

Repair stick steel

Art. No. 114582

Type No. 115.11



Exemplary illustration

High-quality corrosion protection for all metal surfaces. Resistant to a large number of diluted acids and alkaline solutions, weatherproof.

Suitable for use in air conditioning and ventilation systems, combustion plants, pipelines and machine housings.

Technical data

Contents	57 g
GHS	GHS07
GHSSIGNAL	A
Hazard statements	H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H412 - Harmful to aquatic life with long lasting effects.
Base	epoxy
Filler	steel
Texture	modelling compound
Colour	dark grey
Processing temperature	15 to 40 °C
Cure temperature	6 to 40 °C
Relative air humidity	< 85 %
Mixing ratio by weight	1:1
Density of the mixture	2.2 g/cm ³
Gap bridging to max.	15.0 mm
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	80±3
Adhesive strength DIN EN ISO 4624	8 MPa
Thermally stable	-50 to 120 °C

Technical data

Briefly temperature resistance	150 °C
Thermal conductivity DIN EN ISO 22007-4	0.6 W/m·K
Resistance DIN EN 62631-3-1	ca. 5-10 ¹¹ Ω·m
Electrical resistance ASTM D 257	5 Ω·cm
Dielectric strength	3.0 kV/mm
Magnetic	yes

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

(°C x 1.8) + 32	=	°F
mm/25.4	=	inch
µm/25.4	=	mil
N x 0.225	=	lb
N/mm² x 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

Fast-curing | steel-filled

It is particularly suitable for the fast and high-strength repair and bonding of metal parts and for patching and sealing cracks, holes and leaks in machine parts, tanks and pipelines, containers, pumps and housings, balcony railings, banisters, and torn-out threads. The Repair stick steel can be used in machine and system construction, 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) must be observed.

Surface pre-treatment

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

Processing

Repair sticks steel 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 steel 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 Steel

Chemical resistance of Repair stick steel 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.