

MOLYKOTE® D-6600 Anti-Friction Coating

Heat-curing dry-film lubricant

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

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.

How to use

Surface preparation

First, clean and degrease thoroughly the surface that will be coated with MOLYKOTE® 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 minutes at 80°C (176°F) prior to 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

Typical properties

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

Standard ⁽¹⁾	Test	Unit	Result
	Color (cured dry film)		Yellowish
	Service temperature range (cured film)	°C °F	-40 to +260 -40 to +500

Physical properties

DIN EN ISO 2431	Viscosity, cup #4 at 23°C (73°F)	s	32
ASTM D1475	Density at 23°C (73°F)	g/ml	0.93
ASTM D56	Flash point	°C °F	26 79

Load-carrying capacity, wear protection, service life⁽²⁾

DIN 51834	SRV, Endurance life, cylinder (15*22 mm)/disc, load 45 N (100 N/mm ²), speed 0.32 m/s, 50°C, 40% rel. humidity, dry conditions	h COF (µ)	s > 10 0.17
DIN 51834	SRV, Endurance life, cylinder (11*15 mm)/disc, load 130 N (240 N/mm ²), speed 0.15 m/s, 23°C, 40% rel. humidity, dry conditions	h COF (µ)	Mn > 48 0.15
VDA 230-206	Anti-noise tester, 2,500 cycles endurance test, coated steel vs. POM ball, load 30 N (120 N/mm ²), speed 2 mm/s, 23°C, 40% relative humidity, dry conditions	COF (µ)	0.10 (no noise)
VDA 230-206	Anti-noise tester, 2,500 cycles endurance test, coated steel vs. PA ball, load 30 N (90 N/mm ²), speed 2 mm/s, 23°C, 40% relative humidity, dry conditions	COF (µ)	0.11 (no noise)

⁽¹⁾DIN: Deutsche Industrie Norm. ASTM: American Society for Testing and Materials. VDA: Verband der Automobilindustrie.

⁽²⁾s=pretreatment sandblasted; COF (µ)=coefficient of friction; Mn=pretreatment Mn-phosphated; POM=polyoxymethylene; PA=polyamide.

adhesion of the anti-friction coating, specific tests should be performed before definitively fixing application process specifications.

Thinner

Thinning (viscosity adjustment) can be carried out by using MOLYKOTE® L-13 Thinner.

Coverage

When applied at 12 µm dry-film thickness, MOLYKOTE® D-6600 Anti-Friction Coating has a coverage of approximately 18 m²/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 SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION.

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

This product is available in different standard container sizes. Detailed container size information should be obtained from your nearest MOLYKOTE® sales office or MOLYKOTE® distributor.

*DuPont™, the DuPont Oval Logo, and all trademarks and service marks denoted with ™, SM or ® are owned by affiliates of DuPont de Nemours, Inc. unless otherwise noted.
© 2017-2019 DuPont.*

The information set forth herein is furnished free of charge and is based on technical data that DuPont believes to be reliable and falls within the normal range of properties. It is intended for use by persons having technical skill, at their own discretion and risk. This data should not be used to establish specification limits nor used alone as the basis of design. Handling precaution information is given with the understanding that those using it will satisfy themselves that their particular conditions of use present no health or safety hazards. Since conditions of product use and disposal are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information. As with any product, evaluation under end use conditions prior to specification is essential. Nothing herein is to be taken as a license to operate or a recommendation to infringe on patents.