

Assembly Pastes

Copper Paste



Protection, release and lubricating agent for highly stressed parts in high-temperature applications

WEICON Copper Paste is a protection, release and lubricating agent and is resistant to high temperatures and corrosion. It provides strong adhesion and contains no sulphur, lead or nickel. Copper Paste is used as an assembly lubricant for all kinds of threaded joints and sliding surfaces. It forms an effective lubricating and separating film, which protects the functional surfaces on plug-in tools, wear bushings, screws, and all kinds of threaded, plug-in and bayonet joints against corrosion and seizing. It can be used to reduce vibration on brake blocks and guides, brake cams and pins, car and truck battery terminals and other electrical connections, wheel bolts and nuts, and on wear bushings at electrical, compressed air and hydraulic hammers.

Technical Data

Consistency classification	DIN 51818	NLGI grade 1
Base		Mineral Oil
Dry lubricant		Copper ground/ graphite
Colour		copper
Density	(+20°C) DIN 51757	1,1 g/cm ³
Silicone-free		yes
Four ball weld test property load	DIN 51350	0 N
Four ball weld test weld load	DIN 51350	3.200 N
Four ball weld test calotte value	DIN 51350 (1min/1000N)	0 mm
Cone penetration	DIN ISO 2137	310 - 340 1/10 mm
Heat capacity	DIN EN ISO 22007-4	1,713 J/(g·K)
Thermal conductivity		0,392 W/m·K
Dielectric strength	DIN EN 60243-1 (20°C)	1,7 kV/mm
Dripping point	IP 396	+180 °C
Kinematic viscosity (40 °C)	DIN 51 562	180 mm²/s
Temperature conductivity		0,208 mm²/s
Temperature resistance		-20°C to 1,100°C
Shelf life		24 mon.
Thickener		Alu-complex soap

Friction values

Friction values steel-blank (M10 10.9)	
Total friction coefficient	0,13 (min. 0,11)
Friction coefficients threads	0,14 (min. 0,13)
Friction coefficient head	0,12 (min. 0,10)
Friction value V4A (M10 A4 70)	
Total friction coefficient	0,16 (min. 0,13)
Friction coefficients threads	0,16 (min. 0,12)
Friction coefficient head	0,16 (min. 0,13)
Friction value steel electro-galvanized (M10 10.9)	
Total friction coefficient	0,10 (min. 0,09)
Friction coefficient threads	0,11 (min. 0,10)
Friction coefficient head	0,09 (min. 0,08)
Annuavala / Cuidalinas	

Approvals / Guidelines

IMPA Code	450888/89/90/91/92
IMPA Code	450888/89/90/91/9

Surface pre-treatment

First clean the surface to be lubricated with WEICON Cleaner S, depending on the degree of soiling. If screws have already been used, process with the wire brush and clean with WEICON Cleaner S.

Processing

Clean and degrease surfaces with WEICON Cleaner Spray S. Apply a good quantity of Copper Paste with a brush, cloth or sponge. On threads it is important that Copper Paste is applied down to the thread root and up to the bottom of the screw head to ensure a good sealing effect. Copper Paste must not be mixed with greases or oils to avoid changes in the material characteristics. Copper Paste does not replace oil or grease lubrication.

Storage

Store in tightly closed original container. Do not store with oxidising agents. Keep container tightly closed and store in a cool, well-ventilated area.

Instructions for use

When using WEICON products, the physical, safety-related, toxicological and ecological data and regulations in our EC safety data sheets (www.weicon.com) must be observed.

Available sizes

10000950	Copper Paste, 0,45 kg, copper
10002942	Copper Paste, 10 kg, copper
10013761	Copper Paste, 1 kg, copper
10025928	Copper Paste, 30 g, copper
10026335	Copper Paste, 120 g, copper
10030349	Copper Paste, 0,5 kg, copper
10040029	Copper Paste, 0,4 kg, copper
10047468	Copper Paste, 85 g, copper

The specifications and recommendations given in this technical data sheet must not be seen as guaranteed product characteristics. They are based on our laboratory tests and on practical experience. Since individual application conditions are beyond our knowledge, control and responsibility, this information is provided without any obligation. We do guarantee the continuously high quality of our products. However, own adequate laboratory and practical tests to find out if the product in question meets the requested properties are recommended. A claim cannot be derived from them. The user bears the requested properties are recommended. A claim cannot be derived from them.

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Conversion table

 $(^{\circ}C \times 1.8) + 32 = ^{\circ}F$ mm/25.4 = inch $\mu m/25.4 = mil$ $N \times 0.225 = Ib$ $N/mm^2 \times 145 = psi$ $MPa \times 145 = psi$

Nm x 8.851 = Ib·in $Nm \times 0.738 = Ib \cdot ft$ Nm x 141.62 = oz·in mPa·s = cP $N/cm \times 0.571 = Ib/in$ $kV/mm \times 25.4 = V/mil$



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