

# Safety Data Sheet

(EC) No 1907/2006 article 31

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name:

**TEKINJECT EPOXY 100 A** 

Type of product:

Mixture.

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Only for professional use.

1.3. Details of the supplier of the safety data sheet

Company: TEKINJECT BV Gounodstraat 2/25 BE-2018 Antwerp

*Telephone:* +32 494 239 441

E-mail address: info@tekinject.com

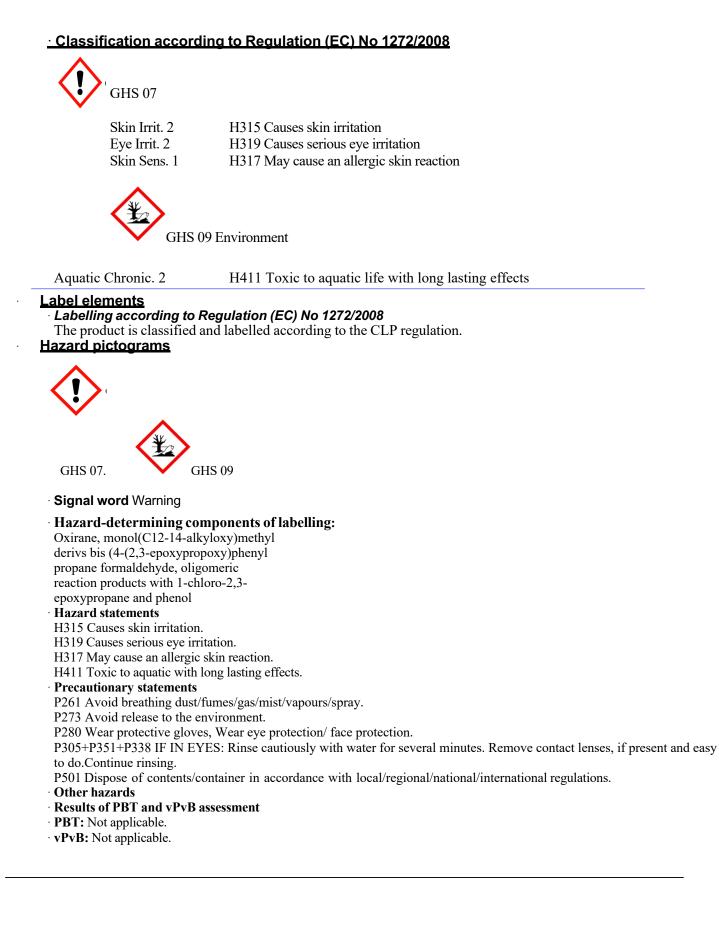
#### 1.4. Emergency telephone number

24-hour emergency number:

National Poison Information Service:

This is a generic EU Safety Data Sheet. Consult your specific Member State version for this information.

# 2. Hazard Identification



# 3. Composition/information on Ingredients

| • Dangerous compone | nts:  |                                 |         |
|---------------------|---|---------------------------------|---------|
| CAS: 68609-97-2     | Oxirane, mono(C12-14-alkyloxy)methyl derivs     | ▲ Skin irritant 2, H315,        | 50-100% |
| EINECS: 271-846-8   |   | Skin sense. 1, H317             |         |
| CAS 1675-54-3       | Bis(2,3-epoxypropoxy)phenylpropane              | Skin irritant 2, H315,          | 10-50%  |
| EINECS: 216-823-5   |   | Eye irrit. 2, H319, Skin        |         |
|                     |   | sens. 1, H317                   |         |
| CAS: 9003-36-5      | Formaldehyde, oligomeric reaction products with | 8 Aquatic chronic 2, H411,      | 10-25%  |
|                     | 1-chloro-2,3-epoxypropane and phenol            | Skin irrit. 2, H315, Eye irrit. |         |
|                     |   | 2, H319, skin sense 1, H317     |         |
| CAS: 933999-84-9    | EBL PD 03                                       | 8 Skin irrit. 2, H315, eye      | 2,5-10% |
| EC number: 618-     |   | irrit. 2, H319, Skin sens. 1,   |         |
| 939-5               |   | H317, aquatic chronic. 3,       |         |
|                     |   | H412                            |         |

· Description: Mixture of substances with nonhazardous additions.

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

#### 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 stable in side position for transportation.

• After skin contact: Immediately wash with water and soap and rinse troroughly.

• After eye contact: Rinse opened eye for several minutes under running water, if symptoms persist, consult a doctor.

