

Specialty
Lubricants

MOLYKOTE® FS 3452
Fluoro-Silicone Grease

FEATURES

- Low evaporation
- High oxidation resistance
- Wide service temperature range (-30°C to +230°C)
- 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 representative prior to writing specifications on this product.

| Standard | Test | Unit | Result |
|-----------------|--|--------------------|----------------------|
| | Color | | White |
| | Consistency, density, viscosity | | |
| DIN 51 818 | NLGI consistency class | | 2-3 |
| ISO 2137 | Worked penetration | mm/10 | 240-280 |
| ISO 2811 | Density at 20°C | g/ml | 1.47 |
| | Base oil viscosity at 25°C | mm ² /s | 10000 |
| | Temperature | | |
| | Service temperature | °C | -30 to +230 |
| ISO 2176 | Drop point | °C | >220 |
| ASTM-D147880 | Low temperature torque test at -20°C | | |
| | Initial break-away torque | Nm | 392x10 ⁻³ |
| | Torque after 20 minutes running time | Nm | 94x10 ⁻³ |
| DIN 51 805 | Kesternich method - flow pressure at -20°C | mbar | 280 |
| | Load-carrying capacity, wear protection, service life | | |
| | Four-ball tester (VKA) | | |
| DIN 51 350 pt.4 | Weld load | N | 4400 |
| | Almen-Wieland machine | | |
| | OK load | N | 15500 |
| | Friction force | N | 3500 |
| | Resistance | | |
| DIN 51 807 pt.1 | Water resistance, static evaluation step | | 0-90 |
| DIN 51 808 | Oxidation resistance, pressure drop 100h, 99°C | bar | 0.0 |
| | Oil separation | | |
| DIN 51 817 | Oil separation - standard test | % | 2.8 |

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.

Table 1 shows the chemical resistance of MOLYKOTE FS 3452 Fluoro-Silicone Grease with respect to a number of solvents.

HANDLING PRECAUTIONS

Hands should be washed before eating, drinking or smoking. Avoid contact with the eyes and skin. Traces of toxic trifluoropropionaldehyde may be formed at temperatures of >150°C. Adequate ventilation must be provided in enclosed spaces. At temperatures above 290°C, fluorine and hydrogen fluoride may be evolved.

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 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 Health, Environment and Regulatory Affairs specialists available in each area.

For further information, please consult your local Dow Corning representative.

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. 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. Dow Corning specifically disclaims any other express or implied warranty of fitness for a particular purpose or merchantability. Unless Dow Corning provides you with a specific, duly signed endorsement of fitness for use, Dow Corning disclaims liability for any incidental or consequential damages. Suggestions of use shall not be taken as inducements to infringe any patent.