# Product Information Specialty Lubricants



# *Molykote*® 3400A AERO Anti-Friction Coating

# **FEATURES & BENEFITS**

- Excellent lubrication
- High load carrying capacity
- Excellent adhesion to metals
- Low coefficient of friction
- High resistance to oils and fuels
- Good corrosion protection

# **COMPOSITION**

- Solid lubricants
- Organic binders
- Organic solvents

Heat curing dry film lubricant for metal/metal material pairings involving slow to medium-fast movements and medium to heavy loads.

# **APPLICATIONS**

- Suitable for permanent lubrication, with simultaneous corrosion protection of friction contacts involving high loads and low speed.
- 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		Dark gray	
	Service temperature range	°C	-200/+260	
		°F	-328/+500	
<b>Physical Properties</b>				
ASTM-D 1475	Density at 23°C (73°F)	g/ml	1.1	
EN ISO DIN 2431	Viscosity, cup # 3 at 23°C (73°F)	S	38	
ASTM-D 56	Flash point	°C	10	
		°F	50	
Load Carrying Capacity, Wear Protection, Service Life				
ASTM-D 2714	LFW-1, rotating, load 2860 N,		$p = 158000^1$	
	n = 72 rpm, v = 7.9 m/min, no. of revolutions to $\mu$ = 0.1			
ASTM-D 2714	LFW-1, oscillating, load 900 N,		$p = 140000^1$	
	frequency = 89.5 osc./min., no. of oscillations to $\mu = 0.08$			
ASTM-D 2625	Falex, procedure B, load carrying	N	$p = 20000^1$	
	capacity	lbf	$p = 4500^1$	
ASTM-D 2625	Falex, procedure A, endurance life average at 4450 N load	min.	p > 450 <sup>1</sup>	

#### **HOW TO USE**

#### **Surface Preparation**

Carefully clean and degrease surfaces to be coated with the Molykote® 3400A AERO Anti-Friction Coating.

Recommended pre-treatments: blasting or phosphating. Both pretreatments increase the adhesion and service life of the Molykote 3400A AERO Anti-Friction Coating.

## How to Apply

Stir the Molykote 3400A AERO Anti-Friction Coating thoroughly before and during use, apply by spraying, dipping, dip-spinning Surfaces should be coated as evenly as possible. Recommended dry film thickness: 5 to 20 µm.

#### Coverage

When applied at 10 µm dry film thickness, Molykote 3400A AERO Anti-Friction Coating has a coverage of approx. 16 m<sup>2</sup>/kg (this value does not take into account the losses generated during the application process).

#### **Thinner**

Recommended thinner is Molykote® L 13 Anti-Friction Coating Thinner.

#### Curing

Typical curing conditions at object temperature: 30 min. at 200°C (392°F) or 60 min. at 150°C (302°F).

**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

## TYPICAL PROPERTIES (continued)

Test*	Property	Unit	Result
Resistances			
ASTM-B 117 DIN 50021	Corrosion resistance without red rust (steel substrate, spraying application, film thickness = $10 \mu m$ )	h	$p = min 100^2$
ASTM-D 2510	Fluid resistance against typical aviation fluids, Proc. C <sup>3</sup>		no adhesion loss
ASTM-D 2510	Film adhesion, Proc A		no adhesion loss

<sup>\*</sup>ASTM: American Society for Testing and Materials

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# **USABLE LIFE AND STORAGE**

When stored at temperatures between 0°C (32°F) and 23°C (73°F) in the original unopened containers, this product has a useable file of 24 months from date of manufacture.

# **PACKAGING INFORMATION**

This product is available in 1 kg can.

# **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, dowcorning.com or consult

your local Dow Corning representative.

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<sup>\*</sup>DIN: Deutsche Industrie Norm

<sup>&</sup>lt;sup>1</sup>p = surface pre-treatment = Mn-phosphating

 $<sup>^{2}</sup>$ p = surface pre-treatment = Zn-phosphating

<sup>&</sup>lt;sup>3</sup>List of tested aviation fluids is available upon request.

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