

Specialty Lubricants

MOLYKOTE® D 96 Anti-Friction Coating

Air-curing dry lubricant

FEATURES

- Excellent "anti-squeak" performance
- Low coefficient of friction
- Constant coefficient of friction at different temperatures
- Water-based
- Transparent coating

COMPOSITION

- Solid lubricants
- Organic binder
- Water
- Stabiliser

APPLICATIONS

- Reduces or eliminates noise of plastic parts e.g. in automotive applications such as door panels, arm rests, dashboards, glove boxes, etc., as well as leather equipment.
- Suitable for material combinations plastic/plastic, plastic/metal, plastic/leather, leather/leather with slow movements or vibrations at low loads.

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 | | Transparent |
| | Physical properties | | |
| DIN 53 211/4 | Viscosity at 20°C (68°F) DIN4 cup | s | 18 |
| DIN 53 217/2 | Density at 20°C (68°F) | g/ml | 1.30 |
| CTM 0242 I | Non-volatile content | % | 48 |
| CTM 0007 A | pH at 20°C (68°F) | | 8 |
| DIN 53 213 | Flash point (Abel-Pensky) | °C | 70 |
| | | °F | 158 |
| | Storage life | months | 9 |
| | Temperature | | |
| | Drying time at 20°C (68°F) | minutes | 10-15 |
| | Curing time, 120 minutes | °C | 23 |
| | | °F | 73 |
| | Service temperature range | °C | -40 to +80 |
| | | °F | -40 to +176 |
| | Coefficient of friction | | |
| DIN 53 375-B | Static coefficient of friction ¹ | μ | 0.20 |
| | Sliding coefficient of friction ¹ | μ | 0.14 |

1. See: ANTI-SQUEAK MECHANISM

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

DIN: Deutsche Industrie Norm.

HOW TO USE

Surface preparation

First clean and degrease the surface which will be coated with MOLYKOTE D 96 Anti-Friction Coating.

How to apply

Stir the Anti-Friction Coating thoroughly before applying by spraying or brushing.

Recommended dry film thickness:
5 to 20μm.

Curing

120 minutes at 23°C (73°F).

Solubility

Thinning can be carried out using distilled water or tap water.

ANTI-SQUEAK MECHANISM

Definition stick-slip

Intermittent movement that occurs when unevenness in the road surface transmits vibrations through the vehicle. An interior plastic part would move and stop causing a juddering motion. This is known as the stick-slip effect which causes the offensive squeak.

MOLYKOTE D 96 Anti-Friction Coating eliminates stick-slip very effectively.

Figure 1 shows coefficients of friction of a coated and non-coated plastic part used in automotive interiors: the higher the difference between static and sliding friction the higher the stick-slip effect and therefore unwanted squeaking noise (Figure 1: left columns).

MOLYKOTE D 96 Anti-Friction Coating:

- reduces the difference between static and sliding friction (Figure 1: right columns).
- lowers the friction dramatically (Figure 1: comparison of left and right pair of columns).

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. 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 between 2°C (36°F) and 30°C (86°F) in the original unopened containers, this product has a usable life of 9 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 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 customers' 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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Figure 1: Difference between static and sliding friction of a coated and non-coated automotive interior plastic part.



