

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

Printing date 15.09.2025

Version number 305 (replaces version 304)

Revision: 15.09.2025

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.
Muta. 2	H341 Suspected of causing genetic defects.
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.

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· Hazard pictograms

GHS07 GHS08 GHS09

· Signal word Warning**· Hazard-determining components of labelling:**bis[4-(2,3-epoxypropoxy)phenyl]propane
2,3-epoxypropyl o-tolyl ether**· Hazard statements**H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H341 Suspected of causing genetic defects.
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.
P391 Collect spillage.
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 GHS08 GHS09

· Signal word Warning**· Hazard-determining components of labelling:**bis[4-(2,3-epoxypropoxy)phenyl]propane
2,3-epoxypropyl o-tolyl ether**· Hazard statements**H317 May cause an allergic skin reaction.
H341 Suspected of causing genetic defects.**· 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.

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P280 Wear protective gloves / eye protection.

P391 Collect spillage.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Persons suffering from skin sensitisation problems, asthma, allergies, chronic or recurrent respiratory diseases should not be involved in any processing where this mixture is used.

Use of the product produces: Reaction product: Bisphenol-A-epichlorohydrin; Epoxy resin (number average molecular weight ≤ 700) Contains epoxy-containing compounds. May cause allergic reactions.

Results of PBT and vPvB assessment

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

Persons suffering from skin sensitisation problems, asthma, allergies, chronic or recurrent respiratory diseases should not be involved in any processing where this mixture is used.

• **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: 1675-54-3 EINECS: 216-823-5 Index number: 603-073-00-2	bis[4-(2,3-epoxypropoxy)phenyl]propane ⚠ Aquatic Chronic 2, H411 ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317 Specific concentration limits: Eye Irrit. 2; H319: C \geq 5 % Skin Irrit. 2; H315: C \geq 5 %	5-10%
CAS: 2210-79-9 EINECS: 218-645-3 Index number: 603-056-00-X	2,3-epoxypropyl o-tolyl ether ⚠ Muta. 2, H341 ⚠ Aquatic Chronic 2, H411 ⚠ Skin Irrit. 2, H315; Skin Sens. 1, H317	1-<5%
Non-hazardous components		
CAS: 7727-43-7 Reg.nr.: 01-2119491274-35	Barium sulphate	2.5-10%

• **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:** Personal protection for the First Aider.

After inhalation:

Supply fresh air.

Seek medical treatment in case of complaints.

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- **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. If symptoms persist, consult a doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; call for medical help immediately.
Call for a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **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:** CO₂, powder or water spray. Fight larger fire with alcohol resistant foam.
- **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** Not required.
- **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.

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See Section 13 for disposal information.

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* SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store only in the original receptacle.
Provide floor trough without outlet.
Store in a cool and dry place.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
Recommended storage temperature: 5-25°C
Keep container tightly sealed.
- **7.3 Specific end use(s)** Adhesives and sealants (multi-component adhesives and sealants)

* 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.

• DNELs**CAS: 1675-54-3 bis[4-(2,3-epoxypropoxy)phenyl]propane**Inhalative | Long term value for employees | 4.93 mg/m³ (industrial use)**CAS: 2210-79-9 2,3-epoxypropyl o-tolyl ether**Inhalative | Long term value for employees | 42.24 mg/m³ (industrial use)

- **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.

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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: ≥ 0.4 mm**· Penetration time of glove material**Penetration time (maximum wearing time). >120 min.

When handling chemical substances, only chemical protective gloves with a CE mark including a four-digit test number may be worn. The design of chemical protective gloves must be selected specifically for the workplace depending on the concentration and quantity of hazardous substances. It is recommended to clarify the chemical resistance of the above-mentioned protective gloves for special applications with the glove manufacturer.

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

· 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****· Physical state**

Liquid

· Colour:

Silver grey

· Odour:

Characteristic

· 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.

