# SAFETY DATA SHEET

novatio

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2020/878

# POXYCON B

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

# 1.1. Product identifier

: POXYCON B Product name **Registration number REACH** : Not applicable (mixture) Product type REACH : Mixture

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

1.2.1 Relevant identified uses

Hardener

1.2.2 Uses advised against

No uses advised against known

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

# Supplier of the safety data sheet

Novatio\* Industrielaan 5B B-2250 Olen +32 14 25 76 40 **▲** +32 14 22 02 66 info@novatio.be \*NOVATIO is a registered trademark of Novatech International N.V.

#### Manufacturer of the product

Novatech International N.V. Industrielaan 5B B-2250 Olen +32 14 85 97 37 **i ⊟** +32 14 85 97 38 info@novatech.be

### 1.4. Emergency telephone number

24h/24h (Telephone advice: English, French, German, Dutch) : +32 14 58 45 45 (BIG)

# SECTION 2: Hazards identification

# 2.1. Classification of the substance or mixture

| Classified as dange | issified as dangerous according to the criteria of Regulation (EC) No 1272/2008 |  |  |  |  |  |
|---------------------|---|--|--|--|--|--|
| Class               | Category  | Hazard statements  |  |  |  |  |
| Skin Sens.          | category 1  | H317: May cause an allergic skin reaction.               |  |  |  |  |
| Acute Tox.          | category 4  | H332: Harmful if inhaled.                                |  |  |  |  |
| Acute Tox.          | category 4  | H302: Harmful if swallowed.                              |  |  |  |  |
| Skin Corr.          | category 1B   | H314: Causes severe skin burns and eye damage.           |  |  |  |  |
| Eye Dam.            | category 1  | H318: Causes serious eye damage.                         |  |  |  |  |
| Aquatic Chronic     | category 3  | H412: Harmful to aquatic life with long lasting effects. |  |  |  |  |

# 2.2. Label elements



Contains: benzyl alcohol; tetraethylenepentamine; 3-aminomethyl-3,5,5-trimethylcyclohexylamine; 2-methylpentane-1,5-diamine; 2,4,6-tris (dimethylaminomethyl)phenol.

| Signal word  | Danger  |                              |      |  |  |  |  |
|--|---|------------------------------|------|--|--|--|--|
| H-statements   |   |                              |      |  |  |  |  |
| H317   | May cause an allergic skin reaction.  |                              |      |  |  |  |  |
| H302 + H332  |   |                              |      |  |  |  |  |
| H314Causes severe skin burns and eye damage.H412Harmful to aquatic life with long lasting effects. |   |                              |      |  |  |  |  |
|  |   |                              |      |  |  |  |  |
| P280   | Wear protective gloves, protective clothing and eye protection/face protection. |                              |      |  |  |  |  |
| by: Brandweerinformatie  | centrum voor gevaarlijke stoffen vzw (BIG)                                      | Publication date: 2006-08-03 | en   |  |  |  |  |
| he Schoolstraat 43 A, B-2  | 440 Geel  | Date of revision: 2022-06-29 | 033  |  |  |  |  |
| ww.big.be  |   |                              | 39-  |  |  |  |  |
| w  |   |                              | 162  |  |  |  |  |
| or revision: 2; 3; 9; 12   |   |                              | 378- |  |  |  |  |
|  |   |                              | ω    |  |  |  |  |

Created by: Brandweerinformatiecentrum voor gevaarlijke stoffen vzw (BIG) Technische Schoolstraat 43 A, B-2440 Geel http://www.big.be © BIG vzw Reason for revision: 2; 3; 9; 12 Revision number: 0500

P260

Do not breathe vapours/mist.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P304 + P340 P303 + P361 + P353 P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

P310

Immediately call a POISON CENTER/doctor.

# 2.3. Other hazards

No other hazards known

# SECTION 3: Composition/information on ingredients

Continue rinsing.

# 3.1. Substances

Not applicable

# 3.2. Mixtures

| Name<br>REACH Registration No  | CAS No<br>EC No<br>Conc. (C) |               | Classification according to CLP  | Note          | Remark      | M-factors and<br>ATE    |  |
|--|------------------------------|---------------|--|---------------|-------------|-------------------------|--|
| benzyl alcohol<br>01-2119492630-38                                   | 100-51-6<br>202-859-9        | 40%<br>≤C<70% | Acute Tox. 4; H332<br>Acute Tox. 4; H302<br>Eye Irrit. 2; H319   | (1)(2)(10)(6) | Constituent |                         |  |
| tetraethylenepentamine   | 112-57-2<br>203-986-2        | 20%<br>≤C<25% | Skin Sens. 1; H317<br>Acute Tox. 4; H312<br>Acute Tox. 4; H302<br>Skin Corr. 1B; H314<br>Eye Dam. 1; H318<br>Aquatic Chronic 2; H411                 | (1)(10)       | Constituent |                         |  |
| 3-aminomethyl-3,5,5-<br>trimethylcyclohexylamine<br>01-2119514687-32 | 2855-13-2<br>220-666-8       | 20%<br>≤C<25% | Skin Sens. 1A; H317<br>Acute Tox. 4; H302<br>Skin Corr. 1B; H314<br>Eye Dam. 1; H318<br>Skin Sens. 1A; H317:<br>C≥0,001%, (CLP Annex VI (ATP<br>17)) | (1)(10)       | Constituent | ATE oral: 1030<br>mg/kg |  |
| 2-methylpentane-1,5-diamine<br>01-2119976310-41                      | 15520-10-2<br>239-556-6      | 3%≤C<5%       | Acute Tox. 4; H332<br>Acute Tox. 4; H312<br>Acute Tox. 4; H302<br>Skin Corr. 1A; H314<br>Eye Dam. 1; H318<br>STOT SE 3; H335                         | (1)(10)       | Constituent |                         |  |
| 2,4,6-tris(dimethylaminomethyl)phenol<br>01-2119560597-27            | 90-72-2<br>202-013-9         | 1%≤C<2.5%     | Acute Tox. 4; H302<br>Skin Irrit. 2; H315<br>Eye Irrit. 2; H319  | (1)(10)       | Constituent |                         |  |

