1 Identification

- **Product name:** EpoxyMount Resin - Part A
  - **Part number:**
    - 145-10005, 145-10020
    - 145-10010, 145-10025
- **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).
  - **Hazard pictograms**
    - GHS07
    - GHS09

- **Signal word** Warning

(Contd. on page 2)
Product name: EpoxyMount Resin - Part A

- **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.

<table>
<thead>
<tr>
<th>Hazardous Components:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>25068-38-6</td>
<td>reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ( \leq 700 ))</td>
</tr>
<tr>
<td></td>
<td><strong>Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-hazardous Components:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>120547-52-6</td>
<td>Aliphatic Glycidyl Ether</td>
</tr>
</tbody>
</table>

### 4 First-aid measures

- **Description of 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.
Product name: EpoxyMount Resin - Part A

- 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).
  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

<table>
<thead>
<tr>
<th>PAC-1:</th>
<th>25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)</th>
<th>90 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAC-2:</td>
<td>25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)</td>
<td>990 mg/m³</td>
</tr>
<tr>
<td>PAC-3:</td>
<td>25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)</td>
<td>5,900 mg/m³</td>
</tr>
</tbody>
</table>

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:
  Unsuitable materials for receptacle: copper
  Store in a cool location.
  No special requirements.
- 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.
Product name: EpoxyMount Resin - Part A

- 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: Use suitable respiratory protective device when high concentrations are present.

- 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

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 cannot 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
      - Color: Yellow tint
      - Odor: Odorless
      - Odor threshold: Not determined.
    - pH-value: Not determined.
  - Change in condition
    - Melting point/Melting range: Undetermined.
    - Boiling point/Boiling range: 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.
Product name: EpoxyMount Resin - Part A

(Contd. of page 4)

- **Explosion limits:**
  - Lower: Not determined.
  - Upper: 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:**
  - Dynamic at 20 °C (68 °F): 400-700 mPas
  - Kinematic: Not determined.

- **Solvent content:**
  - VOC content: 0.00 %
    - 0.0 g/l / 0.00 lb/gal
- **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**
  - Keep away from oxidising agents and acidic substances.
  - Contact with acrylates, aldehydes, atmospheric moisture, halogenates organic and ketones
- **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:**

<table>
<thead>
<tr>
<th>LD/LC50 values that are relevant for classification:</th>
</tr>
</thead>
<tbody>
<tr>
<td>25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight &lt; 700)</td>
</tr>
<tr>
<td>Oral</td>
</tr>
<tr>
<td>Dermal</td>
</tr>
</tbody>
</table>

- **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.

(Contd. on page 6)


12 Ecological information

- **Toxicity**
  - Aquatic toxicity:
    - 25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \( \leq 700 \))
      - EC50 (48h): 1.8 mg/l (water flea)
      - LC50 (96 h): 2 mg/l (rainbow trout)
      - ErC50(72h): 11 mg/l (fresh water algae)
      - IC50(18h): 42.6 mg/l (bacteria)

- **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
- **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

- **UN-Number**
  - DOT, IMDG, IATA: not regulated
- **UN proper shipping name**
  - DOT: not regulated
- **Transport hazard class(es)**
  - DOT
  - Class: not regulated
- **Packing group**
  - DOT: not regulated
- **Environmental hazards:**
  - Marine pollutant: Yes
Product name: EpoxyMount Resin - Part A

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):
    All components have the value ACTIVE.
  · Hazardous Air Pollutants
    None of the ingredients is 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
· Last revision: 04/30/2020 / 1.9
· 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)
Product name: EpoxyMount Resin - Part A

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
tvPvB: 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
1 Identification

- **Product name:** EpoxyMount Hardener - Part B
- **Part number:**
  - 145-10005, 145-10020
  - 145-10015, 145-10030
- **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).
- **Hazard pictograms**

  - GHS05
  - GHS07

(Contd. on page 2)
Product name: EpoxyMount Hardener - Part B

- Signal word Danger

- Hazard-determining components of labeling:
  2-piperazin-1-yethylamine
  Benzyl alcohol
  3-aminomethyl-3,5,5-trimethylecyclohexylamine
  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)
    ![](https://example.com/nfpa.png)
    Health = 3
    Fire = 1
    Reactivity = 0

  - HMIS-ratings (scale 0 - 4)
    ![HMIS ratings](https://example.com/hmis.png)
    Health = *3
    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.

