

## Safety Data Sheet acc. to OSHA HCS

Printing date 06/04/2018

Reviewed on 06/04/2018

### 1 Identification

- **Product name:** EpoxyMount Resin - Part A
- **Part number:**  
145-10005  
145-10010 - 145-10035
- **Application of the substance / the mixture** Epoxy resin
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Allied High Tech Products Inc.  
2376 East Pacifica Place  
USA-RANCHO DOMINGUEZ, CA 90220  
USA  
info@alliedhightech.com
- **Information department:** Product safety department
- **Emergency telephone number:**  
During normal opening times: +1 (310) 635-2466  
Chemtrec: +1 (202) 483-7616

### 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS09 Environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2      H315 Causes skin irritation.  
Eye Irrit. 2A      H319 Causes serious eye irritation.  
Skin Sens. 1      H317 May cause an allergic skin reaction.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

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**Product name: EpoxyMount Resin - Part A**

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· **Hazard pictograms**



GHS07 GHS09

· **Signal word** Warning

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

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq 700$ )

· **Hazard statements**

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

Toxic to aquatic life with long lasting effects.

· **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

Avoid release to the environment.

Wear protective gloves / eye protection / face protection.

If on skin: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Take off contaminated clothing and wash it before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

Specific treatment (see on this label).

If eye irritation persists: Get medical advice/attention.

Wash contaminated clothing before reuse.

Collect spillage.

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

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 1

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 2

Fire = 1

Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

## 3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

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

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

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**Product name: EpoxyMount Resin - Part A**

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**· Hazardous Components:**

|            |                                                                                                                                                                                                                                                                                                                                                                                                                                 |         |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 25068-38-6 | reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight $\leq 700$ )                                                                                                                                                                                                                                                                                                                        | 50-100% |
|            |  Aquatic Chronic 2, H411;  Skin Irrit. 2, H315;  Eye Irrit. 2A, H319;  Skin Sens. 1, H317 |         |

**· Non-hazardous Components:**

|             |                          |        |
|-------------|--------------------------|--------|
| 120547-52-6 | Aliphatic Glycidyl Ether | 10-25% |
|-------------|--------------------------|--------|

### 4 First-aid measures

**· Description of first aid measures**
**· 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: If symptoms persist consult doctor.**
**· Information for doctor:**

**· Most important symptoms and effects, both acute and delayed** No further relevant information available.

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

No further relevant information available.

### 5 Fire-fighting measures

**· Extinguishing media**

**· Suitable extinguishing agents:** Use fire fighting measures that suit the environment.

**· Special hazards arising from the substance or mixture** No further relevant information available.

**· Advice for firefighters**

**· Protective equipment:** Wear self-contained respiratory protective device.

### 6 Accidental release measures

**· Personal precautions, protective equipment and emergency procedures** Not required.

**· Environmental precautions:**

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

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

Inform respective authorities in case of seepage into water course or sewage system.

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

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

**· 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.

**· Protective Action Criteria for Chemicals**
**· PAC-1:**

|            |                                                                                                          |                      |
|------------|----------------------------------------------------------------------------------------------------------|----------------------|
| 25068-38-6 | reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight $\leq 700$ ) | 90 mg/m <sup>3</sup> |
|------------|----------------------------------------------------------------------------------------------------------|----------------------|

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**Product name: EpoxyMount Resin - Part A**

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|                 |                                                                                                          |                         |
|-----------------|----------------------------------------------------------------------------------------------------------|-------------------------|
| · <b>PAC-2:</b> |                                                                                                          |                         |
| 25068-38-6      | reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight $\leq 700$ ) | 990 mg/m <sup>3</sup>   |
| · <b>PAC-3:</b> |                                                                                                          |                         |
| 25068-38-6      | reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight $\leq 700$ ) | 5,900 mg/m <sup>3</sup> |

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Keep receptacle tightly sealed.  
Store receptacle in a well ventilated area.
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components 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 that were valid during the creation were used as basis.
- **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.
- **Breathing equipment:** Not required.
- **Protection of hands:**  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.



Protective gloves

- **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.

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**Product name: EpoxyMount Resin - Part A**

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· **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

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

|                        |                 |
|------------------------|-----------------|
| <b>Form:</b>           | Liquid          |
| <b>Color:</b>          | Yellow tint     |
| <b>Odor:</b>           | Odorless        |
| <b>Odor threshold:</b> | Not determined. |

· **pH-value:** Not determined.

