1 Identification

- Product identifier
  - Trade name: Pro-Poxy™ 500 - Part A
  - Article number: 87-146220A
  - Application of the substance / the mixture

- Details of the supplier of the safety data sheet
  - Manufacturer/Supplier:
    Dayton® Superior
    4226 Kansas Avenue                   Tel.: (866) 329-8724
    Kansas City, KS 66106

Emergency Telephone Number: Use only in the event of an emergency involving a spill, leak, fire, exposure, or accident involving chemicals. Within the U.S., Canada, or the U.S. Virgin Islands, call ChemTrec at (800) 424-9300, 24 hours a day. Or, outside these areas, call international number, +1 703 741-5970. Collect calls are accepted.

- Information department: Environmental, Health, and Safety department.
- Emergency telephone number:
  Use only in the event of an emergency involving a spill, leak, fire, exposure, or accident involving chemicals. Within the U.S., Canada, or the U.S. Virgin Islands, call ChemTrec at (800) 424-9300, 24 hours a day. Or, outside these areas, call international number, +1 703 741-5970. Collect calls are accepted.
  Australia in-country +(61)-290372994

2 Hazard(s) identification

- Classification of the substance or mixture
  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.
  Aquatic Chronic 2   H411 Toxic 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

  ![GHS07](image1)
  ![GHS09](image2)

- Signal word Warning

- Hazard-determining components of labeling:
  - epoxy resin

- 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
  - Wash thoroughly after handling.
  - Wear protective gloves/protection/clothing/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.
  - If skin irritation or rash occurs: Get medical advice/attention.
  - Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)
Trade name: Pro-Poxy™ 500 - Part A

- Classification system:
  - NFPA ratings (scale 0 - 4)
  
  Health = 2  Fire = 1  Reactivity = 0

- HMIS-ratings (scale 0 - 4)

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>FIRE</th>
<th>PHYSICAL HAZARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

- 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>Dangerous components:</th>
</tr>
</thead>
<tbody>
<tr>
<td>25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)</td>
</tr>
<tr>
<td>933999-84-9 2,2'-[hexane-1,6-diylbis(oxy)methylene]dioxirane</td>
</tr>
</tbody>
</table>

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

4 First-aid measures

- Description of first aid measures

  - General information:
    Immediately remove any clothing soiled by the product.
    In the event of persistent symptoms recieve medical treatment.

  - 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.
    Immediately move exposed person to fresh air. If breathing difficulty persists or develops get prompt medical attention.

  - After skin contact:
    Immediately wash with water and soap and rinse thoroughly.
    If skin irritation continues, consult a doctor.

  - After eye contact: Rinse opened eye for several minutes under running water. Then consult 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, sand, extinguishing powder. Do not use water.
  - Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** Water
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
  - **Protective equipment:**
    - Because fire may produce thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.

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.
  - 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).
  - Do not flush with water or aqueous cleansing agents
- **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></th>
</tr>
</thead>
<tbody>
<tr>
<td>25068-38-6</td>
<td>reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)</td>
</tr>
<tr>
<td>28064-14-4</td>
<td>Poly[(phenyl glycidyl ether)-co-formaldehyde]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAC-2:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>25068-38-6</td>
<td>reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)</td>
</tr>
<tr>
<td>28064-14-4</td>
<td>Poly[(phenyl glycidyl ether)-co-formaldehyde]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAC-3:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>25068-38-6</td>
<td>reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)</td>
</tr>
<tr>
<td>28064-14-4</td>
<td>Poly[(phenyl glycidyl ether)-co-formaldehyde]</td>
</tr>
</tbody>
</table>

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
  - Wear appropriate personal protective clothing to prevent eye and skin contact. Avoid breathing vapors or mists of this product. Use with adequate ventilation. Do not take internally.
- **Information about protection against explosions and fires:** No special measures required.
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: Use suitable respiratory protective device in case of insufficient ventilation.
  - Protection of hands:
    - Protective gloves
      The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
  - Eye protection: Wear appropriate eye protection to prevent eye contact.