• After swallowing: If symptoms persist, consult a doctor

# 5. Fire-figthing measures

- · Extinguishing media
- Suitable extinguishing agents: CO2, poweder or water spray. Fight larger fires with water spray or alcolhol resistant foam.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- Protective equipment: No special measures required.

# 6. Accidental releases measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions: Inform repective authorities in case of spillage into water course or sewage system. Dillute with plenty of water; Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- 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.

# 7. Handling and storageHandling:

# Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.Prevent formation of aerosols.

· Information about fire - and explosion protection: 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 container tightly sealed.
- Specific end use(s) No further relevant information available.
  - 8. Exposure control/ personal protection

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

# Control parameters

# Ingredients 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 valid during the making were used as basis.

#### Exposure controls

# Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Avoid contact with eyes and skin.

# Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

# Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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 technical properties

| General Information                  |   |
|--------------------------------------|---|
| Appearance:                          |   |
| Form:                                | Fluid   |
| Colour:                              | According to product specification            |
| Odour:<br>Odour threshold:           | Characteristic<br>Not determined.             |
| pH-value:                            | Not determined.                               |
| •                                    | 100 uclei mineu.                              |
| Change in condition                  | TT 1  |
| Melting point/freezing point:        | Undetermined.                                 |
| Initial boiling point and boiling re | ange: Undetermined.                           |
| Flash point:                         | > 93 °C                                       |
| Flammability (solid, gas):           | Not applicable.                               |
| Decomposition temperature:           | Not determined.                               |
| Auto-ignition temperature:           | Product is not selfigniting.                  |
| Explosive properties:                | Product does not present an explosion hazard. |
| Explosion limits:                    |   |
| Lower:                               | Not determined.                               |
| Upper:                               | Not determined.                               |
| Vapour pressure:                     | Not determined.                               |
| Density at 20 °C:                    | Not determined.                               |
| Relative density                     | Not determined.                               |
| Vapour density                       | Not determined.                               |
| Evaporation rate                     | Not determined.                               |

| • Partition coefficient: n-octanol/water:  | Not determined.   |
|--|---|
| · Viscosity:<br>Dynamic at 20 °C:<br>Kinematic:  | 300 mPas<br>Not determined.                                   |
| <ul> <li>Solvent content:</li> <li>Organic solvents:</li> <li>VOC (EC)</li> <li>Other information</li> </ul> | 0.0 %<br>0.00 %<br>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** No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: No dangerous decomposition products known.

#### 11. Toxicological informations

#### · Information on toxicological effects

• Acute toxicity

Harmful if swallowed

· LD/LC50 values relevant for classification:

9003-36-5 formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

*Oral LD50 23,800 mg/kg (rat)* 

Dermal LD50 >2,000 mg/kg (rabbit)

#### · Primary irritant effect:

- Skin corrosion/irritation
- Causes skin irritation
- Serious eye damage/irritation
- · Causes serious eye irritation
- Respiratory or skin sensitisation
- May cause an allergic skin reaction
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity
- · Based on available data the classification criteria are not met
- Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure
- · Based on available data the classification criteria are not met
- · STOT-repeated exposure
- · Based on available data the classification criteria are not met
- · Aspiration hazard Based on available data, the classification criteria are not met.

# 12. Ecological informations

- Toxicity
- Aquatic toxicity: No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- Behaviour 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 2 (German Regulation) (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 assesments
- **PBT:** Not applicable
- **vPvB:** not applicable
- other adverse effects: no further relevant information available.

# 13. Disposal considerations

# · Waste treatment methods

· Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.
  Recommended cleaning agents: water, if necessary together with cleansing agents.