· **Change in condition**

|                                     |                   |
|-------------------------------------|-------------------|
| <b>Melting point/Melting range:</b> | Undetermined.     |
| <b>Boiling point/Boiling range:</b> | 266 °C (510.8 °F) |

· **Flash point:** 252 °C (485.6 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

|               |                 |
|---------------|-----------------|
| <b>Lower:</b> | Not determined. |
| <b>Upper:</b> | Not determined. |

· **Vapor pressure:** Not determined.

· **Density:** Not determined.

· **Relative density** Not determined.

· **Vapor density** Not determined.

· **Specific gravity:** 1.01

· **Evaporation rate** Not determined.

· **Solubility in / Miscibility with**

**Water:** Slightly soluble.

· **Partition coefficient (n-octanol/water):** Not determined.

· **Viscosity:**

|                   |                 |
|-------------------|-----------------|
| <b>Dynamic:</b>   | Not determined. |
| <b>Kinematic:</b> | Not determined. |

· **Solvent content:**

|                     |                                |
|---------------------|--------------------------------|
| <b>VOC content:</b> | 0.00 %<br>0.0 g/l / 0.00 lb/gl |
|---------------------|--------------------------------|

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**Product name: EpoxyMount Resin - Part A**

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· **Other information** No further relevant information available.

## 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid**  
Contact with acrylates, aldehydes, atmospheric moisture, halogenates organic and ketones  
Keep away from oxidising agents and acidic substances.
- **Incompatible materials:** Copper and copper alloys
- **Hazardous decomposition products:** Carbon monoxide and carbon dioxide
- **Additional information:** Hazardous decomposition products may form during combustion.

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

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

25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq$  700)

|        |      |                       |
|--------|------|-----------------------|
| Oral   | LD50 | 30,000 mg/kg (rat)    |
| Dermal | LD50 | 23,000 mg/kg (rabbit) |

- **Primary chemical irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

## 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish

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**Product name: EpoxyMount Resin - Part A**

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- **Additional ecological information:**
- **General notes:**  
*Water hazard class 2 (Self-assessment): hazardous for water*  
*Do not allow product to reach ground water, water course or sewage system.*  
*Danger to drinking water if even small quantities leak into the ground.*  
*Also poisonous for fish and plankton in water bodies.*  
*Toxic for aquatic organisms*
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Contact waste processors for recycling information.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

|                                                                                  |                 |
|----------------------------------------------------------------------------------|-----------------|
| · <b>UN-Number</b>                                                               |                 |
| · <b>DOT, IMDG, IATA</b>                                                         | not regulated   |
| · <b>UN proper shipping name</b>                                                 |                 |
| · <b>DOT</b>                                                                     | not regulated   |
| · <b>Transport hazard class(es)</b>                                              |                 |
| · <b>DOT</b>                                                                     |                 |
| · <b>Class</b>                                                                   | not regulated   |
| · <b>Packing group</b>                                                           |                 |
| · <b>DOT</b>                                                                     | not regulated   |
| · <b>Environmental hazards:</b>                                                  |                 |
| · <b>Marine pollutant:</b>                                                       | Yes             |
| · <b>Special precautions for user</b>                                            | Not applicable. |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable. |
| · <b>UN "Model Regulation":</b>                                                  | not regulated   |

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

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**Product name: EpoxyMount Resin - Part A**

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· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

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

## 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.*

· **Department issuing SDS:** Environment protection department.

· **Contact:** Kim Dermit

· **Date of preparation / last revision** 06/04/2018 / -

· **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

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

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

Skin Sens. 1: Skin sensitisation – Category 1

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



**Safety Data Sheet**  
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Printing date 06/04/2018

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**1 Identification**

- **Product name:** EpoxyMount Hardener - Part B
- **Part number:**  
145-10005  
145-10015 - 145-10040
- **Application of the substance / the mixture** Epoxy curing agent
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Allied High Tech Products Inc.  
2376 East Pacifica Place  
USA-RANCHO DOMINGUEZ, CA 90220  
USA  
info@alliedhightech.com
- **Information department:** Product safety department
- **Emergency telephone number:**  
During normal opening times: +1 (310) 635-2466  
Chemtrec: +1 (202) 483-7616

**2 Hazard(s) identification**

- **Classification of the substance or mixture**



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      H312 Harmful in contact with skin.