9 Physical and chemical properties

- Information on basic physical and chemical properties
  - General Information
    - Appearance:
      - Form: Liquid
      - Color: Whitish
    - Odor: Characteristic
    - Odor threshold: Not determined.
  - pH-value: Not determined.

- Change in condition
  - Melting point/Melting range: Undetermined.
  - Boiling point/Boiling range: >35 °C (>95 °F)

- Flash point: >100 °C (>212 °F)
- Flammability (solid, gaseous): Not applicable.
46.0

- Ignition temperature:
  - Decomposition temperature: Not determined.

- Auto igniting: Product is not selfigniting.

- Danger of explosion: Product does not present an explosion hazard.

- Explosion limits:
  - Lower: Not determined.
  - Upper: Not determined.

- Vapor pressure: Not determined.

- Density at 20 °C (68 °F): 1.2-1.3 g/cm³ (10.014-10.8485 lbs/gal)
- Relative density: Not determined.
- Vapor density: Not determined.
- Evaporation rate: Not determined.

- Solubility in / Miscibility with Water: Not miscible or difficult to mix.

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

- Viscosity:
  - Dynamic: Not determined.
  - Kinematic: Not determined.

- Solvent content:
  - Solids content: 100.0 %

- Other information: No further relevant information available.

- Volatile Organic Compounds: Not determined

10 Stability and reactivity

- Reactivity: No decomposition if stored and applied as directed.
- Chemical stability: No decomposition if stored and applied as directed
- 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 heat and sources of ignition.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
  - Primary irritant effect:
    - on the skin: May cause skin irritation.
    - on the eye: Strong irritant with the danger of severe eye injury.
    - Irritating effect.
- Sensitization: Sensitization possible through skin contact.
- Additional toxicological information:
  The product shows the following dangers according to internally approved calculation methods for preparations:
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.
- Ecotoxical effects:
  - Remark: Toxic for fish
- Additional ecological information:
  - General notes:
    - Water hazard class 1 (Self-assessment): slightly hazardous for water
    - 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:
    It is the generator's responsibility to determine if the waste meets applicable definitions of hazardous waste. State and local regulations may differ from federal disposal regulations. Dispose of waste material according to local, state, federal, and provincial environmental regulations.
  - Uncleaned packagings:
    - Recommendation: Disposal must be made according to Federal, State, and Local regulations.

14 Transport information

- UN-Number
- DOT, ADR, IMDG, IATA: UN3082
### UN proper shipping name
- **DOT**: Environmentally hazardous substances, liquid, n.o.s. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700))
- **ADR**: 3082 Environmentally hazardous substances, liquid, n.o.s. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700))
- **IMDG**: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)), MARINE POLLUTANT
- **IATA**: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700))

### Transport hazard class(es)
- **DOT**: 9 Miscellaneous dangerous substances and articles
- **ADR, IMDG, IATA**: 9 Miscellaneous dangerous substances and articles

### Packing group
- **DOT, ADR, IMDG, IATA**: III

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

### Special precautions for user
- **EMS Number**: F-A,S-F
- **Stowage Category**: A

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

### Transport/Additional information:
- **ADR**
  - **Excepted quantities (EQ)**: Code: E1
    - Maximum net quantity per inner packaging: 30 ml
    - Maximum net quantity per outer packaging: 1000 ml
  - **U.S. Domestic Ground Shipments**: Same as listed for Standard Shipments above.

(Contd. of page 6)
Safety Data Sheet
acc. to OSHA HCS

Printing date 07/06/2018
Reviewed on 07/06/2018

Trade name: Pro-Poxy™ 500 - Part A

(Contd. of page 7)

- U.S. Domestic Ground Non-Bulk (119 gal or less per container) Shipments: Same as listed for Standard Shipments above.
- Emergency Response Guide (ERG) Number: Not determined
- UN "Model Regulation": UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL-A-(EPICHLORHYDRIN) EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT = 700)), 9, III

