

# Product Information Specialty Lubricants



DOW CORNING

## Molykote<sup>®</sup> D-6600 Anti-Friction Coating

### FEATURES & BENEFITS

- Excellent dry lubrication properties
- Low coefficient of friction, especially at medium and low pressures
- Excellent load carrying capacity at medium and low pressures
- Excellent wear protection
- Excellent adhesion to metals
- Low coefficient of friction for metal/plastic pairings
- Good corrosion protection

### COMPOSITION

- Solid lubricants
- Organic binders
- Organic solvents

Heat-curing dry film lubricant

### APPLICATIONS

- Suitable for the permanent lubrication of metal/metal and metal/plastic material pairings involving slow to medium-fast movements and medium to low pressure conditions
- Used wherever oils or greases cannot be used for technical reasons or are undesirable because of the risk of soiling

### 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 (cured dry film)		Yellowish
	Service temperature range (cured film)	°C °F	-40 to +260 -40 to +500
<b>Physical properties</b>			
DIN EN ISO 2431	Viscosity, cup #4 at 23°C (73°F)	s	32
ASTM D-1475	Density at 23°C (73°F)	g/ml	0.93
ASTM-D 56	Flash point	°C	26
		°F	79
<b>Load-carrying capacity, wear protection, service life</b>			
DIN 51834	SRV, Endurance life, cylinder (15*22 mm)/disc, load 45 N (100 N/mm <sup>2</sup> ), speed 0.32 m/s, 50°C, 40% rel. humidity, dry conditions	h	s > 10
		COF (μ)	0.17
DIN 51834	SRV, Endurance life, cylinder (11*15 mm)/disc, load 130 N (240 N/mm <sup>2</sup> ), speed 0.15 m/s, 23°C, 40% rel. humidity, dry conditions	h	Mn > 48
		COF (μ)	0.15

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

DIN: Deutsche Industrie Norm

ASTM: American Society for Testing and Materials.

VDA: Verband der Automobilindustrie

s = pre-treatment sandblasted, COF = μ = coefficient of friction

Mn = pre-treatment Mn-phosphated

## HOW TO USE

### Surface preparation

First clean and degrease thoroughly the surface which will be coated with *Molykote*<sup>®</sup> D-6600 Anti-Friction Coating. Phosphating or sandblasting (100/180 grit – 80/130 µm) increases the adhesion and service life.

### How to apply

Stir *Molykote* D-6600 Anti-Friction Coating thoroughly before applying by spraying, dipping, dip-spinning. Recommended dry film thickness: 10 to 15 µm (mean value).

### Curing

Typical curing schedule of *Molykote* D-6600 Anti-Friction Coating at object temperature is 20 minutes at 200°C (392°F). A flash-off of the solvents in wet film for 5 min. at 80°C (176°F) prior high temperature curing is recommended. Actual curing time may vary with substrate material, size, mass, coating thickness and type of curing oven; to assure proper cure and adhesion of the Anti-Friction Coating specific tests should be performed before definitely fixing application process specifications.

### Thinner

Thinning (viscosity adjustment) can be carried out by using *Molykote*<sup>®</sup> L-13 Thinner.

### Coverage

When applied at 12 µm dry film thickness *Molykote* D-6600 Anti-Friction Coating has a coverage of approx. 18 m<sup>2</sup>/kg (this value does not take into account the losses generated during the application process)

**HANDLING PRECAUTIONS  
PRODUCT SAFETY  
INFORMATION REQUIRED FOR  
SAFE USE IS NOT INCLUDED IN  
THIS DOCUMENT. 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 ON  
THE DOW CORNING WEBSITE  
AT DOWCORNING.COM, OR  
FROM YOUR DOW CORNING  
SALES APPLICATION**

*Molykote*<sup>®</sup> D-6600 Anti-Friction Coating

## TYPICAL PROPERTIES (continued)

Test*	Property	Unit	Result
VDA 230-206	Anti-noise tester, 2500 cycles endurance test, coated steel vs POM ball, load 30 N (120 N/mm <sup>2</sup> ), speed 2 mm/s, 23°C, 40% relative humidity, dry conditions	COF (µ)	0.10 no noise
VDA 230-206	Anti-noise tester, 2500 cycles endurance test, coated steel vs PA ball, load 30 N (90 N/mm <sup>2</sup> ), speed 2 mm/s, 23°C, 40% relative humidity, dry conditions	COF (µ)	0.11 no noise

POM = polyoxymethylene – PA = polyamide

**ENGINEER, OR DISTRIBUTOR,  
OR BY CALLING  
DOW CORNING CUSTOMER  
SERVICE.**

### USABLE LIFE AND STORAGE

When stored at or below 23°C (73°F) in the original unopened containers *Molykote* D-6600 Anti-Friction Coating has a usable life of 12 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 Web site, [dowcorning.com](http://dowcorning.com) or consult your local Dow Corning representative.

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