Product Information
Specialty
Lubricants

DOW CORNING

Molykote® 3400A AERO Anti-Friction Coating

FEATURES

- Excellent lubrication
- High load carrying capacity
- Excellent adhesion to metals
- Low coefficient of friction
- High resistance to oils and fuels
- Good corrosion protection
- Meets requirements of SAE AS 5272 type I & II, SAE AS 1701 Class I, MIL-L-46010D type I & II, PWA 474

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.
- Suitable for aviation applications where a performance according to SAE AS 1701 Class I, SAE AS 5272 type I & II, Pratt & Whitney PWA 474 (final approval pending) and MIL-L-46010D (type I & II) is required. It is recommended to customers to run specific testing on original components before setting specifications.

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.

Standard	Property	Unit	Result
	Color		Dark gray
	Service temperature range	ºC	-200/+260
		°F	-328/+500
	Physical Properties		
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, n=72 rpm, v=7.9 m/min, no. of revolutions to μ=0.1		p=158000(1)
ASTM-D 2714	LFW-1, oscillating, load 900 N, frequency= 89.5 osc./min., no. of oscillations to μ=0.08		p=140000(1)
ASTM-D 2625	Falex, procedure B, load carrying capacity	N lbf	p=20000(1) p=4500(1)
ASTM-D 2625	Falex, procedure A, endurance life average at 4450 N load	Min.	p > 450(1)
	Resistances		
ASTM-B 117 DIN 50021	Corrosion resistance without red rust (steel substrate, spraying application, film thickness = 10 µm)	h	p= min 100(2)
ASTM-D 2510	Fluid resistance against typical aviation fluids, Proc. C (3)		no adhesion loss
ASTM-D 2510	Film adhesion, Proc A		no adhesion loss

ASTM: American Society for Testing and Materials.
DIN: Deutsche Industrie Norm.
(1) p= surface pre-treatment = Mn-phosphating
(2) p= surface pre-treatment = Zn-phosphating
(3) list of tested aviation fluids is available upon request

HOW TO USE

Surface preparation

Carefully clean and degrease surfaces to be coated with the Anti-Friction Coating.

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

How to apply

Stir the 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^2/kg (this value does not take into account the losses generated during the application process)

Thinner

Recommended thinner is *Molykote*® L13

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. Before handling, read product and safety data sheets and container labels for safe use, physical and health hazard information. The material safety data sheet is available on the Dow Corning website at dowcorning.com. You can also obtain a copy from your local Dow Corning sales representative or Distributor or by calling your local Dow Corning Global Connection.

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.

LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

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