Skin Sens. 1      H317 May cause an allergic skin reaction.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

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**Product name: EpoxyMount Hardener - Part B**

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· **Hazard pictograms**



GHS05 GHS07

· **Signal word** *Danger*

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

2-piperazin-1-ylethylamine  
3-aminomethyl-3,5,5-trimethylcyclohexylamine  
triethylenetetramine

· **Hazard statements**

*Harmful in contact with skin.*  
*Causes severe skin burns and eye damage.*  
*May cause an allergic skin reaction.*  
*Harmful to aquatic life with long lasting effects.*

· **Precautionary statements**

*Do not breathe dusts or mists.*  
*Wash thoroughly after handling.*  
*Contaminated work clothing must not be allowed out of the workplace.*  
*Avoid release to the environment.*  
*Wear protective gloves/protective clothing/eye protection/face protection.*  
*If swallowed: Rinse mouth. Do NOT induce vomiting.*  
*If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.*  
*IF INHALED: Remove person to fresh air and keep comfortable for breathing.*  
*If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*  
*Immediately call a poison center/doctor.*  
*Specific treatment (see on this label).*  
*Take off contaminated clothing and wash it before reuse.*  
*If skin irritation or rash occurs: Get medical advice/attention.*  
*Wash contaminated clothing before reuse.*  
*Store locked up.*  
*Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 3  
Fire = 1  
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



HEALTH 3 Health = 3  
FIRE 1 Fire = 1  
REACTIVITY 0 Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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**Product name: EpoxyMount Hardener - Part B**

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### 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Hazardous Components:**

|           |                                                                                                                                                              |         |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 100-51-6  | Benzyl alcohol<br>⚠ Acute Tox. 4, H302; Acute Tox. 4, H332                                                                                                   | 10-25%  |
| 140-31-8  | 2-piperazin-1-ylethylamine<br>⚠ Skin Corr. 1B, H314; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412                   | 10-25%  |
| 2855-13-2 | 3-aminomethyl-3,5,5-trimethylcyclohexylamine<br>⚠ Skin Corr. 1B, H314; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412 | 2.5-10% |
| 112-24-3  | triethylenetetramine<br>⚠ Skin Corr. 1B, H314; ⚠ Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412                                             | 2.5-10% |

· **Non-hazardous Components:**

|                        |        |
|------------------------|--------|
| Proprietary Ingredient | 25-50% |
|------------------------|--------|

### 4 First-aid measures

- **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. Then consult a doctor.
- **After swallowing:** Drink copious amounts of water and provide fresh air. Immediately call a doctor.
- **Information for doctor:**  
· **Most important symptoms and effects, both acute and delayed** No further relevant information available.  
· **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

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Reviewed on 06/04/2018

**Product name: EpoxyMount Hardener - Part B**

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## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**  
Do not allow product to reach sewage system or any water course.  
Do not allow to enter sewers/ surface or ground water.  
Inform respective authorities in case of seepage into water course or sewage system.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralizing agent.  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **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.
- **Protective Action Criteria for Chemicals**

· **PAC-1:**

|          |                            |                       |
|----------|----------------------------|-----------------------|
| 100-51-6 | Benzyl alcohol             | 30 ppm                |
| 140-31-8 | 2-piperazin-1-ylethylamine | 6.4 mg/m <sup>3</sup> |
| 112-24-3 | triethylenetetramine       | 3 ppm                 |

· **PAC-2:**

|          |                            |                      |
|----------|----------------------------|----------------------|
| 100-51-6 | Benzyl alcohol             | 52 ppm               |
| 140-31-8 | 2-piperazin-1-ylethylamine | 71 mg/m <sup>3</sup> |
| 112-24-3 | triethylenetetramine       | 14 ppm               |

· **PAC-3:**

|          |                            |                       |
|----------|----------------------------|-----------------------|
| 100-51-6 | Benzyl alcohol             | 740 ppm               |
| 140-31-8 | 2-piperazin-1-ylethylamine | 420 mg/m <sup>3</sup> |
| 112-24-3 | triethylenetetramine       | 83 ppm                |

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Store receptacle in a well ventilated area.  
Protect from extreme temperatures.  
Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

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**Product name: EpoxyMount Hardener - Part B**

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## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.  
At this time, the other constituents have no known exposure limits.

|                                      |                                              |
|--------------------------------------|----------------------------------------------|
| <b>100-51-6 Benzyl alcohol</b>       |                                              |
| WEEL                                 | Long-term value: 10 ppm                      |
| <b>112-24-3 triethylenetetramine</b> |                                              |
| WEEL                                 | Long-term value: 6 mg/m <sup>3</sup> , 1 ppm |
|                                      | Skin                                         |

- **Additional information:** The lists that were valid during the creation were used as basis.
- **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.  
Avoid contact with the eyes and skin.
- **Breathing equipment:** Not required.
- **Protection of hands:**  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.