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Section 355 (extremely hazardous substances):
    None of the ingredient is listed.
  - Section 313 (Specific toxic chemical listings):
    This product may contain 1 or more toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR part 372. If so, the chemicals are listed below.
    None of the ingredients is listed.
  - TSCA (Toxic Substances Control Act):
    reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)
    Poly[(phenyl glycidyl ether)-co-formaldehyde]
    Talc
  - TSCA new (21st Century Act) (Substances not listed)
    2,2’-[hexane-1,6-diylbis(oxyethylene)]dioxirane
  - Proposition 65
    reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)
  - Chemicals known to the State of California (Prop. 65) 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.
  - Cancerogenicity categories
    - EPA (Environmental Protection Agency)
      None of the ingredients is listed.
    - TLV (Threshold Limit Value established by ACGIH)
      Talc
    - MAK (German Maximum Workplace Concentration)
      Talc
    - NIOSH-Ca (National Institute for Occupational Safety and Health)
      None of the ingredients is listed.
  - GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 9)
Trade name: Pro-Poxy™ 500 - Part A

· Hazard pictograms

![GHS07](image) ![GHS09](image)

· Signal word Warning

· Hazard-determining components of labeling:
  epoxy resin

· 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
  Wash thoroughly after handling.
  Wear protective gloves/protective clothing/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.
  If skin irritation or rash occurs: Get medical advice/attention.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

· National regulations:
  · Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water.
  · 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: Environmental, Health & Safety Department
· Contact: Environmental, Health & Safety Manager
· Date of preparation / last revision 07/06/2018 / 2

· 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
  ACMS: 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)
  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
1 Identification

- **Product identifier**
  - Trade name: Pro-Poxy™ 500 - Part B
- **Article number:** 87-146220B
- **Application of the substance / the mixture**
- **Details of the supplier of the safety data sheet**
  - Manufacturer/Supplier: Dayton® Superior
    
    4226 Kansas Avenue                   Tel.: (866) 329-8724
    Kansas City, KS 66106

Emergency Telephone Number: Use only in the event of an emergency involving a spill, leak, fire, exposure, or accident involving chemicals. Within the U.S., Canada, or the U.S. Virgin Islands, call ChemTrec at (800) 424-9300, 24 hours a day. Or, outside these areas, call international number, +1 703 741-5970. Collect calls are accepted.

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  - Australia in-country  +(61)-290372994

2 Hazard(s) identification

- **Classification of the substance or mixture**
  - Skin Corr. 1B  **H314**  Causes severe skin burns and eye damage.
  - Eye Dam. 1  **H318**  Causes serious eye damage.
  - Skin Sens. 1  **H317**  May cause an allergic skin reaction.
  - Repr. 2  **H361**  Suspected of damaging fertility or the unborn child.
  - STOT RE 1  **H372**  Causes damage to organs through prolonged or repeated exposure.

- **Label elements**
  - **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
  - **Hazard pictograms**
    - GHS05
    - GHS07
    - GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**
  - 2-piperazin-1-ylethylamine
  - Salicylic acid
  - 2,2’-iminodiethylamine
  - 3,6-diazoctanethylenediamin

- **Hazard statements**
  - Causes severe skin burns and eye damage.
  - May cause an allergic skin reaction.
  - Suspected of damaging fertility or the unborn child.
  - Causes damage to organs through prolonged or repeated exposure.

- **Precautionary statements**
  - Wear protective gloves/protective clothing/eye protection/face protection.

(Contd. on page 2)
If swallowed: Rinse mouth. Do NOT induce vomiting.
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.
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
    - Health = *3
  - FIRE
    - Fire = 1
  - PHYSICAL HAZARD
    - Reactivity = 0

Other hazards

Results of PBT and vPvB assessment
- PBT: None
- 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>Dangerous components:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7 Quartz (SiO2)</td>
<td>≥20-≤50%</td>
</tr>
<tr>
<td>61788-44-1 Styrenated phenol</td>
<td>≥10-≤20%</td>
</tr>
<tr>
<td>140-31-8 2-piperazin-1-ylethylamine</td>
<td>10%</td>
</tr>
<tr>
<td>2579-20-6 1,3-Cyclohexanedimethanamine</td>
<td>≥1-≤5%</td>
</tr>
<tr>
<td>69-72-7 Salicylic acid</td>
<td>≥1-≤5%</td>
</tr>
<tr>
<td>38640-62-9 Bis(isopropyl)naphthalene</td>
<td>≥0.5-≤1%</td>
</tr>
<tr>
<td>111-40-0 2,2'-iminodithylamine</td>
<td>≥0.1-&lt;0.5%</td>
</tr>
<tr>
<td>112-24-3 3,6-diazaoctanethylenediamin</td>
<td>≥0.1-&lt;0.5%</td>
</tr>
</tbody>
</table>

