

# Information About *Molykote*<sup>®</sup> D 10 Anti-Friction Coating

**Type**

Dispersion of solid lubricants in solvent-based resin binder

**Physical Form**

Viscous liquid

**Special Properties**

Long-term wear resistance

**Primary Uses**

Film lubricant for applications that require help to reduce piston and cylinder wall wear during break-in, cold-start, and ongoing operation situations

**DESCRIPTION**

*Molykote*<sup>®</sup> D 10 Anti-Friction Coating is a specially formulated dispersion of solid lubricants in a solvent-based resin binder. It is supplied as a thick liquid suitable for screen-print application processes.

Once properly cured, it offers wear resistance with high load-carrying capacity, as well as long-term resistance to gasoline, motor oils, and solvents. It also offers excellent corrosion protection. The coating is serviceable at operating temperatures from -70° to 380°C (-94° to 716°F).

**TYPICAL APPLICATIONS**

*Molykote* D 10 Anti-Friction Coating is ideal as a long-term lubricating film on pistons used in gasoline and diesel engines, compressors and piston pumps, pneumatic and hydraulic systems, and other applications that require help to reduce piston and cylinder wall wear during break-in, cold-start, and ongoing operation situations.

**LIMITATIONS**

Not intended for medical use.

**HOW TO USE**

**Substrate Preparation**

The surface to be coated must be completely clean and free of grease and oil.

**How To Apply**

*Molykote* D 10 Anti-Friction Coating is specially formulated and supplied for use in screen-print manufacturing processes. For optimum performance, the surface should be coated as evenly as possible. A cured film thickness of 18 to 20 microns is recommended. It also can be applied by spray, dip, brush, tampon-print, and other processes. Depending on the application process, further dilution using a solvent such as N-methylpyrrolidone may be required. Please refer to the solvent manufacturer's safe handling information prior to use. Stir well before and during use.

**Cure**

Suggested cure times are 30 minutes at 180°C (356°F) or 60 to 120 minutes at 150°C (302°F). **NOTE:** Actual curing times vary with substrate size, mass, and material; coating thickness; type of curing oven; and other factors. To assure proper cure and adhesion of the coating, specific tests can be performed.

Contact your Dow Corning representative for further details on process application guidelines.

**SHIPPING LIMITATIONS**

None.

**TYPICAL PROPERTIES**

These values are not intended for use in preparing specifications.

**As Supplied**

ASTM D 1200	Viscosity, 25°C (77°F), cps .....	27,500
ASTM D 1298	Density, 20°C (68°F), g/cm <sup>3</sup> .....	1.3
ASTM 3941	Flash Point, °C (°F) .....	63 (145)

**As Cured**

ASTM B 117	Corrosion Resistance, hours .....	>300
ASTM D 2625	Falex Pressure Resistance, phosphate pretreatment, N (lb) .....	10,800 (2430)
ASTM D 2714	LFW-1, rotating, number of revolutions until $\mu=0.1$ .....	5,500
	oscillating, number of oscillations until $\mu=0.08$ .....	1,000
	coefficient of friction, after running in, $\mu$ .....	<0.1

**Specification Writers: Please obtain a copy of the Dow Corning Sales Specification for this product and use it as a basis for your specifications. It may be obtained from any Dow Corning Sales Office, or from Dow Corning Customer Service in Midland, MI. Call (517) 496-6000.**

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**STORAGE AND SHELF LIFE**

*Molykote* D 10 Anti-Friction Coating can be stored for 5 years from the date of manufacture at ambient temperatures in its original, closed container.

**PACKAGING**

*Molykote* D 10 Anti-Friction Coating is available in 5-kg (11-lb) and 50-kg (110-lb) containers.

**SAFE HANDLING INFORMATION**

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED. 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 FROM YOUR DOW CORNING REPRESENTATIVE, OR DISTRIBUTOR, OR BY WRITING TO DOW CORNING CUSTOMER SERVICE, OR BY CALLING 1-517-496-6000.

**LIMITED WARRANTY—  
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**DOW CORNING**

**Dow Corning Corporation  
Midland, Michigan 48686-0994**