Protective gloves

- **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

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**  
**Form:** Liquid

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|                                                   |                                               |
|---------------------------------------------------|-----------------------------------------------|
| · <b>Color:</b>                                   | Yellow tint                                   |
| · <b>Odor:</b>                                    | Ammonia-like                                  |
| · <b>Odor threshold:</b>                          | Not determined.                               |
| · <b>pH-value:</b>                                | Not determined.                               |
| · <b>Change in condition</b>                      |                                               |
| <b>Melting point/Melting range:</b>               | Undetermined.                                 |
| <b>Boiling point/Boiling range:</b>               | 210 °C (410 °F)                               |
| · <b>Flash point:</b>                             | 96 °C (204.8 °F)                              |
| · <b>Flammability (solid, gaseous):</b>           | Not applicable.                               |
| · <b>Decomposition temperature:</b>               | Not determined.                               |
| · <b>Auto igniting:</b>                           | Product is not selfigniting.                  |
| · <b>Danger of explosion:</b>                     | Product does not present an explosion hazard. |
| · <b>Explosion limits:</b>                        |                                               |
| <b>Lower:</b>                                     | Not determined.                               |
| <b>Upper:</b>                                     | Not determined.                               |
| · <b>Vapor pressure:</b>                          | Not determined.                               |
| · <b>Density:</b>                                 | Not determined.                               |
| · <b>Relative density</b>                         | Not determined.                               |
| · <b>Vapor density</b>                            | Not determined.                               |
| · <b>Specific gravity:</b>                        | 1.1                                           |
| · <b>Evaporation rate</b>                         | Not determined.                               |
| · <b>Solubility in / Miscibility with Water:</b>  | Slightly soluble.                             |
| · <b>Partition coefficient (n-octanol/water):</b> | Not determined.                               |
| · <b>Viscosity:</b>                               |                                               |
| <b>Dynamic:</b>                                   | Not determined.                               |
| <b>Kinematic:</b>                                 | Not determined.                               |
| · <b>Solvent content:</b>                         |                                               |
| <b>Organic solvents:</b>                          | 20.8 %                                        |
| <b>VOC content:</b>                               | 20.83 %                                       |
|                                                   | 208.3 g/l / 1.74 lb/gl                        |
| · <b>Other information</b>                        | No further relevant information available.    |

## 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid**  
Contact with acrylates, aldehydes, atmospheric moisture, halogenates organic and ketones  
Keep away from oxidising agents and acidic substances.
- **Incompatible materials:** Copper and copper alloys

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**Product name: EpoxyMount Hardener - Part B**

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· **Hazardous decomposition products:** Carbon monoxide

## 11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

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

**ATE (Acute Toxicity Estimate)**

|            |          |             |
|------------|----------|-------------|
| Oral       | LD50     | 2,143 mg/kg |
| Dermal     | LD50     | 1,922 mg/kg |
| Inhalative | LC50/4 h | 52.8 mg/l   |

**100-51-6 Benzyl alcohol**

|            |          |                      |
|------------|----------|----------------------|
| Oral       | LD50     | 1,230 mg/kg (rat)    |
| Dermal     | LD50     | 2,000 mg/kg (rabbit) |
| Inhalative | LC50/4 h | 11 mg/l (ATE)        |

**140-31-8 2-piperazin-1-ylethylamine**

|        |      |                    |
|--------|------|--------------------|
| Oral   | LD50 | 2,140 mg/kg (rat)  |
| Dermal | LD50 | 880 mg/kg (rabbit) |

**2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine**

|        |      |                   |
|--------|------|-------------------|
| Oral   | LD50 | 500 mg/kg (ATE)   |
| Dermal | LD50 | 1,100 mg/kg (ATE) |

**112-24-3 triethylenetetramine**

|        |      |                    |
|--------|------|--------------------|
| Oral   | LD50 | 2,500 mg/kg (rat)  |
| Dermal | LD50 | 805 mg/kg (rabbit) |

· **Primary chemical irritant effect:**

· **on the skin:** Caustic effect on skin and mucous membranes.