| UN-Number<br>ADR, IMDG, IATA UN  | 3082   |
|--|--|
| UN proper shipping name  |  |
|  | 82 ENVIRONMENTALLY HAZARDOUS   |
|  | BSTANCE, LIQUID, N.O.S. (formaldehyde, oligomeric  |
|  | ction products with 1-Chloro-2,3-epoxypropane and phenol VIRONMENTALLY HAZARDOUS   |
|  | BSTANCE, LIQUID, N.O.S. (formaldehyde, oligomeric  |
| Rea  | ction products with 1-Chloro-2,3-epoxypropane and phenol   |
| MAI  | RINE POLLUTANT   |
| IATA ENV   | IRONMENTALLY HAZARDOUS   |
|  | BSTANCE, LIQUID, N.O.S. (formaldehyde, oligomeric  |
|  | ction products with 1-Chloro-2,3-epoxypropane and phenol   |
| Transport hazard class(es)   |  |
|  |  |
| ADR, ADN, IMDG, IATA   |  |
|  |  |
| Class  | 9 Miscellaneous dangerous substances and articles  |
| Label  | 9 Miscellaneous dangerous substances and articles<br>9   |
| Label<br>Packing group   | 9  |
| Label<br>Packing group<br>ADR, IMDG, IATA  | -  |
| Label<br>Packing group<br>ADR, IMDG, IATA<br>Environmental hazards:  | 9<br>111   |
| Label<br>Packing group<br>ADR, IMDG, IATA<br>Environmental hazards:<br>Marine Polutant:  | 9<br>III<br>Symbol (fish and tree)   |
| Label<br>Packing group<br>ADR, IMDG, IATA<br>Environmental hazards:<br>Marine Polutant:<br>Special marking (ADR)   | 9<br>III<br>Symbol (fish and tree)<br>Symbol (fish and tree)   |
| Label<br>Packing group<br>ADR, IMDG, IATA<br>Environmental hazards:<br>Marine Polutant:<br>Special marking (ADR)<br>Special marking (IATA)   | 9<br>III<br>Symbol (fish and tree)<br>Symbol (fish and tree)<br>Symbol (fish and tree)   |
| Label<br>Packing group<br>ADR, IMDG, IATA<br>Environmental hazards:<br>Marine Polutant:<br>Special marking (ADR)<br>Special marking (IATA)   | 9<br>III<br>Symbol (fish and tree)<br>Symbol (fish and tree)<br>Symbol (fish and tree)<br>Warning: miscellaneous dangerous substances and  |
| Label<br>Packing group<br>ADR, IMDG, IATA<br>Environmental hazards:<br>Marine Polutant:<br>Special marking (ADR)<br>Special marking (IATA)<br>Special precautions for user   | 9<br>III<br>Symbol (fish and tree)<br>Symbol (fish and tree)<br>Symbol (fish and tree)<br>Warning: miscellaneous dangerous substances and<br>Articles                              |
| Label<br>Packing group<br>ADR, IMDG, IATA<br>Environmental hazards:<br>Marine Polutant:<br>Special marking (ADR)<br>Special marking (IATA)<br>Special precautions for user<br>Hazard identification number (Kemler code).  | 9<br>III<br>Symbol (fish and tree)<br>Symbol (fish and tree)<br>Symbol (fish and tree)<br>Warning: miscellaneous dangerous substances and<br>Articles<br>90                        |
| Label         Packing group         ADR, IMDG, IATA         Environmental hazards:         Marine Polutant:         Special marking (ADR)         Special marking (IATA)         Special precautions for user         Hazard identification number (Kemler code).         EMS-Number   | 9<br>III<br>Symbol (fish and tree)<br>Symbol (fish and tree)<br>Symbol (fish and tree)<br>Warning: miscellaneous dangerous substances and<br>Articles<br>90<br>F-A, S-F            |
| Label<br>Packing group<br>ADR, IMDG, IATA<br>Environmental hazards:<br>Marine Polutant:<br>Special marking (ADR)<br>Special marking (IATA)<br>Special precautions for user<br>Hazard identification number (Kemler code).<br>EMS-Number<br>Storage categorie   | 9<br>III<br>Symbol (fish and tree)<br>Symbol (fish and tree)<br>Symbol (fish and tree)<br>Warning: miscellaneous dangerous substances and<br>Articles<br>90                        |
| Label         Packing group         ADR, IMDG, IATA         Environmental hazards:         Marine Polutant:         Special marking (ADR)         Special marking (IATA)         Special precautions for user         Hazard identification number (Kemler code).         EMS-Number         Storage categorie         Transport additional information:   | 9<br>III<br>Symbol (fish and tree)<br>Symbol (fish and tree)<br>Symbol (fish and tree)<br>Warning: miscellaneous dangerous substances and<br>Articles<br>90<br>F-A, S-F            |
| Label         Packing group         ADR, IMDG, IATA         Environmental hazards:         Marine Polutant:         Special marking (ADR)         Special marking (IATA)         Special precautions for user         Hazard identification number (Kemler code).         EMS-Number         Storage categorie         Transport additional information:         ADR                                 | 9<br>III<br>Symbol (fish and tree)<br>Symbol (fish and tree)<br>Symbol (fish and tree)<br>Warning: miscellaneous dangerous substances and<br>Articles<br>90<br>F-A, S-F<br>A       |
| Label         Packing group         ADR, IMDG, IATA         Environmental hazards:         Marine Polutant:         Special marking (ADR)         Special marking (IATA)         Special precautions for user         Hazard identification number (Kemler code).         EMS-Number         Storage categorie         Transport additional information:         ADR         Limited quantities (LQ) | 9<br>III<br>Symbol (fish and tree)<br>Symbol (fish and tree)<br>Symbol (fish and tree)<br>Warning: miscellaneous dangerous substances and<br>Articles<br>90<br>F-A, S-F<br>A<br>5L |
| Label         Packing group         ADR, IMDG, IATA         Environmental hazards:         Marine Polutant:         Special marking (ADR)         Special marking (IATA)         Special precautions for user         Hazard identification number (Kemler code).         EMS-Number         Storage categorie         Transport additional information:         ADR                                 | 9<br>III<br>Symbol (fish and tree)<br>Symbol (fish and tree)<br>Symbol (fish and tree)<br>Warning: miscellaneous dangerous substances and<br>Articles<br>90<br>F-A, S-F<br>A       |

