ASTM D 1264	Water Washout (80°C)	%	0.1
ASTM D 942	Oxidation resistance, pressure drop 100h, 99°C (210°F)	bar	0.0
<b>Oil separation</b>			
CTM 0033A	Bleed, 30 hrs@200°C	%	0 – 3.5
CTM 0033A	Evaporation, 30 hrs@200°C	%	0.5 – 3

\*DIN: Deutsche Industrie Norm.

ASTM: American Society for Testing and Materials.

ISO: International Standardization Organization.

CTM: Corporate Test Method, copies of CTMs are available on request.

## HOW TO USE

### How to apply

Clean bearing surfaces. Apply grease in the normal way using a brush or grease gun. Do not mix with other greases. Due to variation in quality of plastics and elastomers, compatibility tests should be carried out for swelling and shrinkage, stress-crack formation, and changes in strength and hardness.

## HANDLING

### PRECAUTIONS

#### PRODUCT SAFETY

**INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND MATERIAL 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 DOWCORNING.COM, OR FROM YOUR DOW CORNING SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CORNING CUSTOMER SERVICE.**

## USABLE LIFE AND STORAGE

When stored between 0°C and 40°C in the original unopened containers, product has a usable life of 60 months from the date of production.

## PACKAGING INFORMATION

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, [dowcorning.com](http://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 our 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 our products will meet the 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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