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-51-6 Benzyl alcohol</td>
<td>10-25%</td>
</tr>
<tr>
<td>Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332</td>
<td></td>
</tr>
<tr>
<td>140-31-8 2-piperazin-1-yethylamine</td>
<td>≥10-&lt;25%</td>
</tr>
<tr>
<td>Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; Flam. Liq. 4, H227; Aquatic Chronic 3, H412</td>
<td></td>
</tr>
<tr>
<td>Skin Corr. 1B, H314; Eye Dam. 1, H318;</td>
<td></td>
</tr>
</tbody>
</table>

(Contd. on page 3)
Safety Data Sheet
acc. to OSHA HCS

Product name: EpoxyMount Hardener - Part B

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Chemical Name</th>
<th>Health Hazard Class</th>
<th>Exposure Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>112-24-3</td>
<td>triethylenetetramine</td>
<td>≥5-&lt;10%</td>
<td></td>
</tr>
<tr>
<td>2855-13-2</td>
<td>3-aminomethyl-3,5,5-trimethylcyclohexylamine</td>
<td>≥5-&lt;10%</td>
<td></td>
</tr>
</tbody>
</table>

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: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture: During heating or in case of fire poisonous gases are produced.
- Advice for firefighters
- Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
  - Mount respiratory protective device.
  - 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:
<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical Name</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-51-6</td>
<td>Benzyl alcohol</td>
<td>30 ppm</td>
</tr>
<tr>
<td>140-31-8</td>
<td>2-piperazin-1-ylethylamine</td>
<td>6.4 mg/m³</td>
</tr>
<tr>
<td>112-24-3</td>
<td>triethylenetetramine</td>
<td>3 ppm</td>
</tr>
</tbody>
</table>
Product name: EpoxyMount Hardener - Part B

7 Handling and storage

- **Handling:**
  - **Precautions for safe handling** Prevent formation of aerosols.
  - **Information about protection against explosions and fires:** Keep respiratory protective device available.

- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
  - **Requirements to be met by storerooms and receptacles:**
    - Unsuitable materials for receptacle: copper
    - Store in a cool location.
    - No special requirements.
  - **Information about storage in one common storage facility:** Not required.
  - **Further information about storage conditions:**
    - Protect from extreme temperatures.
    - 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 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.

<table>
<thead>
<tr>
<th>100-51-6 Benzyl alcohol</th>
<th>WEEL</th>
<th>Long-term value: 10 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>112-24-3 triethylenetetramine</td>
<td>WEEL</td>
<td>Long-term value: 6 mg/m³, 1 ppm</td>
</tr>
</tbody>
</table>

- **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:** Use suitable respiratory protective device when high concentrations are present.
**Product name: EpoxyMount Hardener - Part B**

- **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**

  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

<table>
<thead>
<tr>
<th><strong>Information on basic physical and chemical properties</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Information</strong></td>
</tr>
<tr>
<td><strong>Appearance:</strong></td>
</tr>
<tr>
<td>Form: Liquid</td>
</tr>
<tr>
<td>Color: Yellow tint</td>
</tr>
<tr>
<td>Odor: Ammonia-like</td>
</tr>
<tr>
<td>Odor threshold: Not determined.</td>
</tr>
</tbody>
</table>

| **pH-value at 20 °C (68 °F):** 10-12                      |
|------------------------------|---------------------|

