

# Specialty Lubricants

## MOLYKOTE® FS 3451 Fluoro-Silicone Grease

### FEATURES

- High oxidation resistance
- High drop point
- Wide service temperature range, -40°C to +230°C (-40°F to +446°F)
- High resistance to water and water washout
- Resistant to most solvents and chemicals

### COMPOSITION

- Fluorosilicone oil
- PTFE thickener

### APPLICATION

- Lubricating grease for metal/metal combinations with slow to medium-fast movements and medium to high loads over a wide temperature range. Particularly suitable in harsh environments found with chemicals, acids and alkalis.

### TYPICAL PROPERTIES

Specification writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales representative prior to writing specifications on this product.

Standard*	Test	Unit	Result
	Color		White
	<b>Consistency, density, viscosity</b>		
DIN 51 818	NLGI consistency class		2
ISO 2137	Worked penetration	mm/10	265-295
ISO 2811	Density at 20°C (68°F)	g/ml	1.50
	Base oil viscosity at 25°C (77°F)	mm <sup>2</sup> /s	1000
	<b>Temperature</b>		
	Service temperature	°C	-40 to +230
		°F	-40 to +446
ISO 2176	Drop point	°C	>260
		°F	>500
ASTM-D147880	Low temperature torque test at -40°C (-40°F)		
	Initial break-away torque	Nm	615x10 <sup>-3</sup>
	Torque after 20 minutes running time	Nm	70x10 <sup>-3</sup>
	<b>Load-carrying capacity, wear protection, service life</b>		
	Four-ball tester		
DIN 51 350 pt.4	Weld load	N	3200
	Almen-Wieland machine		
	OK load	N	20000
DIN 51 82102A	FAG rolling bearing test equipment, FE9, 1500/6000/180, F <sub>50</sub>	h	250
	<b>Oil separation</b>		
DIN 51 817	Standard test	%	0

\* ASTM: American Society for Testing and Materials.

ISO: International Standardisation Organisation.

DIN: Deutsche Industrie Norm.

### HOW TO USE

#### How to apply

Clean the contact areas. As is usual with lubricating greases, apply by means of a brush, spatula, grease-gun

or automatic lubrication device. Can be used in central lubrication systems. Do not mix with other greases.

## **HANDLING PRECAUTIONS**

At temperatures of >150°C (>302°F), trace elements of toxic Trifluoropropionaldehyde are released. In closed conditions it is necessary to have adequate ventilation.

Above 190°C (374°F) it is possible that hydrogen-fluoride may be discharged.

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 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**

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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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