SAFETY DATA SHEET

HX439N/NC



Compilation date: 21/06/2011

Revision date: 13/07/2016

Revision No: 3

## Section 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product name: HX439N/NC

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

Use of substance / mixture: PC1: Adhesives, sealants.

### 1.3. Details of the supplier of the safety data sheet

Company name: Robnor ResinLab Ltd
31 Athena Avenue
Elgin Industrial Estate
Swindon
Wiltshire
SN2 8EJ
United Kingdom
Tel: +44(0) 1793 823741
Fax: +44(0) 1793 827033
Email: eusds@robnor.co.uk

### 1.4. Emergency telephone number

Emergency tel: +44(0) 1793 823741
(office hours only)

## Section 2: Hazards identification

### 2.1. Classification of the substance or mixture

Classification under CLP: Skin Corr. 1B: H314; Repr. 2: H361f; Aquatic Chronic 2: H411; Skin Sens. 1: H317; Acute Tox. 4: H302

Most important adverse effects: Causes severe skin burns and eye damage. Harmful if swallowed. May cause an allergic skin reaction. Suspected of damaging fertility. Toxic to aquatic life with long lasting effects.

### 2.2. Label elements

Label elements:

Hazard statements: H314: Causes severe skin burns and eye damage.
H302: Harmful if swallowed.
H317: May cause an allergic skin reaction.
H361f: Suspected of damaging fertility.
H411: Toxic to aquatic life with long lasting effects.

[cont...]

Hazard pictograms: GHS05: Corrosion
GHS07: Exclamation mark
GHS08: Health hazard
GHS09: Environmental

Signal words: Danger

Precautionary statements: P260: Do not breathe mist.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water .
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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 doctor.
P273: Avoid release to the environment.

### 2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

## Section 3: Composition/information on ingredients

### 3.2. Mixtures

Hazardous ingredients:

ISOPHORONE DIAMINE - REACH registered number(s): 01-2119514687-32-XXXX

| EINECS | CAS | PBT / WEL | CLP Classification | Percent |
|---|---|---|---|---|
| 220-666-8 | 2855-13-2 | - | Skin Corr. 1B: H314; Acute Tox. 4: H302; Skin Sens. 1: H317; Aquatic Chronic 3: H412 | 50-70% |

DODECYLPHENOL - REACH registered number(s): 01-2119432403-51

| | | | | |
|---|---|---|---|---|
| 310-154-3 | 121158-58-5 | - | Skin Irrit. 2: H315; Eye Irrit. 2: H319; Repr. 2: H361f; Aquatic Acute 1: H400; Aquatic Chronic 1: H410 | 10-30% |

[cont...]

N-(BETA-AMINOETHYL)PIPERAZINE - REACH registered number(s): 01-2119471486-30-XXXX

| | | | | |
|---|---|---|---|---|
| 205-411-0 | 140-31-8 | - | Skin Corr. 1B: H314; Acute Tox. 3: H311; Acute Tox. 4: H302; Skin Sens. 1: H317; Aquatic Chronic 3: H412 | 10-30% |

SALICYLIC ACID - REACH registered number(s): 01-2119486984-17-XXXX

| | | | | |
|---|---|---|---|---|
| 200-712-3 | 69-72-7 | - | Acute Tox. 4: H302; Eye Dam. 1: H318 | 1-10% |

## Section 4: First aid measures

### 4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

Eye contact: Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

Ingestion: Wash out mouth with water. Do not induce vomiting. Give 1 cup of water to drink every 10 minutes. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.

### 4.2. Most important symptoms and effects, both acute and delayed

Skin contact: Severe burns may occur. Blistering may occur. Progressive ulceration will occur if treatment is not immediate. May cause sensitisation in susceptible individuals.

Eye contact: Corneal burns may occur. May cause permanent damage.

Ingestion: Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.

Inhalation: There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.

### 4.3. Indication of any immediate medical attention and special treatment needed

Immediate / special treatment: Show this safety data sheet to the doctor in attendance. A decontamination shower should be available on the premises. Eye bathing equipment should be available on the premises.

## Section 5: Fire-fighting measures

### 5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

[cont...]

### 5.2. Special hazards arising from the substance or mixture

Exposure hazards: Corrosive. In combustion emits toxic fumes.

### 5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

## Section 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not attempt to take action without suitable protective clothing - see section 8 of SDS.