<table>
<thead>
<tr>
<th><strong>Change in condition</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/Melting range: Undetermined.</td>
</tr>
<tr>
<td>Boiling point/Boiling range: 210 °C (410 °F)</td>
</tr>
</tbody>
</table>

| **Flash point:** 96 °C (204.8 °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. |

<table>
<thead>
<tr>
<th><strong>Explosion limits:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower: Not determined.</td>
</tr>
<tr>
<td>Upper: Not determined.</td>
</tr>
</tbody>
</table>

| **Vapor pressure:** Not determined. |

<table>
<thead>
<tr>
<th><strong>Density:</strong> Not determined.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Relative density</strong> Not determined.</td>
</tr>
<tr>
<td><strong>Vapor density</strong> Not determined.</td>
</tr>
<tr>
<td><strong>Specific gravity:</strong> 1.1</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong> Not determined.</td>
</tr>
</tbody>
</table>

| **Solubility in / Miscibility with Water:** Slightly soluble. |

(Contd. on page 6)
Product name: EpoxyMount Hardener - Part B

(Contd. of page 5)

- Partition coefficient (n-octanol/water): Not determined.
- Viscosity:
  - Dynamic at 20 °C (68 °F): 500-900 mPas
  - Kinematic: Not determined.
- Solvent content:
  - Organic solvents: 20.8 %
  - VOC content: 20.83 %
  - 208.3 g/l / 1.74 lb/gal
- 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
  - Keep away from oxidising agents and acidic substances.
  - Contact with acrylates, aldehydes, atmospheric moisture, halogenates organic and ketones
- 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:

<table>
<thead>
<tr>
<th>ATE (Acute Toxicity Estimate)</th>
<th>Oral</th>
<th>LD50</th>
<th>2,143 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dermal</td>
<td>LD50</td>
<td>1,923 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Inhalative</td>
<td>LC50/4 h</td>
<td>52.8 mg/l</td>
<td></td>
</tr>
</tbody>
</table>

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-yethylamine

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

112-24-3 triethylenetetramine

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

- 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.

(Contd. on page 7)
Product name: EpoxyMount Hardener - Part B

- 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.
- 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
  Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms.
  In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.
- 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

- UN-Number
  DOT, IMDG, IATA
  UN2815

- UN proper shipping name
  DOT
  N-Aminoethylpiperazine solution
  IMDG, IATA
  N-AMINOETHYLPIPERAZINE solution
  (Contd. on page 8)
### Transport hazard class(es)

- DOT
  - Class 8
  - Label Corrosive substances
- IMDG
  - Class 8
  - Label Corrosive substances
- IATA
  - Class 8
  - Label Corrosive substances

### Packing group
- DOT, IMDG, IATA
  - Packing group III

### Environmental hazards:
- Marine pollutant: No

### Special precautions for user
- Hazard identification number (Kemler code): 86
- EMS Number: F-A,S-B
- Stowage Category B
- Stowage Code SW2 Clear of living quarters.

### Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
- Not applicable.

### Transport/Additional information:
- DOT
  - Quantity limitations
    - On cargo aircraft only: 60 L
    - On passenger aircraft/rail: 5 L
  - Limited quantities (LQ) 5L
  - Transport category 3
  - Tunnel restriction code E

- IMDG
  - Limited quantities (LQ) 5L
  - Excepted quantities (EQ) Code: E1
    - Maximum net quantity per inner packaging: 30 ml
    - Maximum net quantity per outer packaging: 1000 ml

### UN "Model Regulation"
- UN 2815 N-AMINOETHYLPIPERAZINE SOLUTION, 8 (6.1), III

(Contd. on page 9)
# 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):**

All components have the value ACTIVE.

- **Hazardous Air Pollutants**
  - None of the ingredients is 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
- **Last revision:** 04/30/2020 / 1.9

**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

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Product name: EpoxyMount Hardener - Part B

TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Flam. Liq. 4: Flammable liquids – Category 4
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