MOLYKOTE® P-3300 Paste

Preliminary data

Anti-seize paste for assembly and threaded connections

Features

- Constant and defined friction on threaded connections
- Wide service temperature range
- Good water resistance
- Good corrosion inhibition properties
- No intentional calcium ingredients
- No intentional polytetrafluoroethylene (PTFE) or per- and polyfluoroalkyl substances (PFAS)

Composition

- Mineral oil
- Solid lubricants
- Thickener
- Corrosion inhibitor

Applications

Suitable for lubrication of threaded connections up to service temperatures of 540°C. Paste has been developed for friction control on a constant level, targeting friction class B of VDI 2230. Paste guarantees safe operation at elevated temperatures due to no intentional added calcium compounds, which are known to promote formation of hexavalent chromium compounds at high temperatures.

How to use

Clean points of contact. In case of visible oil separation, stir up product before use. Apply in same way as lubricating greases, using brush, spatula or grease-gun. Suitable for delivery by central lubricating system.
Do not mix with other lubricants, as this may have adverse effects on consistency and performance.

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.

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		White
Consistency, density, viscosity			
ISO 2137	Unworked penetration	mm/10	280 - 320
ISO 2811	Density at 20°C	g/ml	1.54
Temperature			
	Service temperature range	°C	-30 to +540
	Stability of solid lubricant	°C	+1350
DIN 51 805	Kesternich method - flow pressure at -30°C	mbar	< 1400
Threaded Connections			
Internal	Bolted connection test: Schatz Tester		
	M12 x 1.75 mm, 8.8, blackened surface		
	µ thread avg. (min.)		0.13 (0.10)
	µ head avg. (min.)		0.11 (0.10)
	k-factor avg.		0.16
	M12 x 1.75 mm, A2-70, 1.4301, blank		
	µ thread avg. (min.)		0.13 (0.11)
	µ head avg. (min.)		0.11 (0.10)
	k-factor avg.		0.16
	M12 x 1.75 mm, 1.7709, blank		
	µ thread avg. (min.)		0.11 (0.10)
	µ head avg. (min.)		0.12 (0.11)
	k-factor avg.		0.16
Internal	Initial breakaway torque after 540°C / 21 h on 1.7709, M12, blank (start torque = 56 Nm)	Nm	~130

[1] ISO: International Standardization Organization. DIN: Deutsche Industrie Norm.

Continued on next page.

Typical properties (continued)

Standard[1]	Test	Unit	Result
Corrosion protection & Water Resistance			
DIN 51 807 T.1	Water resistance, static evaluation step		0-90
DIN 51 807 T.2	Water washout (80°C, 1 h)	wt.-%	< 5
ASTM D 130	Copper Corrosion, 24h / 100°C		1a
DIN 51 802	SKF-Emcor method – distilled Water Degree of corrosion		≤ 2

[1]ISO: International Standardization Organization. DIN: Deutsche Industrie Norm. ASTM: American Society for Testing and Materials.

Usable life and storage

When stored between 0°C and 40°C in the original unopened containers, this product has a usable life of 36 months from the date of production.

Packaging

This product is available in different standard container sizes as shown on **molykote.com**. Detailed container size information should be obtained from your nearest MOLYKOTE® sales office or MOLYKOTE® distributor.

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