

## Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 03.09.2024

Version number 304 (replaces version 303)

Revision: 03.09.2024

### \* SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier** 600282 PART A
- **Trade name:** 2-component liquid metal Part A
- **Article number:** 4317784465007, 4317784465014
- **UFI:** XEGJ-E9V2-U90W-W3S8
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use**  
SU21 Consumer uses: Private households / general public / consumers  
SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- **Application of the substance / the mixture** Adhesives and sealants
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
E/D/E - Einkaufsbuero Deutscher Eisenhaendler GmbH  
EDE Platz 1  
D-42389 Wuppertal  
Germany  
  
Tel. +49 202 6096-0  
e-mail: sdb@ede.de
- **Further information obtainable from:** Product safety department
- **1.4 Emergency telephone number:**  
Poison Control Center Mainz - 24 hour emergency service – phone: +49 (0) 6131/19240

### SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**  
Skin Irrit. 2            H315 Causes skin irritation.  
Eye Irrit. 2            H319 Causes serious eye irritation.  
Skin Sens. 1            H317 May cause an allergic skin reaction.  
Aquatic Chronic 2    H411 Toxic to aquatic life with long lasting effects.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS07   GHS09

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**· Signal word** Warning**· Hazard-determining components of labelling:**

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq 700$ )  
1,4-bis(2,3-epoxypropoxy)butane

**· Hazard statements**

H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H317 May cause an allergic skin reaction.  
H411 Toxic to aquatic life with long lasting effects.

**· Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P273 Avoid release to the environment.  
P280 Wear protective gloves / eye protection / face protection.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P337+P313 If eye irritation persists: Get medical advice/attention.  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**· Labelling of packages where the contents do not exceed 125 ml****· Hazard pictograms**

GHS07 GHS09

**· Signal word** Warning**· Hazard-determining components of labelling:**

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq 700$ )  
1,4-bis(2,3-epoxypropoxy)butane

**· Hazard statements**

H317 May cause an allergic skin reaction.

**· Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P273 Avoid release to the environment.  
P280 Wear protective gloves / eye protection / face protection.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P337+P313 If eye irritation persists: Get medical advice/attention.  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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• **2.3 Other hazards** People who are allergic to epoxides should avoid handling the product.

• **Results of PBT and vPvB assessment**

• **PBT:** Not applicable.

• **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

• **3.2 Mixtures**

• **Description:** Mixture of substances listed below with nonhazardous additions.

• **Dangerous components:**

CAS: 25068-38-6 NLP: 500-033-5 Index number: 603-074-00-8	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight $\leq 700$ ) ⚠ Aquatic Chronic 2, H411 ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317 EUH205 Specific concentration limits: Eye Irrit. 2; H319: C $\geq 5$ % Skin Irrit. 2; H315: C $\geq 5$ %	60-65%
CAS: 2425-79-8 EINECS: 219-371-7 Index number: 603-072-00-7	1,4-bis(2,3-epoxypropoxy)butane ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	2.5-10%
CAS: 2530-83-8 EINECS: 219-784-2 Reg.nr.: 01-2119513212-58	Glycidoxypropytriethoxysilan ⚠ Eye Dam. 1, H318 Aquatic Chronic 3, H412	<1.25%

• **Additional information:** For the wording of the listed hazard phrases refer to section 16.

### SECTION 4: First aid measures

• **4.1 Description of first aid measures**

• **General information:** Immediately remove any clothing soiled by the product.

• **After inhalation:**

Supply fresh air.

Seek medical treatment in case of complaints.

• **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

• **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

• **After swallowing:**

Rinse out mouth and then drink plenty of water.

Call for a doctor immediately.

• **4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

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

No further relevant information available.

**SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable extinguishing agents:**CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.**For safety reasons unsuitable extinguishing agents:** Water with full jet**5.2 Special hazards arising from the substance or mixture** No further relevant information available.**5.3 Advice for firefighters****Protective equipment:** Wear self-contained respiratory protective device.**Additional information**

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation

**6.2 Environmental precautions:**

Do not allow product to reach sewage system or any water course.

