# MOLYKOTE® TP-42 Paste

Light-colored adhesive grease-paste with solid lubricants for metallic friction combinations

## Features

- High load-carrying capacity
- Particularly adhesive
- Particularly resistant to washout by water and metal machining emulsions
- Prevents stick-slip
- Good corrosion protection
- Excellent protection against galling

## Composition

- Mineral oil
- Synthetic oil
- Lithium soap
- Solid lubricants
- Adhesion improver

## Applications

Sliding surfaces exposed to high pressure loadings and subject to the influence of water of metal machining emulsions. Recommended and successfully used by leading clamping-element manufacturers, especially for chucks on metal processing machines.

## How to use

The sliding surfaces should be cleaned. The paste should then be applied with a suitable brush, rag or grease gun. It should not be mixed with greases or oils.

## 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.

## 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 | | Light beige |
| **Penetration, density, viscosity** | | | |
| ISO 2137 | Unworked penetration | mm/10 | 265-300 |
| ISO 2811 | Density at 20°C | g/ml | 1.19 |
| **Temperature** | | | |
| | Service temperature[2] | °C | -25 to +250 |
| ISO 2176 | Drop point | °C | 125 |
| ASTM D1478-80 | Low-temperature torque test at -20°C | | |
| | Initial break-away torque | Nm | $224 \times 10^{-3}$ |
| | Torque after 20 minutes running time | Nm | $59 \times 10^{-3}$ |
| DIN 51 805 | Kesternich method - flow pressure at -20°C | mbar | 740 |
| **Load-carrying capacity, wear protection, service life** | | | |
| | Four-ball tester (VKA) | | |
| DIN 51 350 pt.4 | Weld load | N | 3,000 |
| DIN 51 350 pt.5 | Wear under 800 N load | mm | 0.9 |
| | Almen-Wieland machine | | |
| | OK load | N | 20,000 |
| | Friction force | N | 1,710 |
| **Coefficient of friction** | | | |
| | Press-fit test μ = | | 0.09 |
| **Resistance** | | | |
| DIN 51 807 pt.1 | Water resistance, static | | 2-90 |

[1]ASTM: American Society for Testing and Materials. ISO: International Standardization Organization. DIN: Deutsche Industrie Norm.
[2]Thermal stability of solid lubricant.

*Continued on next page*

## Typical properties (continued)

| Standard[1] | Test | Unit | Result |
|---|---|---|---|
| **Corrosion protection** | | | |
| DIN 51 802 | SKF-Emcor method | | |
| | Degree of corrosion | | 0-1 |
| **Oil separation - evaporation** | | | |
| DIN 51 817 | Oil separation, standard test | % | 1.5 |

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## Packaging

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

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