### 6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

### 6.3. Methods and material for containment and cleaning up

Clean-up procedures: Clean-up should be dealt with only by qualified personnel familiar with the specific substance. Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

### 6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

## Section 7: Handling and storage

### 7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of mists in the air.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.

Suitable packaging: Must only be kept in original packaging.

### 7.3. Specific end use(s)

Specific end use(s): PC1: Adhesives, sealants.

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

Workplace exposure limits: No data available.

### DNEL/PNEC Values

[cont...]

Hazardous ingredients:

ISOPHORONE DIAMINE

| Type | Exposure | Value | Population | Effect |
|---|---|---|---|---|
| DNEL | Inhalation | 0.073 mg/m3 | Workers | Local |
| PNEC | Fresh water | 60 ug/L | - | - |
| PNEC | Marine water | 6 ug/L | - | - |
| PNEC | Microorganisms in sewage treatment | 3.18 mg/L | - | - |
| PNEC | Fresh water sediments | 5.784 mg/kg | - | - |
| PNEC | Marine sediments | 578 ug/kg | - | - |
| PNEC | Soil (agricultural) | 1.121 mg/kg | - | - |

N-(BETA-AMINOETHYL)PIPERAZINE

| Type | Exposure | Value | Population | Effect |
|---|---|---|---|---|
| DNEL | Inhalation (repeated dose) | 3.6 mg/m3 | Workers | Systemic |
| DNEL | Inhalation | 21.4 mg/m3 | Workers | Systemic |
| DNEL | Dermal (repeated dose) | 3.3 mg/kg | Workers | Systemic |
| DNEL | Dermal | 20 mg/kg | Workers | Systemic |
| DNEL | Dermal | 6 ug/cm2 | Workers | Local |
| PNEC | Fresh water | 58 ug/L | - | - |
| PNEC | Marine water | 6 ug/L | - | - |
| PNEC | Microorganisms in sewage treatment | 250 mg/L | - | - |
| PNEC | Fresh water sediments | 215 mg/kg | - | - |
| PNEC | Marine sediments | 21.5 mg/kg | - | - |
| PNEC | Soil (agricultural) | 42.9 mg/kg | - | - |

SALICYLIC ACID

| Type | Exposure | Value | Population | Effect |
|---|---|---|---|---|
| DNEL | Inhalation | 5 mg/m3 | Workers | Systemic |
| DNEL | Inhalation | 5 mg/m3 | Workers | Local |
| DNEL | Dermal | 2.3 mg/kg | Workers | Systemic |
| PNEC | Fresh water | 200 ug/L | - | - |
| PNEC | Marine water | 20 ug/L | - | - |
| PNEC | Microorganisms in sewage treatment | 162 mg/L | - | - |
| PNEC | Fresh water sediments | 1.42 mg/kg | - | - |
| PNEC | Marine sediments | 142 ug/kg | - | - |
| PNEC | Soil (agricultural) | 166 ug/kg | - | - |

[cont...]

### 8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Impermeable gloves.

Eye protection: Tightly fitting safety goggles. Ensure eye bath is to hand.

Skin protection: Impermeable protective clothing.

## Section 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Colourless

Odour: Characteristic odour

Flash point°C: 100

Relative density: 0.9

### 9.2. Other information

Other information: No data available.

## Section 10: Stability and reactivity

### 10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

### 10.2. Chemical stability

Chemical stability: Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

### 10.4. Conditions to avoid

Conditions to avoid: Heat.

### 10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids. Bases.

### 10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

[cont...]

Hazardous ingredients:

ISOPHORONE DIAMINE

| | | | | |
|---|---|---|---|---|
| DERMAL | RAT | LD50 | >2000 | mg/kg |
| ORAL | RAT | LD50 | 1030 | mg/kg |

DODECYLPHENOL

| | | | | |
|---|---|---|---|---|
| ORAL | RAT | LD50 | 2140 | mg/kg |

N-(BETA-AMINOETHYL)PIPERAZINE

| | | | | |
|---|---|---|---|---|
| DERMAL | RBT | LD50 | 886 | mg/kg |
| ORAL | RAT | LD50 | 1000 | mg/kg |

SALICYLIC ACID

| | | | | |
|---|---|---|---|---|
| DERMAL | RAT | LD50 | >2000 | mg/kg |
| DUST/MIST | RAT | 4H LC50 | 0.4 | mg/l |
| ORAL | RAT | LD50 | 891 | mg/kg |

Relevant hazards for product:

| Hazard | Route | Basis |
|---|---|---|
| Acute toxicity (ac. tox. 4) | ING | Hazardous: calculated |
| Skin corrosion/irritation | DRM | Hazardous: calculated |
| Serious eye damage/irritation | OPT | Hazardous: calculated |
| Respiratory/skin sensitisation | DRM | Hazardous: calculated |
| Reproductive toxicity | -- | Hazardous: calculated |

### Symptoms / routes of exposure

Skin contact: Severe burns may occur. Blistering may occur. Progressive ulceration will occur if treatment is not immediate. May cause sensitisation in susceptible individuals.

