# Safety data sheet
**according to 1907/2006/EC, Article 31**

hahne Bautenschutz Systeme

*Printing date 27.05.2015* *Revision: 27.05.2015*

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

· **1.1 Product identifier**

· **Trade name: HADALAN EPUni 12E, Komp. B**

· **Article number:** 50048 B
· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
· **Application of the substance / the mixture** Solvent-free, low-viscosity, two-component epoxy resin.

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Heinrich Hahne GmbH & Co. KG
Heinrich-Hahne-Weg 11
45711 Datteln Tel.:02363/5663-0

· **Further information obtainable from:**
Abteilung: Produktsicherheit
Tel.: 02363 5663-0
EMail: info@hahne-bautenschutz.de
· **1.4 Emergency telephone number:**
Giftinformationszentrum Nord (GIZ Nord) Universität Göttingen,
Tel.: 0551-19240

## SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**

GHS05 corrosion

| | | |
|---|---|---|
| Skin Corr. 1B | H314 | Causes severe skin burns and eye damage. |
| Eye Dam. 1 | H318 | Causes serious eye damage. |

GHS07

| | | |
|---|---|---|
| Acute Tox. 4 | H302 | Harmful if swallowed. |
| Acute Tox. 4 | H312 | Harmful in contact with skin. |
| Acute Tox. 4 | H332 | Harmful if inhaled. |
| Skin Sens. 1 | H317 | May cause an allergic skin reaction. |
| Aquatic Chronic 3 | H412 | Harmful to aquatic life with long lasting effects. |

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** C Corrosive
· **Information concerning particular hazards for human and environment:**
R 20/22 Harmful by inhalation and if swallowed.
R 34 Causes burns.
R 43 May cause sensitisation by skin contact.
· **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

· **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**

GHS05 GHS07

· **Signal word** Danger

· **Hazard-determining components of labelling:**
Benzyl alcohol
2-piperazin-1-ylethylamine
2,4,6-tris(dimethylaminomethyl)phenol
· **Hazard statements**
H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.
· **Precautionary statements**
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P262 Do not get in eyes, on skin, or on clothing.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.
· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

## SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**
· **Description:** Hardener for epoxy resin.

· **Dangerous components:**

| | | |
|---|---|---|
| CAS: 100-51-6<br>EINECS: 202-859-9 | Benzyl alcohol<br>Xn R20/22<br>Acute Tox. 4, H302; Acute Tox. 4, H332 | 50-100% |
| CAS: 140-31-8<br>EINECS: 205-411-0 | 2-piperazin-1-ylethylamine<br>C R34; Xn R21/22; Xi R43<br>R52/53<br>Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412 | 10-25% |
| CAS: 90-72-2<br>EINECS: 202-013-9 | 2,4,6-tris(dimethylaminomethyl)phenol<br>Xn R22; Xi R36/38<br>Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319 | 10-25% |

· **Additional information:**
For the wording of the listed risk phrases refer to section 16.
GISCODE: RE 1 (Comp. A + B)



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## SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· **General information:**
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
· **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
· **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· **After swallowing:** Drink plenty of water and provide fresh air. 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:** Foam ( alcohol resistent), carbon dioxide, dry powder, water spray.
· **For safety reasons unsuitable extinguishing agents:** Water jet
· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
· **5.3 Advice for firefighters**
· **Protective equipment:** In case of fire: breathing protection with independent air supply.

## SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
· **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
· **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralising agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
· **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** Only store in original containers.
· **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:** Keep cool and dry.
· **Information about storage in one common storage facility:** Store separate from eatables.

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· ***Further information about storage conditions:*** *Protect from frost.*
· ***Storage class:*** *VCI: 8*
· ***7.3 Specific end use(s)*** *No further relevant information available.*

## SECTION 8: Exposure controls/personal protection

· ***Additional information about design of technical facilities:*** *No further data; see item 7.*

· ***8.1 Control parameters***

| · ***Ingredients with limit values that require monitoring at the workplace:*** |
|---|
| ***100-51-6 Benzyl alcohol (50-75%)*** |
| *MAK chap. IIb* |

· ***Additional information:*** *The lists valid during the making were used as basis.*

· ***8.2 Exposure controls***
· ***Personal protective equipment:***
· ***General protective and hygienic measures:***
*Keep away from foodstuffs, beverages and feed.*
*Immediately remove all soiled and contaminated clothing*
*Wash hands before breaks and at the end of work.*
*Avoid contact with the eyes and skin.*
· ***Respiratory protection:***
*With good ventilation is not required. In inadequately ventilated places and during spray processing, wear respiratory protection. Filter A / P2.*
· ***Protection of hands:***
*The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.*
*Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation*
· ***Material of gloves***
*The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.*
*Protective gloves made of nitrile with a layer thickness of min. 0.4 mm reagen (Durchdringungszeigt> 480 Min. Www.gisbau.de see also).*
· ***Penetration time of glove material***
*The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.*
· ***Eye protection:*** *Tightly sealed goggles*
· ***Body protection:*** *Long sleeved protective clothing.*