| - Transport category       | 3  |
|----------------------------|--|
| - Tunnel restriction code  | -  |
| • IMGD                     |  |
| - Limited quantities (LQ)  | 5 L  |
| - Expected quantities (EQ) | Code: E1   |
|                            | Maximum net quantity per inner packaging: 30 ml    |
|                            | Maximum net quantity per outer packaging : 1000 ml |
|                            |  |
| · UN "Model Regulation":   | UN 3082 ENVIRONMENTALLY HAZARDOUS                  |
|                            | SUBSTANCE, LIQUID, N.O.S. (FORMALDEHYDE,           |
|                            | OLIGOMERIC REACTION PRODUCTS WITH 1-               |
|                            | CHLORO-2,3-EPOXYPROPANE AND PHENOL),9,111          |

#### **Regulatory informations** 15

Safety, health and environmental regulations/legislation specific for the product

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed. Seveso category E2 Hazardous to the aquatic environment. Qualifying quantity (tonnes) for the application of lower-tier requirements: 200 t Qualifying quantitys (tonnes) for the application of upper-tier requirements: 500 t REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

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

#### 16. Additionnal information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### · Relevant phrases referred to under sections 2 and 3

H315 Causes skin irritation

H317 May cause an allergic skin reaction

H319 Causes serious eye irritation

H411 Toxic to aquatic life with long lasting

effects

H412 Harmful to aquatic life with long lasting

effects

• Department issuing SDS: Product safety department.

#### · 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 IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical

Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical

Society) 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

Flam. Liq. 3: Flammable liquids - Category 3

Acute Tox. 4: Acute toxicity - oral -Category 4

\* Data compared to the previous version altere



# Safety Data Sheet

(EC) No 1907/2006 article 31

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name:

**TEKINJECT EPOXY 100 B** 

Type of product:

Mixture.

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Only for professional use.

1.3. Details of the supplier of the safety data sheet

Company: TEKINJECT BV Gounodstraat 2/25 BE-2018 Antwerp

*Telephone:* +32 494 239 441

E-mail address: info@tekinject.com

#### 1.4. Emergency telephone number

24-hour emergency number:

National Poison Information Service:

This is a generic EU Safety Data Sheet. Consult your specific Member State version for this information.

## 2. Hazard Identification

#### · Classification according to Regulation (EC) No 1272/2008

GHS 07

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



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

#### Label elements

*Labelling according to Regulation (EC) No 1272/2008* The product is classified and labelled according to the CLP regulation. Hazard pictograms



GHS 07.



· Signal word Danger

- · Hazard-determining components of labelling:
- 3-aminomethyl-3,5,5trimethylcyclohexylamine Benzyl alcohol
- m-phenylenebis(methylamine)
- salicylic acid
- Hazard statements
- H302+H332 Harmful if swallowed or if inhaled
- H314 Causes severe skin burns and eye damage
- H317 May cause an allergic skin reaction
- H412 Harmful to aquatic with long lasting effects.

# · Precautionary statements

P260 Do not breatch dusts or mists.

