

# MOLYKOTE® Cu-7439 Plus Paste

Copper paste for components subjected to high temperatures, high pressures and corrosive influences

## Features

- Wide service-temperature range
- Good pressure resistance
- Very adhesive and resistant against water washout
- Good corrosion protection
- Low evaporation
- No drop point

## Composition

- Powdered copper
- Partly synthetic oil
- Inhibitor

## Applications

Well-suited for all areas that need to be protected against water, steam and corrosion (e.g., brake mechanisms, flange seals, exhaust bolts).

## How to use

If possible, contact surfaces should be cleaned. Then apply paste with a brush or cloth. Excess lubricant need not be removed. MOLYKOTE® Cu-7439 Plus Paste can be used in grease guns and centralized lubrication systems.

## 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(68°F) 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 different standard container sizes. Detailed container size information should be obtained from your nearest MOLYKOTE® sales office or MOLYKOTE® distributor.

## 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                              |                    | Copper - colored                          |
| <b>Consistency, density, viscosity</b>                       |                                    |                    |   |
| ISO 2137   | Unworked penetration               | mm/10              | 320-370                                   |
| DIN 53 217   | Density at 20°C (68°F)             | g/ml               | 1.0                                       |
| DIN 51 562   | Base oil viscosity at 40°C (104°F) | mm <sup>2</sup> /s | 1,100                                     |
| <b>Temperature</b>   |                                    |                    |   |
|  | Service temperature                | °C                 | -30 to +650;<br>paste effective to +300   |
|  |                                    | °F                 | -22 to +1,202;<br>paste effective to +572 |
| ISO 2176   | Drop point                         | °C                 | None                                      |
|  |                                    | °F                 | None                                      |
| <b>Load-carrying capacity, wear protection, service life</b> |                                    |                    |   |
|  | Four-ball tester                   |                    |   |
| DIN 51 350 pt.4  | Weld load                          | N                  | 2,500                                     |
| DIN 51 350 pt.5  | Wear factor under 800 N load       | mm                 | 1.0                                       |
|  | Almen-Wieland machine              |                    |   |
|  | OK load                            | N                  | >20,000                                   |
| <b>Coefficient of friction</b>                               |                                    |                    |   |
|  | Press-fit test $\mu =$             |                    | 0.07                                      |

<sup>(1)</sup>DIN: Deutsche Industrie Norm.

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## Typical properties (continued)

| Standard                    | Test   | Unit | Result                 |
|-----------------------------|--|------|------------------------|
|                             | Screw test:  |      |                        |
|                             | Coefficient of friction of bolt connection M12, 8.8, blackened surface   |      |                        |
|                             | - $\mu$ thread   |      | 0.17                   |
|                             | - $\mu$ head   |      | 0.10                   |
|                             | Initial break-away torque<br>(M12 with starting torque $M_a=80$ Nm and heat treatment at $300^\circ\text{C}/572^\circ\text{F}$ , 21 h, bolt material: C 45, 8.8, mat.no. 1.0503) | Nm   | 110                    |
| DIN 51 807 pt.1             | Water resistance, static, evaluation   |      | 1 @ $90^\circ\text{C}$ |
| <b>Corrosion protection</b> |  |      |                        |
| DIN 52 802                  | SKF-Emcor method   |      |                        |
|                             | Degree of corrosion  |      | 0                      |

<sup>(1)</sup>DIN: Deutsche Industrie Norm.

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