

MOLYKOTE® D-6024

Anti-Friction Coating

Heat-curing dry-film lubricant

Features

- Low coefficient of friction
- Excellent resistance to fuel, oil, grease and solvents
- Highly viscous and suitable for screen-printing
- High-temperature resistance

Composition

- Solid lubricants
- Organic binder
- Organic solvent

Applications

For metal/metal combinations involving slow to medium speeds and low to medium loads. Suitable for the permanent lubrication of heavily loaded friction contacts involving low to high speeds, in direct contact with motor oils, gasoline, diesel or grease. Used in automotive applications like pistons of internal gasoline and diesel combustion engines and other applications that require help to reduce piston and cylinder wall wear during break-in, cold start and ongoing operation situations.

How to use

Surface preparation

First, clean and thoroughly degrease the surface that will be coated with MOLYKOTE® D-6024 Anti-Friction Coating. Phosphating or sandblasting increases the adhesion and service life.

How to apply

Stir MOLYKOTE® D-6024 Anti-Friction Coating thoroughly before applying by screen-printing. Recommended dry-film thickness: 15 to 20 µm. It also can be applied by other processes, like spraying or brushing; in this case, depending on the application, it should be diluted to the suitable application viscosity.

Curing

Typical curing schedule at object temperature is 60 minutes at 200°C (392°F). A flash-off of the solvent for 10 minutes at 80°C (176°F) prior to high-temperature curing is recommended. Actual curing times vary with substrate material, size, mass, coating

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		Gray-black
	Service temperature range (cured film)	°C °F	-70 to +310 -94 to +590
Physical properties			
	Viscosity at 25°C (77°F)	mPas	33,000
	Density at 25°C (77°F)	g/ml	1.20
	Flash point	°C(°F)	41 (106)
	Curing time at 180°C	min	90
	at 200°C	min	60
Load-carrying capacity, wear protection, service life ⁽²⁾			
DIN 51834	SRV, endurance life cylinder/disc, load 50 N (150 MPa) speed = 120 mm/s, 50°C (122°F), 40%RH, 3 drops engine oil	h µ	s > 12 0.10
ASTM D2714	Falex LFW-1, rotating load=2,860 N, 72 rpm, Dry condition no. of rotations to µ=0.1		s=305,000

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

⁽²⁾Surface pretreatment: s=sandblasted.

thickness and type of curing oven; to ensure proper cure and adhesion of MOLYKOTE® D-6024 Anti-Friction Coating, specific tests should be performed before fixing application process specifications.

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 40°C (104°F) in the original unopened containers, MOLYKOTE® D-6024 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.

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