Do not allow to enter sewers/ surface or ground water.

**6.3 Methods and material for containment and cleaning up:**

Ensure adequate ventilation.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

**6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

**SECTION 7: Handling and storage****7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.**Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.

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- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:**
  - Store away from foodstuffs.
  - Store away from oxidising agents.
  - Do not store together with acids.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.
- **7.3 Specific end use(s)** No further relevant information available.

## SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
  - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see section 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**
  - Keep away from foodstuffs, beverages and feed.
  - Wash hands before breaks and at the end of work.
  - Do not inhale gases / fumes / aerosols.
  - Avoid contact with the eyes and skin.

- **Hand protection**



Protective gloves

- **Material of gloves**
  - Nitrile rubber, NBR
  - Recommended thickness of the material:  $\geq 0.4$  mm

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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**· Eye/face protection**

Tightly sealed goggles

**· Body protection: Protective work clothing****SECTION 9: Physical and chemical properties****· 9.1 Information on basic physical and chemical properties****· General Information**

· Colour:	Silver grey
· Odour:	Mild
· Odour threshold:	Not determined.
· Melting point/freezing point:	Undetermined.
· Boiling point or initial boiling point and boiling range	Undetermined.
· Flammability	Not applicable.
· Lower and upper explosion limit	
· Lower:	Not determined.
· Upper:	Not determined.
· Flash point:	Not applicable.
· Decomposition temperature:	>200 °C
· pH	Not determined.
· Viscosity:	
· Kinematic viscosity	Not determined.
· Kinematic: 23 °C - 4 mm (ISO 2431)	
· Dynamic:	Not determined.
· Solubility	
· water:	Not miscible or difficult to mix.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure:	Not determined.
· Density and/or relative density	
· Density at 20 °C:	1.4 g/cm <sup>3</sup>
· Relative density	Not determined.
· Vapour density	Not determined.

**· 9.2 Other information**

· Appearance:	
· Form:	Pasty
· Important information on protection of health and environment, and on safety.	
· Ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Change in condition	
· Drip point:	
· Oxidising properties	Not determined.
· Evaporation rate	Not determined.

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**Information with regard to physical hazard classes**

· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Void
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

**SECTION 10: Stability and reactivity**

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** Reacts with alcohols, amines, aqueous acids and alkalis.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

**SECTION 11: Toxicological information**

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

**LD/LC50 values relevant for classification:****CAS: 25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq 700$ )**

Oral	LD50	11,400 mg/kg (rat)
Dermal	LD50	22,800 mg/kg (rabbit) (GESTIS)

**CAS: 2530-83-8 Glycidoxypopyltriethoxysilan**

Oral	LD50	24,200 mg/kg (rat)
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Dermal	LD50	4,250 mg/kg (rabbit)
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**• Skin corrosion/irritation**

Causes skin irritation.

**• Serious eye damage/irritation**

Causes serious eye irritation.

**• Respiratory or skin sensitisation**

May cause an allergic skin reaction.

**• Germ cell mutagenicity** Based on available data, the classification criteria are not met.**• Carcinogenicity** Based on available data, the classification criteria are not met.**• Reproductive toxicity** Based on available data, the classification criteria are not met.**• STOT-single exposure** Based on available data, the classification criteria are not met.**• STOT-repeated exposure** Based on available data, the classification criteria are not met.**• Aspiration hazard** Based on available data, the classification criteria are not met.**• 11.2 Information on other hazards****• Endocrine disrupting properties**

None of the ingredients is listed.

**SECTION 12: Ecological information****• 12.1 Toxicity****• Aquatic toxicity:****CAS: 25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq 700$ )**

EC50 (48h) 2.8 mg/L (daphnia)

96h LC50 3.6 mg/l (Leuciscus idus auratus)

**• 12.2 Persistence and degradability** No further relevant information available.**• 12.3 Bioaccumulative potential** No further relevant information available.**• 12.4 Mobility in soil** No further relevant information available.**• 12.5 Results of PBT and vPvB assessment****• PBT:** Not applicable.**• vPvB:** Not applicable.**• 12.6 Endocrine disrupting properties** For information on endocrine disrupting properties see section 11.**• 12.7 Other adverse effects****• Remark:** Toxic for fish

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**· Additional ecological information:****· General notes:**

Toxic for aquatic organisms

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Also poisonous for fish and plankton in water bodies.

