

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Name of product RIEGLER Repair stick copper / 57 g
Code-Nr. R115.31 / ID-Nr. 114584

1.2. Relevant identified uses of the substance or mixture and uses advised against
Recommended intended purpose(s)

2-Component Epoxy Resins

1.3. Details of the supplier of the safety data sheet**Manufacturer/distributor**

RIEGLER & Co. KG
Schützenstr. 27, D-72574 Bad Urach
Phone : +49 (0) 7125/9497-0, Fax : +49 (0) 7125/9497-97
E-Mail : zedok@riegler.de
Internet : www.riegler.de

Advice

Abteilung eDocumentation
Phone : +49 (0) 7125/9497-0
Fax : +49 (0) 7125/9497-97
E-mail (competent person):
zedok@riegler.de

1.4. Emergency telephone number**Emergency advice**

Giftnotrufzentrale Bonn
Phone : +49(0)228-19 240

! SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****! Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]**

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
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Skin Irrit. 2	H315	
Eye Irrit. 2	H319	
Skin Sens. 1	H317	
Aquatic Acute 1		
Aquatic Chronic 2		

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.

2.2. Label elements**Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]**

GHS07



GHS09

! Signal word

Warning

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.

Precautionary Statements

P102 Keep out of reach of children.
 P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P264 Wash hands thoroughly after handling.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/eye protection.
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P332 + P313 If skin irritation occurs: Get medical advice/attention.
 P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
 P337 + P313 If eye irritation persists: Get medical advice/attention.
 P362 Take off contaminated clothing.
 P363 Wash contaminated clothing before reuse.
 P391 Collect spillage.
 P501 Dispose of contents/container to hazardous or special waste collection point.

! Hazardous ingredients for labeling

3-[3-(3-hydroxypropoxy)-2,2-bis[(3-hydroxypropoxy)methyl]propoxy]propan-1-ol; 3-sulfanylpropane-1,2-diol, reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)

Special rules for supplemental label elements for certain mixtures

Contains epoxy constituents. May produce an allergic reaction.

2.3. Other hazards
Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

! SECTION 3: Composition/ information on ingredients
3.1. Substances

not applicable

3.2. Mixtures
Description

2-component epoxy sticks

! Hazardous ingredients

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
25068-38-6	500-033-5	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)	5 - 10	Eye Irrit. 2, H319 / Skin Irrit. 2, H315 / Skin Sens. 1, H317 / Aquatic Chronic 2, H411
65997-17-3	266-046-0	glass, oxide, chemicals	20 - 50	
90-72-2	202-013-9	2,4,6-Tri-(dimethylaminomethyl)phenol	1 < 3	Acute Tox. 4, H302 / Skin Irrit. 2, H315 / Eye Irrit. 2, H319 / Acute Tox. 4, H312

Hazardous ingredients (continued)

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
72244-98-5	615-735-8	3-[3-(3-hydroxypropoxy)-2,2-bis[(3-hydroxypropoxy)methyl]propoxy]propan-1-ol; 3-sulfanylpropane-1,2-diol	20 - 50	Skin Sens. 1B, H317 / Aquatic Chronic 3, H412
7440-50-8	231-159-6	Copper	1 - 5	Aquatic Chronic 1, H410 M=10 / Aquatic Acute 1, H400 M=10

REACH

CAS No	Name	REACH registration number
25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)	01-2119456619-26
90-72-2	2,4,6-Tri-(dimethylaminomethyl)phenol	01-2119560597-27
72244-98-5	3-[3-(3-hydroxypropoxy)-2,2-bis[(3-hydroxypropoxy)methyl]propoxy]propan-1-ol; 3-sulfanylpropane-1,2-diol	01-2120118957-46
7440-50-8	Copper	01-2119480154-42

SECTION 4: First aid measures
4.1. Description of first aid measures
General information

Remove contaminated soaked clothing immediately.

In case of inhalation

Ensure of fresh air.

In the event of symptoms refer for medical treatment.

In case of skin contact

Do not use solvents or thinners.

In case of contact with skin wash off with water.

Consult a doctor if skin irritation persists.

In case of eye contact

After eye contact, rinse opened eye for 15 minutes under running water. Transfer to hospital for specialist examination.

In case of ingestion

Do not induce vomiting.

Call for a doctor immediately.

4.2. Most important symptoms and effects, both acute and delayed
Physician's information / possible symptoms

vomiting

Allergic symptoms

skin irritation

Physician's information / possible dangers

allergic reactions

4.3. Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Alcohol-resistant foam
Dry fire-extinguishing substance
Carbon dioxide
Water spray jet

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of fire formation of dangerous gases possible.