## SECTION 9: Physical and chemical properties

· ***9.1 Information on basic physical and chemical properties***
· ***General Information***
· ***Appearance:***

| | |
|---|---|
| ***Form:*** | *Liquid* |
| ***Colour:*** | *yellowisch* |
| · ***Odour:*** | *amine-like* |
| · ***pH-value at 20 °C:*** | *8.5 - 11* |

· ***Change in condition***
***Melting point/Melting range:*** *Undetermined.*

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| | |
|---|---|
| **Boiling point/Boiling range:** | >200 °C |
| · **Flash point:** | 92 °C |
| · **Ignition temperature:** | 435 °C |
| · **Self-igniting:** | Product is not selfigniting. |
| · **Danger of explosion:** | Product does not present an explosion hazard. |
| · **Vapour pressure at 50 °C:** | <5 hPa |
| · **Density at 20 °C:** | 1.03 g/cm³ |
| · **Solubility in / Miscibility with water:** | Not miscible or difficult to mix. |
| · **Viscosity:** | |
| **Dynamic at 20 °C:** | 50 mPas |
| · **9.2 Other information** | No further relevant information available. |

## SECTION 10: Stability and reactivity

· **10.1 Reactivity**
· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **10.3 Possibility of hazardous reactions** No dangerous reactions known.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:**
Keep away from highly acidic and alkaline materials, oxidizing agents to avoid exothermic reactions.
· **10.6 Hazardous decomposition products:** Elimination of acrylonitrile at > 60 °C is possible.

## SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

**1477-55-0 m-phenylenebis(methylamine)**

| | | |
|---|---|---|
| Oral | LD50 | 1040 mg/kg (rat) |
| Dermal | LD50 | 2000 mg/kg (rab) |
| Inhalative | LC50/4 h | 2.4 mg/l (rat) |

· **Primary irritant effect:**
· **on the skin:** Caustic effect on skin and mucous membranes.
· **on the eye:** Strong caustic effect.
· **Sensitisation:** Sensitisation possible through skin contact.
· **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Harmful
Corrosive
Irritant
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.



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## 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.
· **Ecotoxical effects:**
· **Remark:** Harmful to fish
· **Additional ecological information:**
· **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
Danger to drinking water if even small quantities leak into the ground.
Harmful to aquatic organisms
· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **12.6 Other adverse effects** No further relevant information available.

## SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

| · **European waste catalogue** | |
|---|---|
| 08 01 11* | waste paint and varnish containing organic solvents or other dangerous substances |

· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.

## SECTION 14: Transport information

· **14.1 UN-Number**
· **ADR, IMDG, IATA** UN2735

· **14.2 UN proper shipping name**
· **ADR** 2735 AMINES, LIQUID, CORROSIVE, N.O.S., mixture
· **IMDG, IATA** AMINES, LIQUID, CORROSIVE, N.O.S., mixture

· **14.3 Transport hazard class(es)**

· **ADR, IMDG, IATA**


· **Class** 8 Corrosive substances.
· **Label** 8

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

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| | |
|---|---|
| · **14.5 Environmental hazards:** | |
| · **Marine pollutant:** | No |
| · **14.6 Special precautions for user** | Warning: Corrosive substances. |
| · **Danger code (Kemler):** | 80 |
| · **EMS Number:** | F-A,S-B |
| · **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** | Not applicable. |
| · **Transport/Additional information:** | |
| · **ADR** | |
| · **Limited quantities (LQ)** | 5L |
| · **Transport category** | 3 |
| · **Tunnel restriction code** | E |
| · **UN "Model Regulation":** | UN2735, AMINES, LIQUID, CORROSIVE, N.O.S., mixture, 8, III |

## SECTION 15: Regulatory information

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

· **National regulations:**

· **Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

· **Other regulations, limitations and prohibitive regulations**
For activities involving exposure to uncured epoxy resins and contact through the skin or the respiratory tract, regular checkups are causing.
The product subject to the directive 2004/42/EG. The VOC limit value of this product in ready to use condition is max. 500 g/l . The product contains in ready to use condition max. 250 g/l VOC.

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

## 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**
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H412 Harmful to aquatic life with long lasting effects.

R20/22 Harmful by inhalation and if swallowed.
R21/22 Harmful in contact with skin and if swallowed.
R22 Harmful if swallowed.
R34 Causes burns.
R36/38 Irritating to eyes and skin.
R43 May cause sensitisation by skin contact.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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· **Abbreviations and acronyms:**
*RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)*
*ICAO: International Civil Aviation Organisation*
*ADR: Accord européen sur le transport 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*
*Acute Tox. 4: Acute toxicity, Hazard Category 4*
*Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B*
*Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2*
*Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1*
*Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2*
*Skin Sens. 1: Sensitisation - Skin, Hazard Category 1*
*Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3*