Eye contact: Corneal burns may occur. May cause permanent damage.

Ingestion: Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.

Inhalation: There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.

## Section 12: Ecological information

### 12.1. Toxicity

[cont...]

Hazardous ingredients:

ISOPHORONE DIAMINE

| | | | |
|---|---|---|---|
| Daphnia magna | 48H EC50 | 23 | mg/l |
| FISH | 96H LC50 | 110 | mg/l |
| Scenedesmus Subspicatus | 72H ErC50 | >50 | mg/l |

DODECYLPHENOL

| | | | |
|---|---|---|---|
| DAPHNIA | 48H EC50 | 0.037 | mg/l |
| FISH | 96H LC50 | 0.14 | mg/l |

N-(BETA-AMINOETHYL)PIPERAZINE

| | | | |
|---|---|---|---|
| Daphnia magna | 48H EC50 | 58 | mg/l |
| FISH | 96H LC50 | 2190 | mg/l |
| GREEN ALGA (Selenastrum capricornutum) | 72H ErC50 | >1000 | mg/l |

SALICYLIC ACID

| | | | |
|---|---|---|---|
| DAPHNIA | 48H EC50 | 870 | mg/l |
| FISH | 96H LC50 | 1370 | mg/l |
| Scenedesmus Subspicatus | 72H ErC50 | >100 | mg/l |

### 12.2. Persistence and degradability

Persistence and degradability: Not readily biodegradable.

### 12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

### 12.4. Mobility in soil

Mobility: Readily absorbed into soil.

### 12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

### 12.6. Other adverse effects

Other adverse effects: Toxic to aquatic organisms.

## Section 13: Disposal considerations

### 13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

Disposal of packaging: Arrange for collection by specialised disposal company.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

[cont...]

## Section 14: Transport information

### 14.1. UN number

UN number: UN2735

### 14.2. UN proper shipping name

Shipping name: AMINES, LIQUID, CORROSIVE, N.O.S.
(ISOPHORONE DIAMINE; 2-PIPERAZIN-1-YLETHYLAMINE)

### 14.3. Transport hazard class(es)

Transport class: 8

### 14.4. Packing group

Packing group: II

### 14.5. Environmental hazards

Environmentally hazardous: Yes Marine pollutant: Yes

### 14.6. Special precautions for user

Special precautions: Marine pollutant(s) - DODECYLPHENOL ;
Tunnel code: E
Transport category: 2

## Section 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Specific regulations: Not applicable.

### 15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

## Section 16: Other information

### Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.
* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3: H302: Harmful if swallowed.
H311: Toxic in contact with skin.
H314: Causes severe skin burns and eye damage.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H318: Causes serious eye damage.
H319: Causes serious eye irritation.

[cont...]

H361f: Suspected of damaging fertility.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

H411: Toxic to aquatic life with long lasting effects.

H412: Harmful to aquatic life with long lasting effects.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

SAFETY DATA SHEET

RX439N/NC



Compilation date: 27/01/2012

Revision date: 12/07/2016

Revision No: 2

## Section 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product name: RX439N/NC

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

Use of substance / mixture: PC1: Adhesives, sealants.

### 1.3. Details of the supplier of the safety data sheet

Company name: Robnor ResinLab Ltd
31 Athena Avenue
Elgin Industrial Estate
Swindon
Wiltshire
SN2 8EJ
United Kingdom
Tel: +44(0) 1793 823741
Fax: +44(0) 1793 827033
Email: eusds@robnor.co.uk

### 1.4. Emergency telephone number

Emergency tel: +44(0) 1793 823741
(office hours only)

## Section 2: Hazards identification

### 2.1. Classification of the substance or mixture

Classification under CLP: Eye Dam. 1: H318; Skin Irrit. 2: H315; Skin Sens. 1: H317; Muta. 2: H341; Aquatic Chronic 2: H411

Most important adverse effects: Causes serious eye damage. Causes skin irritation. May cause an allergic skin reaction. Suspected of causing genetic defects ([kidney][liver][bone marrow]). Toxic to aquatic life with long lasting effects.