Nitrogen oxides (NO_x)
Carbon monoxide (CO)
Carbon dioxide (CO₂)

5.3. Advice for firefighters**Special protective equipment for fire-fighters**

Fire-fighting operations, rescue and clearing work under effect of combustion and smoulder gases just may be done with breathing apparatus.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****For non-emergency personnel**

Ensure adequate ventilation.
Remove persons to safety.
Use personal protective clothing.

6.2. Environmental precautions

Inform pollution control authorities if product gets into the sewerage systems or open waters.
Do not discharge into the drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up

Send in suitable containers for recovery or disposal.
Take up with absorbent material.

6.4. Reference to other sections

Safe handling: see section 7
Disposal: see section 13
Personal protection equipment: see section 8

! SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Care for thoroughly room ventilation, if necessary use in well ventilated area with local exhaust ventilation at workplace.

General protective measures

Avoid contact with eyes and skin

Hygiene measures

At work do not eat, drink, smoke or take drugs.
Wash hands before breaks and after work.

Advice on protection against fire and explosion

Pay attention to general rules of internal fire prevention.

7.2. Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels

Keep in closed original container.

Advice on storage compatibility

Do not store together with acids.

Do not store together with oxidizing agents.

Further information on storage conditions

Protect from direct solar radiation.

Store container at cool and aired place.

Store in a dry place.

Protect from heat/overheating.

7.3. Specific end use(s)
Recommendation(s) for intended use

See section 1.2

! SECTION 8: Exposure controls/personal protection
8.1. Control parameters
! Ingredients with occupational exposure limits to be monitored

CAS No	Name	Code	[mg/m3]	[ppm]	Remark
7440-50-8	Copper: fume	8 hours Short-term	0.2 2		EH40/2005
7440-50-8	Copper: dusts and mists (as Cu)	8 hours	1		EH40/2005
14807-96-6	Talc respirable dust	8 hours	1		EH40/2005
14807-96-6	Talk astbestfaserfrei (CH)	MAK, 8 hours	2		Lungenfib, Lunge, Methode: OSHA

DNEL-/PNEC-values
DNEL worker

CAS No	Substance name	Value	Code	Remark
25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)	8,33 mg/kg bw/day	DNEL long-term dermal (local)	
		12,25 mg/m3	DNEL long-term inhalative (systemic)	
		8,33 mg/kg bw/day	DNEL long-term dermal (systemic)	
90-72-2	2,4,6-Tri-(dimethylaminomethyl)phenol	0,31 mg/m3	DNEL long-term inhalative (systemic)	
		0,2 mg/kg bw/day	DNEL long-term dermal (systemic)	

PNEC

CAS No	Substance name	Value	Code	Remark
25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)	0,006 mg/l	PNEC aquatic, freshwater	
		0,0006 mg/l	PNEC aquatic, marine water	

DNEL-/PNEC-values (continued)

CAS No	Substance name	Value	Code	Remark
		10 mg/l	PNEC sewage treatment plant (STP)	
		11 mg/kg	PNEC Secondary Poisoning	
		0,018 mg/l	PNEC aquatic, intermittent release	
		0,996 mg/kg	PNEC sediment, freshwater	
		0,0996 mg/kg	PNEC sediment, marine water	
90-72-2	2,4,6-Tri-(dimethylaminomethyl)phenol	0,0084 mg/l	PNEC aquatic, marine water	
		0,2 mg/l	PNEC sewage treatment plant (STP)	
		0,084 mg/l	PNEC aquatic, freshwater	

! Additional advice

The statutory local and national regulations have to be observed.

8.2. Exposure controls
Respiratory protection

In case of insufficient ventilation or long-term effect use breathing apparatus.

Hand protection

In the cases of special applications, it is recommended to check the chemical resistance with the manufacturer of the gloves.

Glove material specification [make/type, thickness, permeation time/life, wetting resistance]: Nitrile rubber; 0,4mm; 480min;60min.

Chemical protective gloves must be chosen carefully in view of their design and depending on the dependence on the concentration and amounts of dangerous goods used in the specific working tasks.

Eye protection

tightly fitting goggles

Other protection measures

protective clothing

Appropriate engineering controls

Sufficient ventilation and exhaustion.