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

4 First-aid measures

- Description of first aid measures
- General information:
  Immediately remove any clothing soiled by the product.
  In the event of persistent symptoms receive medical treatment.
- After inhalation:
  Supply fresh air and 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.
  Immediately rinse with water.
  If skin irritation continues, consult a doctor.
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.

Seek medical treatment.

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, sand, extinguishing powder. Do not use water.

Use fire fighting measures that suit the environment.

For safety reasons unsuitable extinguishing agents: Water

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

Advice for firefighters

Protective equipment:
Because fire may produce thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.

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.
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.
Do not flush with water or aqueous cleansing agents

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 Number</th>
<th>Substance</th>
<th>Limit</th>
</tr>
</thead>
</table>
| 14808-60-7 | Quartz (SiO2)              | 0.075 mg/m³  
| 140-31-8  | 2-piperazin-1-ylethylamine | 6.4 mg/m³    
| 38640-62-9 | Bis(isopropyl)naphthalene  | 5.6 mg/m³    
| 111-40-0  | 2,2'-iminodiethylamine     | 3 ppm         
| 112-24-3  | 3,6-diazaoctanethylenediamin | 3 ppm       |

PAC-2:

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Substance</th>
<th>Limit</th>
</tr>
</thead>
</table>
| 14808-60-7 | Quartz (SiO2)              | 33 mg/m³      
| 140-31-8  | 2-piperazin-1-ylethylamine | 71 mg/m³     
| 38640-62-9 | Bis(isopropyl)naphthalene  | 61 mg/m³     |
Trade name: Pro-Poxy™ 500 - Part B

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical Name</th>
<th>Concentration</th>
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<tr>
<td>111-40-0</td>
<td>2,2'-iminodiethylamine</td>
<td>8.5 ppm</td>
</tr>
<tr>
<td>112-24-3</td>
<td>3,6-diazaoctanethylenediamin</td>
<td>14 ppm</td>
</tr>
</tbody>
</table>

- PAC-3:

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical Name</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7</td>
<td>Quartz (SiO2)</td>
<td>200 mg/m³</td>
</tr>
<tr>
<td>140-31-8</td>
<td>2-piperazin-1-ylethylamine</td>
<td>420 mg/m³</td>
</tr>
<tr>
<td>38640-62-9</td>
<td>Bis(isopropyl)naphthalene</td>
<td>370 mg/m³</td>
</tr>
<tr>
<td>111-40-0</td>
<td>2,2'-iminodiethylamine</td>
<td>51 ppm</td>
</tr>
<tr>
<td>112-24-3</td>
<td>3,6-diazaoctanethylenediamin</td>
<td>83 ppm</td>
</tr>
</tbody>
</table>

7 Handling and storage

- Handling:
  - Precautions for safe handling
    Wear appropriate personal protective clothing to prevent eye and skin contact. Avoid breathing vapors or mists of this product. Use with adequate ventilation. Do not take internally.
  - 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: No special requirements.
    - Information about storage in one common storage facility: Not required.
    - Further information about storage conditions: Keep receptacle tightly sealed.
    - 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>CAS Number</th>
<th>Chemical Name</th>
<th>PEL Long-term value:</th>
<th>REL Long-term value:</th>
<th>TLV Long-term value:</th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7</td>
<td>Quartz (SiO2)</td>
<td>see Quartz listing</td>
<td>0.05* mg/m³</td>
<td>0.025* mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*respirable dust</td>
<td>See Pocket Guide App. A</td>
<td></td>
</tr>
<tr>
<td>111-40-0</td>
<td>2,2'-iminodiethylamine</td>
<td>4 mg/m³, 1 ppm Skin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>112-24-3</td>
<td>3,6-diazaoctanethylenediamin</td>
<td>6 mg/m³, 1 ppm Skin</td>
<td></td>
<td></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:
- In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