P303+P361+P353 IF ON SKIN (or hair): take off imedialtely all contaminated clothing, rinse skin with water (or shower) P305+P351+P338 IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor

P321 Specific treatment (see label)

P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Other hazards
- $\cdot$  Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

#### 3. Composition/information on Ingredients

#### • Description: Mixture of substances with nonhazardous additions.

| · Dangerous compone | ents:  |                               |                |
|---------------------|--|-------------------------------|----------------|
| CAS: 100-51-6       | Benzyl alcohol                               | ▲ Acute tox. 4, H302;         | 25-50%         |
| EINECS: 202-859-9   |  | <i>Acute tox. 4, H312 ;</i>   |                |
|                     |  | Acute tox. 4, H332; Eye       |                |
|                     |  | irrit. 2, H319                |                |
| CAS 2855-13-2       | 3-aminomethyl-3,5,5-trimethylcyclohexylamine | <b>№</b> Skin corr 1B, H314 ; | 25-50%         |
| EINECS: 220-666-8   |  | Eye dam. 1, H318 ;            |                |
|                     |  | <i>Acute tox.4, H332 ;</i>    |                |
|                     |  | Aquatic Chronic. 3,           |                |
|                     |  | H412                          |                |
| CAS: 1477-55-0      | m-phenylenebis(methylamine)                  | 8 Skin corr. 1B, H314;        | 2,5-10%        |
| EINECS: 216-032-5   |  | acute tox. 4, H302; Acute     |                |
|                     |  | tox. 4, H332; Aquatic         |                |
|                     |  | chronic. 3, H412              |                |
| CAS: 69-72-7        | Salicylic acid                               | 8 repr. 2; H361; Eye dam. 1,  | <i>3</i> >2,5% |
| EC number: 200-     |  | H318; Acute tox. 4, H302      |                |
| 712-3               |  |                               |                |

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. Symptoms of poisoning may even occur after several hours: therefor 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 stable 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: Call for a doctor immediately. Drink plenty of water and provide fresh air.

#### 5. Fire-figthing measures

- · Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- Protective equipment: Mouth respiratory protective device.

# 6. Accidental releases measures

• Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.

• Environmental precautions: Inform respective authorities in case of spillage into water course or sewage system. Dilute with plenty of water; Do not allow to enter sewers/ surface or ground water.

• 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.

# 7. Handling and storageHandling:

# · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.

· Information about fire - and explosion protection: 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 container tightly sealed.

• **Specific end use(s)** No further relevant information available.

#### 8. Exposure control/ personal protection

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

# Control parameters

#### Ingredients 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 valid during the making were used as basis.

#### Exposure controls

#### Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages, and feed.

Wash hands before breaks and at the end of work.

Avoid contact with eyes and skin.

# Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

# Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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 must be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection: Tightly sealed goggles

# 9. Physical and technical properties

| General Information<br>Appearance:  |   |
|-------------------------------------|---|
| Form:                               | Fluid   |
| Colour:                             | According to product specification            |
| Odour:                              | Characteristic                                |
| Odour threshold:                    | Not determined.                               |
| pH-value:                           | Not determined.                               |
| Change in condition                 |   |
| Melting point/freezing point:       | Undetermined.                                 |
| Initial boiling point and boiling r | ange: 205,4 °C                                |
| Flash point:                        | 101 °C  |
| Flammability (solid, gas):          | Not applicable.                               |
| Decomposition temperature:          | Not determined.                               |
| Auto-ignition temperature:          | Product is not selfigniting.                  |
| Explosive properties:               | Product does not present an explosion hazard. |
| Explosion limits:                   |   |
| Lower:                              | 1,3 Vol %                                     |
| Upper:                              | 13 Vol %                                      |
| Vapour pressure at 20°C:            | 0,1 hPa                                       |
| Density at 20 °C:                   | Not determined.                               |
| Relative density                    | Not determined.                               |
| Vapour density                      | Not determined.                               |
| Evaporation rate                    | Not determined.                               |

| • Partition coefficient: n-octanol/water:                           | Not determined.                            |
|---|--|
| <ul> <li>Viscosity:<br/>Dynamic at 20 °C:<br/>Kinematic:</li> </ul> | 100 mPas<br>Not determined.                |
| · Solvent content:  |  |
| Organic solvents:<br>VOC (EC)                                       | 25 - 50 %<br>25 - 50 %                     |
| 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** No further relevant information available.

**Incompatible materials:** No further relevant information available.

Hazardous decomposition products: No dangerous decomposition products known.

