

# Repair stick copper

Art. No. 114584

Type No. 115.31



Versand in die Schweiz nicht möglich!

Exemplary illustration

For very fast (3 minutes) repairs of breaks, leakages and leakages on damp and wet surfaces such as pipes, tube bends, fittings, flanges, copper sheets, tanks, freezing and air conditioning systems and as repair mass for the installation and trades.

## Technical data

Contents	57 g
GHS	GHS07 GHS09
GHSSIGNAL	A
Hazard statements	H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H410 - Very toxic to aquatic life with long lasting effects.
Base	epoxy
Filler	copper
Texture	modelling compound
Colour	copper-colored
Processing temperature	15 to 40 °C
Component temperature	> 3 °C above dew point
Cure temperature	6 to 40 °C
Relative air humidity	<85 %
Mixing ratio by weight	1:1
Density of the mixture	1.9 g/cm <sup>3</sup>
Gap bridging to max.	15.0 mm
Pot life at 20 °C, 10 g batch	4-5 min
Handling strength (35 % strength)	10 min
Working strength after (80 % strength)	60 min
Final strength (80 % strength)	24 hours
Shrinkage	< 1.0 %
Compressive strength DIN EN ISO 604	55 MPa
Hardness (Shore D) DIN ISO 7619	82±3
Adhesive strength DIN EN ISO 4624	7 MPa

## Technical data

Thermally stable	-50 to 120 °C
Briefly temperature resistance	150 °C
Thermal conductivity DIN EN ISO 22007-4	0.7 W/m·K
Resistance DIN EN 62631-3-1	approx. $5 \cdot 10^{11} \Omega \cdot m$
Electrical resistance ASTM D 257	5 $\Omega \cdot cm$
Dielectric strength	3.0 kV/mm
Magnetic	no

## Commercial data

Customs tariff number	32141010
Country of origin	DE
eCl@ss 5.1.4	30021609
eCl@ss 9.0	30021609
UNSPSC_Code_v190501	47131825
UNSPSC_CodeDesc_v190501	Contact surface cleaners

## Material informations

REACH SVHC1 substance name	no
CAS no. SVHC 1	no CAS No.
RoHS materials notice	RoHS compliant
REACH Info	no SVHC substance included

## Conversion table

$(^{\circ}C \times 1.8) + 32$	=	$^{\circ}F$
mm/25.4	=	inch
$\mu m/25.4$	=	mil
N x 0.225	=	lb
$N/mm^2 \times 145$	=	psi
MPa x 145	=	psi
Nm x 8.851	=	lb·in
Nm x 0.738	=	lb·ft
Nm x 141.62	=	oz·in
mPa·s	=	cP
N/cm x 0.571	=	lb/in
kV/mm x 25.4	=	V/mil

## Product informations

Extremely fast-curing | copper-filled

Repair stick copper is suitable for very quick repairs and mending of cracks, leaks and leakages. The epoxy resin system has a very fast working time of only three minutes and can also be used on damp and wet surfaces. With the stick, pipes and pipe bends, fittings and flanges, copper gutters and sheets, water heaters, water tanks, hot and cold water pipes and freezer and air conditioning systems can be repaired and mended quickly and easily. The Repair stick copper can be used in tank construction and apparatus engineering, in the food, cosmetics and pharmaceutical industries and in many other applications.

### Instructions for use

When using RIEGLER products, the physical, safety-related, toxicological and ecological data and regulations in our EC safety data sheets ([www.riegler.com](http://www.riegler.com)) must be observed.

### Surface pre-treatment

For a flawless adhesive bond, surfaces must be clean and dry.

### Processing

Repair sticks copper can bridge a bonding gap of max. 15 mm per work step. The specified pot life refers to a material preparation of 25 g at room temperature. Larger preparation quantities result in a faster curing time due to the typical reaction heat of epoxy resins (exothermic reaction). Higher temperatures also reduce the pot life and curing time. (General rule: every increase by +10 °C above room temperature results in a decrease of the pot life and curing time by half). Temperatures below +16 °C increase the pot life and curing time significantly. From approx. +5 °C and below, no reaction takes place.

### Storage

When unopened, Repair sticks copper can be stored at a constant room temperature of approx. +20 °C in a dry place for at least 18 months. Protect from direct sunlight.

## Repair Stick Copper

### Chemical resistance of Repair stick copper after curing\* (Excerpt)

Exhaust fumes	+	Potassium carbonate	+
Acetone	o	Potassium hydroxide 0-20 % (caustic potash)	+
Ethyl ether	+	Milk of lime	+
Ethyl alcohol	o	Carbolic acid	-
Ethylbenzene	-	Creosote oil	-
Alkalis (alkaline substances)	+	Cresylic acid	-
Hydrocarbons, aliphatic (petroleum derivatives)	+	Magnesium hydroxide	+
Formic acid >10 % (methanoic acid)	-	Maleic acid (cis-ethylenedicarboxylic acid)	+
Ammonia anhydrous 25%	+	Methanol (methyl alcohol) <85 %	-
Amyl acetate	+	Mineral oil	+
Amyl alcohol	+	Naphthalene	-
Hydrocarbons, aromatic (benzene, toluene, xylene)	+	Naphthene	-
Barium hydroxide	+	Sodium carbonate (soda)	+
Petrol (92-100 octane)	+	Sodium bicarbonate (sodium hydrogen carbonate)	+
Hydrobromic acid <10 %	+	Sodium chloride (table salt)	+
Butyl acetate	+	Sodium hydroxide >20 % (caustic soda)	o
Butyl alcohol	+	Caustic soda	+
Calcium hydroxide (slaked lime)	+	Heating oil, diesel	+
Chloroacetic acid	-	Oxalic acid <25 % (ethanedioic acid)	+
Chloroform (trichlormethane)	o	Perchloraethylene	o
Chlorosulphuric acid (wet and dry)	-	Kerosene	+
Chlorinated water (swimming pool concentration)	+	Oils, vegetable and animal	+
Hydrochloric acid	+	Phosphoric acid <5%	+
Chromium bath	+	Phthalic acid, phthalic anhydride	+
Chromic acid	+	Crude oil	+
Diesel fuels	+	Nitric acid <5%	o
Mineral oil and mineral oil products	+	Hydrochloric acid <10 %	+
Acetic acid diluted <5%	+	Sulphur dioxide (wet and dry)	+
Ethanol <85 % (ethyl alcohol)	+	Carbon disulphide	+
Greases, oils and waxes	+	Sulphuric acid <5%	o
Hydrofluoric acid diluted	o	White spirit	+
Tannic acid diluted <7%	+	Carbon tetrachloride (tetrachloromethane)	+
Glycerin (trihydroxypropane)	+	Tetralin (tetrahydronaphthalene)	o
Glycol	o	Toluene	-
Humic acid	+	Hydrogen peroxide <30 % (hydrogen superoxide)	+
Impregnating oils	+	Trichloraethylene	o
Potash	+	Xylene	-

+ = resistant 0 = for a limited time - = not resistant \*The storage of all Repair sticks was carried out at +20°C chemical temperature.