### 2.2. Label elements

Label elements:

Hazard statements: H318: Causes serious eye damage.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H341: Suspected of causing genetic defects ([kidney][liver][bone marrow]).
H411: Toxic to aquatic life with long lasting effects.

[cont...]

Hazard pictograms: GHS05: Corrosion

GHS07: Exclamation mark

GHS08: Health hazard

GHS09: Environmental

Signal words: Danger

Precautionary statements: P261: Avoid breathing mist.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

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 doctor.

P302+P352: IF ON SKIN: Wash with plenty of water.

P308+P313: IF exposed or concerned: Get medical advice/attention.

P273: Avoid release to the environment.

### 2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

## Section 3: Composition/information on ingredients

### 3.2. Mixtures

Hazardous ingredients:

ALUMINIUM HYDROXIDE

| EINECS | CAS | PBT / WEL | CLP Classification | Percent |
|---|---|---|---|---|
| 244-492-7 | 21645-51-2 | Substance with a Community workplace exposure limit. | - | 30-50% |

ZINC OXIDE - REACH registered number(s): 01-2119463881-32-XXXX

| | | | | |
|---|---|---|---|---|
| - | 1314-13-2 | - | Aquatic Chronic 1: H410; Aquatic Acute 1: H400 | 10-30% |

BISPHENOL A EPOXY RESIN (MW <700) - REACH registered number(s): 01-2119456619-26-XXXX

| | | | | |
|---|---|---|---|---|
| 500-033-5 | 25068-38-6 | - | Skin Irrit. 2: H315; Eye Irrit. 2: H319; Skin Sens. 1: H317; Aquatic Chronic 2: H411 | 10-30% |

[cont...]

1,4-BUTANEDIOL DIGLYCIDYL ETHER - REACH registered number(s): 01-2119494060-45-XXXX

| | | | | |
|---|---|---|---|---|
| 219-371-7 | 2425-79-8 | - | Acute Tox. 4: H302+H312+H332; Skin Sens. 1: H317; Aquatic Chronic 3: H412; Eye Dam. 1: H318; Skin Irrit. 2: H315 | 1-10% |

GLYCIDYL NEODECANOATE - REACH registered number(s): 01-2119431597-33-XXXX

| | | | | |
|---|---|---|---|---|
| 247-979-2 | 26761-45-5 | - | Skin Sens. 1: H317; Muta. 2: H341; Aquatic Chronic 2: H411 | 1-10% |

## Section 4: First aid measures

### 4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water. If irritation occurs or persists, seek medical attention. Transfer to hospital if necessary.

Eye contact: Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

Ingestion: Wash out mouth with water. Do not induce vomiting. Consult a doctor.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

### 4.2. Most important symptoms and effects, both acute and delayed

Skin contact: There may be irritation and redness at the site of contact. May cause sensitisation in susceptible individuals.

Eye contact: Corneal burns may occur. May cause permanent damage. The eyes may water profusely. There may be severe pain. The vision may become blurred.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

### 4.3. Indication of any immediate medical attention and special treatment needed

Immediate / special treatment: Eye bathing equipment should be available on the premises.

## Section 5: Fire-fighting measures

### 5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

### 5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

[cont...]

### 5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

## Section 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not attempt to take action without suitable protective clothing - see section 8 of SDS.

### 6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

### 6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

### 6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

## Section 7: Handling and storage

### 7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Avoid the formation or spread of mists in the air.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.

Suitable packaging: Must only be kept in original packaging.

### 7.3. Specific end use(s)

Specific end use(s): PC1: Adhesives, sealants.