**SECTION 13: Disposal considerations****· 13.1 Waste treatment methods:**

Containers can be recycled if completely empty; if not, dispose product/containers as dangerous waste.

Observe local regulations.

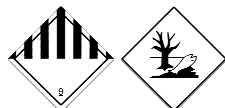
**· European waste catalogue**

08 04 09\* waste adhesives and sealants containing organic solvents or other dangerous substances

15 01 10\* packaging containing residues of or contaminated by dangerous substances

**SECTION 14: Transport information****· 14.1 UN number or ID number****· ADR, IMDG, IATA**

UN3082

**· 14.2 UN proper shipping name****· ADR**UN3082 ENVIRONMENTALLY HAZARDOUS  
SUBSTANCE, LIQUID, N.O.S. (reaction product:  
bisphenol-A-(epichlorhydrin) epoxy resin (number  
average molecular weight  $\leq 700$ ))**· IMDG**ENVIRONMENTALLY HAZARDOUS SUBSTANCE,  
LIQUID, N.O.S. (reaction product: bisphenol-A-  
(epichlorhydrin) epoxy resin (number average  
molecular weight  $\leq 700$ )), MARINE POLLUTANT**· IATA**ENVIRONMENTALLY HAZARDOUS SUBSTANCE,  
LIQUID, N.O.S. (reaction product: bisphenol-A-  
(epichlorhydrin) epoxy resin (number average  
molecular weight  $\leq 700$ ))**· 14.3 Transport hazard class(es)****· ADR****· Class**9 (M6) Miscellaneous dangerous substances and  
articles.

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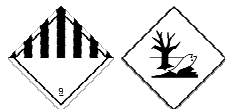
**Trade name: 2-component liquid metal Part A**

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· Label

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· IMDG, IATA



· Class

9 Miscellaneous dangerous substances and articles.

· Label

9

· 14.4 Packing group

· ADR, IMDG, IATA

III

· 14.5 Environmental hazards:

Product contains environmentally hazardous substances: reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq 700$ )

· Marine pollutant:

Yes

· Special marking (ADR):

Symbol (fish and tree)

· Special marking (IATA):

Symbol (fish and tree)

Symbol (fish and tree)

· 14.6 Special precautions for user

Warning: Miscellaneous dangerous substances and articles.

· Hazard identification number (Kemler code):

90

· EMS Number:

F-A,S-F

· Stowage Category

A

· 14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

· Transport/Additional information:

· ADR

· Limited quantities (LQ)

5L

· Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· Transport category

3

· Tunnel restriction code

E

· IMDG

· Limited quantities (LQ)

5L

· Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· UN "Model Regulation":

UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL-A-(EPICHLORHYDRIN) EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT  $\leq 700$ )), 9, III

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### SECTION 15: Regulatory information

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

- **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

- **Hazard pictograms**



GHS07 GHS09

- **Signal word** Warning

- **Hazard-determining components of labelling:**

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq 700$ )  
1,4-bis(2,3-epoxypropoxy)butane

- **Hazard statements**

H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H317 May cause an allergic skin reaction.  
H411 Toxic to aquatic life with long lasting effects.

- **Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P273 Avoid release to the environment.  
P280 Wear protective gloves / eye protection / face protection.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P337+P313 If eye irritation persists: Get medical advice/attention.  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

H312 Harmful in contact with skin.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H332 Harmful if inhaled.  
H411 Toxic to aquatic life with long lasting effects.  
H412 Harmful to aquatic life with long lasting effects.  
EUH205 Contains epoxy constituents. May produce an allergic reaction.

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- **Department issuing SDS:** Product safety department

- **Contact:** sdb@ede.de

- **Date of previous version:** 11.12.2020

- **Version number of previous version:** 303

- **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

- **\* Data compared to the previous version altered.**