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· Viscosity:	
· Kinematic viscosity at 40 °C	78,000-87,000 mm ² /s
· Kinematic: 23 °C - 4 mm (ISO 2431)	
· Dynamic at 40 °C:	105,300-126,150 mPas
· Solubility	
· water:	Not miscible or difficult to mix.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure at 25 °C:	78 hPa
· Density and/or relative density	
· Density at 20 °C:	1.35-1.45 g/cm ³
· 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.
· 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.

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- **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.
No dangerous reactions known.
- **10.4 Conditions to avoid** Protect against: Heat, frost, UV radiation/sunlight.
- **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: 1675-54-3 bis[4-(2,3-epoxypropoxy)phenyl]propane

Oral	LD50	5,000 mg/kg (rat)
Dermal	LD50	5,000 mg/kg (rabbit)

CAS: 2210-79-9 2,3-epoxypropyl o-tolyl ether

Oral	LD50	5,000 mg/kg (rat)
Dermal	LD50	2,000 mg/kg (rat)
Inhalative	LC50/4h	6,060 mg/m ³ (rat)

- **Primary irritant effect:**
- **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** Suspected of causing genetic defects.
- **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.

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· 11.2 Information on other hazards**· Endocrine disrupting properties**

None of the ingredients is listed.

*** SECTION 12: Ecological information****· 12.1 Toxicity****· Aquatic toxicity:** No further relevant information available.**· 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**

The product does not contain substances with endocrine disrupting properties.

· 12.7 Other adverse effects**· Remark:** Harmful to fish**· Additional ecological information:****· General notes:**

Harmful to 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.

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

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*** 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 ≤ 700))
· **IMDG** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis[4-(2,3-epoxypropoxy)phenyl] propane, 2,3-epoxypropyl o-tolyl ether), MARINE POLLUTANT
· **IATA** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis[4-(2,3-epoxypropoxy)phenyl] propane, 2,3-epoxypropyl o-tolyl ether)

- **14.3 Transport hazard class(es)**
· **ADR**

· **Class** 9 (M6) Miscellaneous dangerous substances and articles.
· **Label** 9

- **IMDG, IATA**

· **Class** 9 Miscellaneous dangerous substances and articles.
· **Label** 9

- **14.4 Packing group**
· **ADR, IMDG, IATA** III

- **14.5 Environmental hazards:**
· **Marine pollutant:** Yes
Symbol (fish and tree)
· **Special marking (ADR):** Symbol (fish and tree)
· **Special marking (IATA):** 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

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· 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	(-)
· Remarks:	SV 375 - These substances are not subject to the other provisions of ADR/RID when carried in single or combination packagings with a net quantity not exceeding 5 litres of liquids or a net mass not exceeding 5 kg of solids per single or inner packaging, provided that the packagings comply with the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
· 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 ≤ 700)), 9, III

* SECTION 15: Regulatory information

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

· Labelling according to Regulation (EC) No 1272/2008

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

· Hazard pictograms



GHS07 GHS08 GHS09

· Signal word Warning

· Hazard-determining components of labelling:

bis[4-(2,3-epoxypropoxy)phenyl]propane
2,3-epoxypropyl o-tolyl ether

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· Hazard statements

- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H317 May cause an allergic skin reaction.
- H341 Suspected of causing genetic defects.
- 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.
- P391 Collect spillage.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Directive 2012/18/EU**· Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t****· Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t****· REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3****· DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

· REGULATION (EU) 2019/1148**· Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

· National regulations:**· Information about limitation of use:**

Employment restrictions concerning pregnant and lactating women must be observed.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.**· Exposure scenario(s)**Exposure scenario(s) of ingredients (if present) are available on request at:
sdb@ede.de

— EU —

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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

- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H341 Suspected of causing genetic defects.
- H411 Toxic to aquatic life with long lasting effects.

• Department issuing SDS: Product safety department**• Contact: sdb@ede.de****• Date of previous version: 11.12.2020****• Version number of previous version: 304****• 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)
- DNEL: Derived No-Effect Level (REACH)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Skin Irrit. 2: Skin corrosion/irritation – Category 2
- Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
- Skin Sens. 1: Skin sensitisation – Category 1
- Muta. 2: Germ cell mutagenicity – Category 2
- Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

• * Data compared to the previous version altered.