#### 11. Toxicological informations

· Information on toxicological effects

• Acute toxicity Harmful if swallowed

| LD/LC50    | values rele | evant for classification:                 |
|------------|-------------|---|
| 100-51-6   | Benzyl alco | ohol                                      |
| Oral       | LD50        | 1,040 mg/kg (Mouse)                       |
|            |             | 1,230 mg/kg (rat)<br>1,040 mg/kg (rabbit) |
| Dermal     | LD50        | 2,000 mg/kg (rabbit)                      |
| Inhalative | LC50/4 h    | 4,178 mg/l (rat)                          |
| 2855-13-2  | 3-aminon    | nethyl-3,5,5-trimethylcyclohexylamine     |
| Oral       | LD50        | 1,030 mg/kg (rat)                         |
| Dermal     | LD50        | 1,840 mg/kg (rabbit)                      |
| 1477-55-0  | m-phenyl    | enebis(methylamine)                       |
| Oral       | LD50        | 930 mg/kg (rat)                           |
| Dermal     | LD50        | 3,100 mg/kg (rabbit)                      |

## · Primary irritant effect:

- Skin corrosion/irritation
- Causes severe skin burns and eye damage
- Serious eye damage/irritation
- · Causes serious eye damage
- Respiratory or skin sensitisation
- $\cdot$  May cause an allergic skin reaction
- CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity
- · Based on available data the classification criteria are not met
- Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure
- · Based on available data the classification criteria are not met
- · STOT-repeated exposure
- · Based on available data the classification criteria are not met
- · Aspiration hazard Based on available data, the classification criteria are not met.

# 12. Ecological informations

# • Toxicity

| TOXICITY       |   |
|----------------|---|
| Aquatic toxici | ity   |
| 100-51-6 Be    | nzyl alcohol                                |
| LC50/96 h      | 460 mg/l (fathead minnow)                   |
| EC50/24 h      | 400 mg/l (daphnia)                          |
| EC50/96 h      | 640 mg/l (algae)                            |
| 2855-13-2 3    | -aminomethyl-3,5,5-trimethylcyclohexylamine |
| LC50/96 h      | 110 mg/l (zebrafish)                        |

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

# 13. Disposal considerations

# · Waste treatment methods

· Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.
  Recommended cleaning agents: water, if necessary together with cleansing agents.

| UN-Number<br>ADR, IMDG, IATA U                         | N 2289  |
|--|---|
| UN proper shipping name<br>ADR 2.<br>IMDG, IATA        | 289 ISOPHORONEDIAMINE<br>ISOPHORONEDIAMINE  |
| Transport hazard class(es)                             |   |
| ADR, ADN, IMDG, IATA                                   |   |
| Class<br>Label   | 8 Corrosive substances<br><b>8</b>  |
| Packing group<br>ADR, IMDG, IATA                       | III   |
| Environmental hazards:                                 | Not applicable  |
| Special precautions for user                           | Warning: corrosive substances   |
| Hazard identification number (Kemler code)             |   |
| EMS-Number   | F-A, S-B  |
| Storage categorie                                      |   |
| Segregation Code                                       | SG35 stow "separated from" SGG1-acids   |
| <b>Transport additional information:</b><br>ADR        |   |
| ADK<br>Limited quantities (LQ)                         | 5L  |
| Expected quantities $(EQ)$                             | SL<br>Code: El  |
| Expected quantities (EQ)                               | Maximum net quantity per inner packaging: 30 ml   |
|  | Maximum net quantity per outer packaging: 50 ml<br>Maximum net quantity per outer packaging : 1000 ml |
| Transport category                                     | 3   |
| <ul><li>Tunnel restriction code</li><li>IMGD</li></ul> | E   |
| Limited quantities (LQ)                                | 5 L   |
| Expected quantities (EQ)                               | Code: E1  |
|  | Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging : 1000 ml |

#### 15 Regulatory informations

Safety, health and environmental regulations/legislation specific for the product

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed. REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

**DIRECTIVE 2011/65/EU** on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

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

#### 16. Additionnal information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### · Relevant phrases referred to under sections 2 and 3

H302 Harmful if swallowed.

- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage
- H317 May cause an allergic skin reaction
- H318 Causes serious eye damage
- H319 Causes serious eye irritation
- H332 Harmful if inhaled
- H361 Suspected of damaging the unborn child
- H412 Harmful to aquatic life with long lasting effects

# **Department issuing SDS:**

Product safety department. · 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 IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) 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 Flam. Liq. 3: Flammable liquids – Category 3 Acute Tox. 4: Acute toxicity - oral -Category 4 \* Data compared to the previous version altered