

# MOLYKOTE® P-1500 Anti-Fretting Paste

White grease-paste with solid lubricants

## Features

- Wide service-temperature range (-50° to +160°C)
- High load-carrying capacity
- Good water resistance and water washout resistance
- Excellent protection against galling and fretting corrosion
- Prevents stick-slip and seizure

## Composition

- Semi-synthetic oil
- Lithium soap
- Solid lubricants
- Corrosion inhibitor

## Applications

Assembly and long-term lubrication of metallic components. Sliding surfaces and friction contacts exposed to heavy loads, requiring "clean" lubrication, especially at low to medium speeds. Used on friction contacts of electrical and domestic appliances, packaging and office machinery, precision instruments, in textile and plastics processing machinery, and for lubrication of components in the automotive industry.

## Description

MOLYKOTE® P-1500 Anti-Fretting Paste is a white-colored grease-paste that combines the benefits of wide operating-temperature range with excellent anti-fretting properties. This paste can be used for assembly as well as for long-term lubrication of metallic components.

## How to use

The contact points should be cleaned, wherever possible. Paste should be applied using a suitable brush. It can be delivered by a grease gun or central lubricating system. Excess lubrication does not harm.

## 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 <sup>(1)</sup>	Test	Unit	Result
	Color		White
<b>Consistency, density, viscosity</b>			
ISO 2137	Unworked penetration	mm/10	290-320
ISO 2811	Density at 20°C	g/ml	1.05
DIN 51562	Base oil viscosity at 40°C	mm <sup>2</sup> /s	90
<b>Temperature</b>			
	Service temperature range	°C	-50 to 160
ISO 2176	Dropping point	°C	170
DIN 51805	Flow pressure at -20°C/-40°C	mbar	380/820
ASTM D1478-80	Low-temperature torque at -40°C		
	Initial break-away torque	Nm	224 x 10 <sup>-3</sup>
	Torque after 20 min running time	Nm	41 x 10 <sup>-3</sup>
<b>Load-carrying capacity, wear protection</b>			
	Four-ball tester		
DIN 51350 T4	Weld load	N	4,000
DIN 51350 T5	Wear scar under 800 N load	mm	0.82
	LFW-1 oscillating; no. of oscillations to $\mu=0,12$ Load = 562 N, $v = 72$ cm/s	cycles	500,000
	Almen-Wieland machine		
	OK load	N	20,000
	Friction force	N	1,650

<sup>(1)</sup>ISO: International Organization for Standardization. DIN: Deutsche Industrie Norm. ASTM: American Society for Testing and Materials.

## Typical properties (continued)

Standard <sup>(1)</sup>	Test	Unit	Result
<b>Coefficient of friction</b>			
	Press-fit test	μ	0.12
<b>Resistance</b>			
DIN 51807	Water resistance, 3 h, 90°C		0
<b>Corrosion protection</b>			
DIN 51802	SKF Emscor, corrosion preventing properties		0-1
	Fretting corrosion (Deyber test)	cycles	> 36 x 10 <sup>6</sup>
<b>Oil separation</b>			
DIN 51817	Standard test 7 days, 40°C	%	4.0

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## 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 20°C in the original unopened containers, this product has a usable life of 60 months from the date of production.

## Packaging

This product is available in 1 kg cans, 5 kg pails and 25 kg pails.

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