### Protection of hands:
- **Proper protective equipment:**
  - **Gloves:**
    The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

### Eye protection:
- Wear appropriate eye protection to prevent eye contact.

---

### 9 Physical and chemical properties

<table>
<thead>
<tr>
<th>Information on basic physical and chemical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Information</strong></td>
</tr>
<tr>
<td><strong>Appearance:</strong> Liquid</td>
</tr>
<tr>
<td><strong>Color:</strong> Brown</td>
</tr>
<tr>
<td><strong>Odor:</strong> Amine-like</td>
</tr>
<tr>
<td><strong>Odor threshold:</strong> Not determined.</td>
</tr>
<tr>
<td><strong>pH-value:</strong> Not determined.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Change in condition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Melting point/Melting range:</strong> Undetermined.</td>
</tr>
<tr>
<td><strong>Boiling point/Boiling range:</strong> 220 °C (428 °F)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flash point:</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;100 °C (&gt;212 °F)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flammability (solid, gaseous):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ignition temperature:</th>
</tr>
</thead>
<tbody>
<tr>
<td>315 °C (599 °F)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Decomposition temperature:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not determined.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Auto igniting:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product is not selfigniting.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Danger of explosion:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product does not present an explosion hazard.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Explosion limits:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lower:</strong> 2.1 Vol %</td>
</tr>
<tr>
<td><strong>Upper:</strong> 10.5 Vol %</td>
</tr>
</tbody>
</table>

| Vapor pressure at 20 °C (68 °F): 0.1 hPa (0.1 mm Hg)  |

<table>
<thead>
<tr>
<th>Density at 20 °C (68 °F): 1.75-1.85 g/cm³ (14.60375-15.43825 lbs/gal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative density</td>
</tr>
<tr>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapor density</td>
</tr>
<tr>
<td>Not determined.</td>
</tr>
</tbody>
</table>
Trade name: Pro-Poxy™ 500 - Part B

- Evaporation rate: Not determined.
- Solubility in / Miscibility with Water: Not miscible or difficult to mix.
- Partition coefficient (n-octanol/water): Not determined.
- Viscosity:
  - Dynamic: Not determined.
  - Kinematic: Not determined.
- Solvent content:
  - Solids content: 90.0%
  - Other information: No further relevant information available.
- Volatile Organic Compounds: Not determined

10 Stability and reactivity

- Reactivity: No decomposition if stored and applied as directed.
- Chemical stability: No decomposition if stored and applied as directed.
- 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 heat and sources of ignition.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
  - Acute toxicity:
    - LD/LC50 values that are relevant for classification:
      140-31-8 2-piperazin-1-ylethylamine
      - Oral LD50: 2,140 mg/kg (rat)
      - Dermal LD50: 880 mg/kg (rabbit)
  - Primary irritant effect:
    - on the skin: May cause skin irritation.
    - on the eye:
      - Strong caustic effect.
      - Strong irritant with the danger of severe eye injury.
    - Sensitization: Sensitization possible through skin contact.
  - Additional toxicological information:
    The product shows the following dangers according to internally approved calculation methods for preparations:
    - Corrosive
    - Irritant
    - 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)
    14808-60-7 Quartz (SiO2)
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 1 (Self-assessment): slightly hazardous for water
    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:
    It is the generator's responsibility to determine if the waste meets applicable definitions of hazardous waste. State and local regulations may differ from federal disposal regulations. Dispose of waste material according to local, state, federal, and provincial environmental regulations.
- Uncleaned packagings:
  - Recommendation: Disposal must be made according to Federal, State, and Local regulations.