· **on the eye:**

Strong caustic effect.

Strong irritant with the danger of severe eye injury.

· **Sensitization:** Sensitization possible through skin contact.

· **Additional toxicological information:**

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

## 12 Ecological information

· **Toxicity**

· **Aquatic toxicity:** No further relevant information available.

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- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**  
 Water hazard class 2 (Self-assessment): hazardous for water  
 Do not allow product to reach ground water, water course or sewage system.  
 Must not reach bodies of water or drainage ditch undiluted or unneutralized.  
 Danger to drinking water if even small quantities leak into the ground.  
 Harmful to aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Contact waste processors for recycling information.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

- |                                                                                     |                        |
|-------------------------------------------------------------------------------------|------------------------|
| <b>· UN-Number</b>                                                                  | UN2815                 |
| <b>· DOT, IMDG, IATA</b>                                                            | UN2815                 |
| <b>· UN proper shipping name</b>                                                    | N-Aminoethylpiperazine |
| <b>· DOT</b>                                                                        | N-AMINOETHYLPIPERAZINE |
| <b>· IMDG, IATA</b>                                                                 | N-AMINOETHYLPIPERAZINE |
| <b>· Transport hazard class(es)</b>                                                 |                        |
| <b>· DOT</b>                                                                        |                        |
|  |                        |
| <b>· Class</b>                                                                      | 8 Corrosive substances |
| <b>· Label</b>                                                                      | 8, 6.1                 |
| <b>· IMDG</b>                                                                       |                        |
|  |                        |
| <b>· Class</b>                                                                      | 8 Corrosive substances |

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|                                                                                   |                                                                                                                  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| · <b>Label</b>                                                                    | 8/6.1                                                                                                            |
| · <b>IATA</b>                                                                     |                                                                                                                  |
|  |                                                                                                                  |
| · <b>Class</b>                                                                    | 8 Corrosive substances                                                                                           |
| · <b>Label</b>                                                                    | 8 (6.1)                                                                                                          |
| · <b>Packing group</b>                                                            | III                                                                                                              |
| · <b>DOT, IMDG, IATA</b>                                                          | III                                                                                                              |
| · <b>Environmental hazards:</b>                                                   |                                                                                                                  |
| · <b>Marine pollutant:</b>                                                        | No                                                                                                               |
| · <b>Special precautions for user</b>                                             | Warning: Corrosive substances                                                                                    |
| · <b>Danger code (Kemler):</b>                                                    | 86                                                                                                               |
| · <b>EMS Number:</b>                                                              | F-A,S-B                                                                                                          |
| · <b>Stowage Category</b>                                                         | A                                                                                                                |
| · <b>Stowage Code</b>                                                             | SW1 Protected from sources of heat.                                                                              |
| · <b>Handling Code</b>                                                            | H2 Keep as cool as reasonably practicable                                                                        |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>  | Not applicable.                                                                                                  |
| · <b>Transport/Additional information:</b>                                        |                                                                                                                  |
| · <b>DOT</b>                                                                      |                                                                                                                  |
| · <b>Quantity limitations</b>                                                     | On passenger aircraft/rail: 5 L<br>On cargo aircraft only: 60 L                                                  |
| · <b>IMDG</b>                                                                     |                                                                                                                  |
| · <b>Limited quantities (LQ)</b>                                                  | 5L                                                                                                               |
| · <b>Excepted quantities (EQ)</b>                                                 | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| · <b>UN "Model Regulation":</b>                                                   | UN 2815 N-AMINOETHYLPIPERAZINE, 8 (6.1), III                                                                     |

## 15 Regulatory information

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

· Sara

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

100-51-6 Benzyl alcohol

140-31-8 2-piperazin-1-ylethylamine

2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine

112-24-3 triethylenetetramine

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· **TSCA new (21st Century Act) (Substances not listed)**

Proprietary Ingredient

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

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

## 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.

· **Department issuing SDS:** Environment protection department.

· **Contact:** Kim Dermit

· **Date of preparation / last revision** 06/04/2018 / -

· **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)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

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

Skin Sens. 1: Skin sensitisation – Category 1

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