! SECTION 9: Physical and chemical properties
9.1. Information on basic physical and chemical properties
Appearance

pasty

Colour

Red-brown

Odour

hardly noticeable

Odour threshold

not determined

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	not applicable				
boiling point	> 35 °C		ca. 101 kPa		
melting point	not applicable				
Flash point	> 100 °C				

	Value	Temperature	at	Method	Remark
Vapourisation rate	not applicable				
Flammable (solid)	not determined				
Flammability (gas)	not determined				
Ignition temperature	not determined				
Self ignition temperature	not determined				
Lower explosion limit	not determined				
Upper explosion limit	not determined				
Vapour pressure	< 500 Pa	20 °C			
Relative density	ca. 2				
Vapour density	not applicable				
Solubility in water					insoluble
Solubility/other	not determined				
Partition coefficient n-octanol/water (log P O/W)	not determined				
Decomposition temperature	not determined				
Viscosity dynamic	not applicable				
Viscosity kinematic	not applicable				
Oxidising properties No information available.					
Explosive properties not applicable					
9.2. Other information No information available.					

! SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Reactions with acids and strong oxidising agents.

10.4. Conditions to avoid

No information available.

10.5. Incompatible materials

Substances to avoid

Amines
 Acid
 Oxidising agent, strong

10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide.
 Nitrous oxides (NOx)
 Toxic gases/vapours

Thermal decomposition

Remark No decomposition if used as directed.

! SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity/Irritation/Sensitization

	Value/Validation	Species	Method	Remark
LD50 acute oral	21739 mg/kg			ATE
LD50 acute dermal	1200 mg/kg	rat		CAS: 25068-38-6
Skin irritation	irritant			
Eye irritation	irritant			
Skin sensitization	sensitizing			

Subacute Toxicity - Carcinogenicity

	Value	Species	Method	Validation
Mutagenicity				No experimental information on genotoxicity in vitro available.
Reproduction-Toxicity				No indications of toxic effects were observed in reproduction studies in animals.
Carcinogenicity				No indications of carcinogenic effects are available from long-term trials.

Experiences made from practice

Sensitization through skin contact possible.
 Irritates eyes and skin.

Additional information

The product is to be handled with the caution usual with chemicals.
 Other hazardous properties may not be excluded.

! SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicological effects

	Value	Species	Method	Validation
Fish	LC50 2 mg/l (96 h)	Oncorhynchus mykiss		CAS: 25068-38-6
Daphnia	EC50 1,8 mg/l (48 h)	Daphnia magna		CAS: 25068-38-6
Algae	EC50 220 mg/l (96 h)	Scenedesmus subspicatus		CAS: 25068-38-6

12.2. Persistence and degradability

	Elimination rate	Method of analysis	Method	Validation
Biological degradability	12 % (28 d) CAS: 25068-38-6			not degradable

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

! General regulation

Very toxic to aquatic life with long lasting effects.

Do not allow uncontrolled leakage of product into the environment.

Product is not allowed to be discharged into aquatic environment, drains or sewage treatment plants.

Product is not allowed to be discharged into aquatic environment.

The ecotoxic effect of the product has not been tested. The information on this is given on the basis of details in the literature.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recommendations for the product

Cured material may be considered inert and disposed of as builders waste.

Remove in accordance with local official regulations.

Recommendations for packaging

Uncontaminated packaging may be treated as household waste.

Packaging that cannot be cleaned should be disposed of like the product.

General information

Assignment to a waste code number / waste identification according to the EWC is to be carried out on a sector or process-specific basis.

! SECTION 14: Transport information

	ADR/RID	IMDG	IATA-DGR
14.1. UN number	3077	3077	3077

	ADR/RID	IMDG	IATA-DGR
14.2. UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Copper)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Copper)	Environmentally hazardous substance, solid, n.o.s. (Copper)
14.3. Transport hazard class(es)	9	9	9
14.4. Packing group	III	III	III
14.5. Environmental hazards	Yes	Yes	Yes

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
 not applicable

Land and inland navigation transport ADR/RID

Hazard label(s) 9

tunnel restriction code E

Classification code M7

Marine transport IMDG

MARINE POLLUTANT

! SECTION 15: Regulatory information
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
VOC standard

VOC content 0 %

15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information
Recommended uses and restrictions

National and local regulations concerning chemicals shall be observed.

Further information

Each user is responsible for the implementation of the national special regulations.

The information contained herein is based on the state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

Please observe the following disclaimer! --- Our safety data sheets have been compiled according to effective EU-directives, WITHOUT taking into account the special national directives concerning the handling of hazardous substances.

Indication of changes: "!" = Data changed compared with the previous version. Previous version: 9.1

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.



Safety Data Sheet according to Regulation (EC)

No. 1907/2006 (REACH)

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RIEGLER Repair stick copper / 57 g

H412 Harmful to aquatic life with long lasting effects.