14 Transport information

- UN-Number
- DOT, ADR, IMDG, IATA
- UN proper shipping name
- DOT
- ADR

Amines, liquid, corrosive, n.o.s. (1,3-Cyclohexanidimethanamine, N-Aminoethylpiperazine)
2735 Amines, liquid, corrosive, n.o.s. (1,3-Cyclohexanidimethanamine, N-Aminoethylpiperazine)
**Trade name:** Pro-Poxy™ 500 - Part B

| IMDG, IATA | AMINES, LIQUID, CORROSIVE, N.O.S. (1,3-Cyclohexanediethanimine, N-AMINOETHYLPIPERAZINE) |
| Transport hazard class(es) |  |
| DOT |  |
| Class | 8 Corrosive substances |
| Label | 8 |
| ADR, IMDG, IATA |  |
| Class | 8 Corrosive substances |
| Label | 8 |
| Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| Packing group |  |
| DOT, ADR, IMDG, IATA | II |
| Special precautions for user | Warning: Corrosive substances |
| EMS Number: | F-A,S-B |
| Segregation groups | Alkalis |
| U.S. Domestic Ground Shipments: |  |
| U.S. Domestic Ground Non-Bulk (119 gal or less per container) Shipments: | Same as listed for Standard Shipments above. |
| U.S. Domestic Ground Shipments: |  |
| Emergency Response Guide (ERG) Number: | Not determine |
| IMDG |  |
| Limited quantities (LQ) | 5L |
| Code: E1 |
| Excepted quantities (EQ) | Maximum net quantity per inner packaging: 30 ml |
| Maximum net quantity per outer packaging: 500 ml | Same as listed for Standard Shipments above. |
| UN "Model Regulation": | UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (1,3-CYCLOHEXANEDIETHANAMINE, N-AMINOETHYLPIPERAZINE), 8, II |
### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **Sara**
    - **Section 355 (extremely hazardous substances):**
      - None of the ingredient is listed.
  - **Section 313 (Specific toxic chemical listings):**
    - This product may contain 1 or more toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR part 372. If so, the chemicals are listed below.
      - None of the ingredients is listed.
  - **TSCA (Toxic Substances Control Act):**
    - All ingredients are listed.
  - **Proposition 65**
    - **Chemicals known to the State of California (Prop. 65) to cause cancer:**
      - 14808-60-7 Quartz (SiO2)
    - **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.
  - **Cancerogenity categories**
    - **EPA (Environmental Protection Agency)**
      - None of the ingredients is listed.
    - **TLV (Threshold Limit Value established by ACGIH)**
      - 14808-60-7 Quartz (SiO2) [A2]
    - **MAK (German Maximum Workplace Concentration)**
      - 14808-60-7 Quartz (SiO2) [1]
    - **NIOSH-Ca (National Institute for Occupational Safety and Health)**
      - 14808-60-7 Quartz (SiO2)
  - **GHS label elements**
    - The product is classified and labeled according to the Globally Harmonized System (GHS).
  - **Hazard pictograms**
    - GHS05
    - GHS07
    - GHS08

- **Signal word** Danger
- **Hazard-determining components of labeling:**
  - 2-piperazin-1-ylethylamine
  - Salicylic acid
  - 2,2’-iminodiethyamine
  - 3,6-diazaoctanethylenediamin
- **Hazard statements**
  - Causes severe skin burns and eye damage.
  - May cause an allergic skin reaction.
Suspected of damaging fertility or the unborn child.
Causes damage to organs through prolonged or repeated exposure.

**Precautionary statements**

- Wear protective gloves/protective clothing/eye protection/face protection.
- If swallowed: Rinse mouth. Do NOT induce vomiting.
- 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.
- Store locked up.
- Dispose of contents/container in accordance with local/regional/national/international regulations.

**National regulations:**

- **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.
- **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:** Environmental, Health & Safety Department
- **Contact:** Environmental, Health & Safety Manager
- **Date of preparation / last revision** 07/06/2018 / 4
- **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)
  - 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 Corr. 1B: Skin corrosion/irritation – Category 1B
  - Eye Dam. 1: Serious eye damage/eye irritation – Category 1
  - Skin Sens. 1: Skin sensitisation – Category 1
  - Repr. 2: Reproductive toxicity – Category 2
  - STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1