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

Hazardous ingredients:

ZINC OXIDE

Workplace exposure limits:

| | | | Respirable dust | |
|---|---|---|---|---|
| State | 8 hour TWA | 15 min. STEL | 8 hour TWA | 15 min. STEL |

[cont...]

| | | | | |
|---|---|---|---|---|
| UK | 5 mg/m3 | 10 mg/m3 | - | - |

DNEL/PNEC Values

Hazardous ingredients:

ALUMINIUM HYDROXIDE

| Type | Exposure | Value | Population | Effect |
|---|---|---|---|---|
| DNEL | Inhalation | 10.76 mg/m3 | Workers | Systemic |
| DNEL | Inhalation | 3.59 mg/m3 | Workers | Local |

ZINC OXIDE

| Type | Exposure | Value | Population | Effect |
|---|---|---|---|---|
| DNEL | Inhalation | 5 mg/m3 | Workers | Systemic |
| DNEL | Inhalation | 0.5 mg/m3 | Workers | Local |
| DNEL | Dermal | 83 mg/kg | Workers | Systemic |
| PNEC | Fresh water | 20.6 ug/L | - | - |
| PNEC | Marine water | 6.1 ug/L | - | - |
| PNEC | Microorganisms in sewage treatment | 100 ug/L | - | - |
| PNEC | Fresh water sediments | 117.8 mg/kg | - | - |
| PNEC | Marine sediments | 56.5 mg/kg | - | - |
| PNEC | Soil (agricultural) | 35.6 mg/kg | - | - |

BISPHENOL A EPOXY RESIN (MW <700)

| Type | Exposure | Value | Population | Effect |
|---|---|---|---|---|
| DNEL | Inhalation | 12.25 mg/m3 | Workers | Systemic |
| DNEL | Dermal | 8.33 mg/kg | Workers | Systemic |
| PNEC | Fresh water | 6 ug/L | - | - |
| PNEC | Marine water | 600 ng/L | - | - |
| PNEC | Microorganisms in sewage treatment | 10 mg/L | - | - |
| PNEC | Fresh water sediments | 996 ug/kg | - | - |
| PNEC | Marine sediments | 99.6 ug/kg | - | - |
| PNEC | Soil (agricultural) | 196 ug/kg | - | - |
| PNEC | Food chain | 11 mg/kg | - | - |

1,4-BUTANEDIOL DIGLYCIDYL ETHER

| Type | Exposure | Value | Population | Effect |
|---|---|---|---|---|
| DNEL | Inhalation | 4.7 mg/m3 | Workers | Systemic |
| DNEL | Dermal | 6.66 mg/kg | Workers | Systemic |

[cont...]

| | | | | |
|---|---|---|---|---|
| PNEC | Fresh water | 24 ug/L | - | - |
| PNEC | Marine water | 2.4 ug/L | - | - |
| PNEC | Microorganisms in sewage treatment | 100 mg/L | - | - |
| PNEC | Fresh water sediments | 84 ug/kg | - | - |
| PNEC | Marine sediments | 8.4 ug/kg | - | - |
| PNEC | Soil (agricultural) | 2.7 ug/kg | - | - |
| PNEC | Food chain | 28 ug/kg | - | - |

GLYCIDYL NEODECANOATE

| Type | Exposure | Value | Population | Effect |
|---|---|---|---|---|
| DNEL | Inhalation | 2.7 mg/m3 | Workers | Systemic |
| DNEL | Dermal | 1.9 mg/kg | Workers | Systemic |
| PNEC | Fresh water | 1.2 ug/L | - | - |
| PNEC | Marine water | 120 ng/L | - | - |
| PNEC | Microorganisms in sewage treatment | 50 mg/L | - | - |

### 8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Protective gloves.

Eye protection: Tightly fitting safety goggles. Ensure eye bath is to hand.

Skin protection: Protective clothing.

## Section 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Off-white

Odour: Barely perceptible odour

Relative density: 2.05

### 9.2. Other information

Other information: No data available.

## Section 10: Stability and reactivity

### 10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

### 10.2. Chemical stability

Chemical stability: Stable under normal conditions.

[cont...]

### 10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

### 10.4. Conditions to avoid

Conditions to avoid: Heat.

### 10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

Hazardous ingredients:

ALUMINIUM HYDROXIDE

| | | | | |
|---|---|---|---|---|
| ORAL | RAT | LD50 | >2000 | mg/kg |

ZINC OXIDE

| | | | | |
|---|---|---|---|---|
| DUST/MIST | RAT | 4H LC50 | >5.7 | mg/l |
| ORL | MUS | LD50 | 7950 | mg/kg |

BISPHENOL A EPOXY RESIN (MW <700)

| | | | | |
|---|---|---|---|---|
| DERMAL | RAT | LD50 | >2000 | mg/kg |
| ORAL | RAT | LD50 | >2000 | mg/kg |

