

## 1 Identification of the substance/preparation and of the company/undertaking

· **Product details**

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

· **Article number:** 50048 B

· **Application of the substance / the preparation** Solvent-free, low-viscosity, two-component epoxy resin.

· **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

E-Mail: [info@hahne-bautenschutz.de](mailto:info@hahne-bautenschutz.de)

· **Information in case of emergency:**

Giftinformationszentrum Nord (GIZ Nord) Universität Göttingen,  
Tel.: 0551-19240

## 2 Hazards identification

· **Hazard description:**



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.

· **GHS label elements**



**Danger**

H314 - Causes severe skin burns and eye damage.



**Warning**

H302 - Harmful if swallowed.

H312 - Harmful in contact with skin.

H332 - Harmful if inhaled.

H317 - May cause an allergic skin reaction.

· **Prevention:**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

· **Response:**

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.

P310 **Immediately call a POISON CENTER or doctor/physician.**

· **Storage:**

P405 Store locked up.

(Contd. on page 2)

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

(Contd. of page 1)

- **Disposal:**  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### 3 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Hardener for epoxy resin.

· **Dangerous components:**

CAS: 100-51-6 EINECS: 202-859-9	Benzyl alcohol ☒ Xn; R 20/22-43 Warning: ⚠ 3.1.O/4, 3.1.I/4	>50 - <75%
CAS: 140-31-8 EINECS: 205-411-0	2-piperazin-1-ylethylamine ☒ C, ☒ Xn; R 21/22-34-43-52/53 Danger: ⚠ 3.2/1B Warning: ⚠ 3.1.O/4, 3.1.D/4, 3.4.S/1 4.1.C/3	>10 - <25%
CAS: 90-72-2 EINECS: 202-013-9	2,4,6-tris(dimethylaminomethyl)phenol ☒ Xn, ☒ Xi; R 22-36/38 Warning: ⚠ 3.1.O/4, 3.2/2, 3.3/2	>10 - <20%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

### 4 First-aid measures

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

### 5 Fire-fighting measures

- **Suitable extinguishing agents:**  
Use fire extinguishing methods suitable to surrounding conditions.  
Foam ( alcohol resistant), carbon dioxide, dry powder, water spray.
- **For safety reasons unsuitable extinguishing agents:** Water jet
- **Protective equipment:** In case of fire: breathing protection with independent air supply.

### 6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**  
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.
- **Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralizing agent.  
Dispose contaminated material as waste according to item 13.

(Contd. on page 3)

Printing date 06.04.2011

Revision: 05.04.2011

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

Ensure adequate ventilation.

(Contd. of page 2)

### 7 Handling and storage

- **Handling:**
- **Information for safe handling:**  
Ensure good ventilation/exhaustion at the workplace.  
Only store in original containers.
- **Information about fire - and explosion protection:** No special measures required.
- **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.
- **Further information about storage conditions:** Keep container tightly sealed.

### 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **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.
- **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.
- **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.
- **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.
- **Eye protection:** Tightly sealed goggles

### 9 Physical and chemical properties

- **General Information**
- **Form:** Liquid
- **Colour:** yellowisch
- **Odour:** amine-like
- **Change in condition**  
**Melting point/Melting range:** Undetermined.

(Contd. on page 4)

GB

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

(Contd. of page 3)

<b>Boiling point/Boiling range:</b>	>200°C
· <b>Flash point:</b>	92°C
· <b>Ignition temperature:</b>	435°C
· <b>Self-igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Vapour pressure at 50°C:</b>	<5 hPa
· <b>Density at 20°C:</b>	1.03 g/cm <sup>3</sup>
· <b>Solubility in / Miscibility with water:</b>	Not miscible or difficult to mix.
· <b>pH-value at 20°C:</b>	8.5 - 11
· <b>Viscosity:</b>	
<b>Dynamic at 20°C:</b>	50 mPas

### 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Materials to be avoided:**  
Keep away from highly acidic and alkaline materials, oxidizing agents to avoid exothermic reactions.
- **Dangerous decomposition products:** Elimination of acrylonitrile at > 60°C is possible.

### 11 Toxicological information

- **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.
- **Sensitization:** Sensitization 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.

### 12 Ecological information

- **Ecotoxicological effects:**
- **Remark:** Harmful to fish

(Contd. on page 5)

Printing date 06.04.2011

Revision: 05.04.2011

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

(Contd. of page 4)

· **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 unneutralized.  
Danger to drinking water if even small quantities leak into the ground.  
Harmful to aquatic organisms

### 13 Disposal considerations

· **Product:**· **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.

### 14 Transport information

· **Land transport ADR/RID (cross-border)**

- **ADR/RID class:** 8 Corrosive substances.
- **Danger code (Kemler):** 80
- **UN-Number:** 2815
- **Packaging group:** III
- **Hazard label** 8
- **Description of goods:** 2815 N-AMINOETHYLPIPERAZINE, mixture
- **Tunnel restriction code** E

· **Maritime transport IMDG:**

- **IMDG Class:** 8
- **UN Number:** 2815
- **Label** 8
- **Packaging group:** III
- **EMS Number:** F-A,S-B
- **Marine pollutant:** No
- **Proper shipping name:** N-AMINOETHYLPIPERAZINE, mixture

· **Air transport ICAO-TI and IATA-DGR:**

- **ICAO/IATA Class:** 8

(Contd. on page 6)

Printing date 06.04.2011

Revision: 05.04.2011

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

(Contd. of page 5)

- **UN/ID Number:** 2815
- **Label** 8
- **Packaging group:** III
- **Proper shipping name:** N-AMINOETHYLPIPERAZINE, mixture
- **UN "Model Regulation":** UN2815, N-AMINOETHYLPIPERAZINE, mixture, 8, III

### 15 Regulatory information

· **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· **Code letter and hazard designation of product:**



C Corrosive

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

Benzyl alcohol  
2-piperazin-1-ylethylamine

· **Risk phrases:**

- 20/22 Harmful by inhalation and if swallowed.
- 34 Causes burns.
- 43 May cause sensitisation by skin contact.

· **Safety phrases:**

- 23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
- 24/25 Avoid contact with skin and eyes.
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 27 Take off immediately all contaminated clothing.
- 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

· **National regulations:**

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

· **Other regulations, limitations and prohibitive regulations**

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.

### 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 R-phrases**

- 20/22 Harmful by inhalation and if swallowed.
- 21/22 Harmful in contact with skin and if swallowed.
- 22 Harmful if swallowed.
- 34 Causes burns.
- 36/38 Irritating to eyes and skin.

(Contd. on page 7)

**Safety Data Sheet**  
according to 1907/2006/EC, Article 31

Printing date 06.04.2011

Revision: 05.04.2011

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

(Contd. of page 6)

43 May cause sensitisation by skin contact.

52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**· Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent