

Product Information

High Performance Lubricants

DOW CORNING

Molykote[®] 3451 Fluoro-silicone Grease

FEATURES & BENEFITS

- 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

APPLICATIONS

- 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 office or your Global Dow Corning Connection before writing specifications on this product.

| Test* | Property | Unit | Result |
|--|---|--------------------|------------------------|
| | Color | | White |
| Consistency, density, viscosity | | | |
| 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 ² /s | 495 |
| Temperature | | | |
| | 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 | 615 x 10 ⁻³ |
| | Torque after 20 minutes running time | Nm | 70 x 10 ⁻³ |
| Load-carrying capacity, wear protection, service life | | | |
| 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 ₅₀ | h | 250 |
| Oil separation | | | |
| DIN 51 817 | Standard test | % | 0 |

*DIN: Deutsche Industrie Norm.

ISO: International Standardization Organization.

ASTM: American Society for Testing and Materials.

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 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 at or below 20°C (68°F) 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 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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