1,4-BUTANEDIOL DIGLYCIDYL ETHER

| | | | | |
|---|---|---|---|---|
| DERMAL | RAT | LD50 | >2150 | mg/kg |
| ORAL | RAT | LD50 | 1118 | mg/kg |
| VAPOURS | RAT | 4H LC50 | >11.3 | mg/l |

GLYCIDYL NEODECANOATE

| | | | | |
|---|---|---|---|---|
| DERMAL | RAT | LD50 | >2000 | mg/kg |
| ORAL | RAT | LD50 | >2000 | mg/kg |

Relevant hazards for product:

| Hazard | Route | Basis |
|---|---|---|
| Skin corrosion/irritation | DRM | Hazardous: calculated |

[cont...]

| | | |
|---|---|---|
| Serious eye damage/irritation | OPT | Hazardous: calculated |
| Respiratory/skin sensitisation | DRM | Hazardous: calculated |
| Germ cell mutagenicity | -- | Hazardous: calculated |

### Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact. May cause sensitisation in susceptible individuals.

Eye contact: Corneal burns may occur. May cause permanent damage. The eyes may water profusely. There may be severe pain. The vision may become blurred.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

## Section 12: Ecological information

### 12.1. Toxicity

Hazardous ingredients:

ALUMINIUM HYDROXIDE

| | | | |
|---|---|---|---|
| Daphnia magna | 48H EC50 | >100 | mg/l |
| FISH | 96H LC50 | >100 | mg/l |
| GREEN ALGA (Selenastrum capricornutum) | 72H ErC50 | >100 | mg/l |

ZINC OXIDE

| | | | |
|---|---|---|---|
| Daphnia magna | 48H EC50 | 7.1 | mg/l |
| GREEN ALGA (Selenastrum capricornutum) | 72H IC50 | 136 | µg/l |
| ZEBRAFISH (Brachydanio rerio) | 96H LC50 | 3.31 | mg/l |

BISPHENOL A EPOXY RESIN (MW <700)

| | | | |
|---|---|---|---|
| Daphnia magna | 48H EC50 | 1.7 | mg/l |
| GREEN ALGA (Selenastrum capricornutum) | 72H ErC50 | 2.4 | mg/l |
| RAINBOW TROUT (Oncorhynchus mykiss) | 96H LC50 | 1.2 | mg/l |

1,4-BUTANEDIOL DIGLYCIDYL ETHER

| | | | |
|---|---|---|---|
| Scenedesmus Subspicatus | 72H ErC50 | 110 | mg/l |
| ZEBRAFISH (Brachydanio rerio) | 96H LC50 | 24 | mg/l |

[cont...]

GLYCIDYL NEODECANOATE

| | | | |
|---|---|---|---|
| Daphnia magna | 48H EC50 | 4.8 | mg/l |
| GREEN ALGA (Selenastrum capricornutum) | 72H ErC50 | 1.2 | mg/l |
| RAINBOW TROUT (Oncorhynchus mykiss) | 96H LC50 | 5 | mg/l |

### 12.2. Persistence and degradability

Persistence and degradability: Not readily biodegradable.

### 12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

### 12.4. Mobility in soil

Mobility: Non-volatile.

### 12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

### 12.6. Other adverse effects

Other adverse effects: Toxic to aquatic organisms.

## Section 13: Disposal considerations

### 13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

Disposal of packaging: Arrange for collection by specialised disposal company.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

## Section 14: Transport information

### 14.1. UN number

UN number: UN3082

### 14.2. UN proper shipping name

Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(BISPHENOL A EPOXY RESIN (MW <700); ZINC OXIDE)

### 14.3. Transport hazard class(es)

Transport class: 9

### 14.4. Packing group

Packing group: III

[cont...]

### 14.5. Environmental hazards

Environmentally hazardous: Yes

Marine pollutant: Yes

### 14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: E

Transport category: 3

## Section 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Specific regulations: Not applicable.

### 15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

## Section 16: Other information

### Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3: H302+H312+H332: Harmful if swallowed, in contact with skin or if inhaled

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H318: Causes serious eye damage.

H319: Causes serious eye irritation.

H341: Suspected of causing genetic defects ([kidney][liver][bone marrow]).

H341: Suspected of causing genetic defects ([kidneys] [liver] [bone marrow]).

H410: Very toxic to aquatic life with long lasting effects.

H411: Toxic to aquatic life with long lasting effects.

H412: Harmful to aquatic life with long lasting effects.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.