(1) For H- and EUH-statements in full: see section 16

(2) Substance with a Community workplace exposure limit

(6) Enumerated in Annex VI of Regulation (EC) No. 1272/2008 but the classification has been adapted after evaluation of available test data

(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

# SECTION 4: First aid measures

# 4.1. Description of first aid measures

#### General:

Observe (own) safety. If possible, approach victim and check vital functions. In case of injury and/or intoxication, call the European emergency number 112. Treat symptoms starting with most life-threatening injuries and disorders. Keep victim under observation, possibility of delayed symptoms.

### After inhalation:

Remove victim into fresh air. Immediately consult a doctor/medical service.

#### After skin contact:

If possible, wipe up/dry remove chemical. Then rinse/shower immediately for 30 minutes with (lukewarm) water. Cut clothing; never remove burnt clothing from the wound. Do not give any pain medication. Consult a doctor/medical service.

#### After eye contact:

Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult a doctor/medical service.

#### After ingestion:

Rinse mouth with water. Immediately consult a doctor/medical service. Do not wait for symptoms to occur to consult Poison Center.

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

### 4.2.1 Acute symptoms

After inhalation:

Reason for revision: 2; 3; 9; 12

EXPOSURE TO HIGH CONCENTRATIONS: Corrosion of the upper respiratory tract. After skin contact: Caustic burns/corrosion of the skin. After eye contact: Corrosion of the eye tissue. After ingestion:

Burns to the gastric/intestinal mucosa.

4.2.2 Delayed symptoms

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

If applicable and available it will be listed below.

# SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### 5.1.1 Suitable extinguishing media:

Small fire: Quick-acting ABC powder extinguisher, Quick-acting BC powder extinguisher, Quick-acting class B foam extinguisher, Quick-acting CO2 extinguisher. Major fire: Class B foam (alcohol-resistant), Water spray if puddle cannot expand.

## 5.1.2 Unsuitable extinguishing media:

Small fire: Water (quick-acting extinguisher, reel); risk of puddle expansion. Major fire: Water; risk of puddle expansion.

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

On burning: release of toxic and corrosive gases/vapours (nitrous vapours, carbon monoxide - carbon dioxide).

# 5.3. Advice for firefighters

#### 5.3.1 Instructions:

Dilute toxic gases with water spray. Take account of toxic/corrosive precipitation water. Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it. Heat exposure: dilute toxic gas/vapour with water spray.

#### 5.3.2 Special protective equipment for fire-fighters:

Gloves (EN 374). Face shield (EN 166). Corrosion-proof suit (EN 14605). Heat/fire exposure: self-contained breathing apparatus (EN 136 + EN 137).

# SECTION 6: Accidental release measures

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

No naked flames.

#### 6.1.1 Protective equipment for non-emergency personnel

#### See section 8.2 6.1.2 Protective equipment for emergency responders

Gloves (EN 374). Face shield (EN 166). Corrosion-proof suit (EN 14605).

Suitable protective clothing

#### See section 8.2

### 6.2. Environmental precautions

Contain released product. Dam up the liquid spill. Prevent soil and water pollution. Prevent spreading in sewers.

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

Take up liquid spill into inert absorbent material. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

# 6.4. Reference to other sections

See section 13.

# SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

### 7.1. Precautions for safe handling

Keep away from naked flames/heat. Gas/vapour heavier than air at 20°C. Observe very strict hygiene - avoid contact. Remove contaminated clothing immediately. Do not discharge the waste into the drain. Keep container tightly closed.

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

#### 7.2.1 Safe storage requirements:

Meet the legal requirements. Store in a dry area. Protect against frost.

#### 7.2.2 Keep away from:

Heat sources, oxidizing agents, (strong) acids, (strong) bases, metals.

#### 7.2.3 Suitable packaging material:

No data available

#### 7.2.4 Non suitable packaging material: No data available

Reason for revision: 2; 3; 9; 12

# 7.3. Specific end use(s)

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

# SECTION 8: Exposure controls/personal protection

# 8.1. Control parameters

### 8.1.1 Occupational exposure

# a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

| Benzylalkohol | Time-weighted average exposure limit 8 h (TRGS 900) | 5 ppm    |
|---------------|---|----------|
|               | Time-weighted average exposure limit 8 h (TRGS 900) | 22 mg/m³ |

### b) National biological limit values

If limit values are applicable and available these will be listed below.

# 8.1.2 Sampling methods

| Product name   | Test           | Number |
|----------------|----------------|--------|
| Benzyl Alcohol | OSHA           | 2009   |
| Butyl Acrylate | OSHA           | 2011   |
| 2 A            | ي م الم يو الم |        |

Acute systemic effects dermal

8.1.3 Applicable limit values when using the substance or mixture as intended If limit values are applicable and available these will be listed below.

8.1.4 Threshold values

DNEL/DMEL - Workers

| Effect level (DNEL/DMEL)         | Туре                                  | Value                   | Remark |
|----------------------------------|---------------------------------------|-------------------------|--------|
| DNEL                             | Long-term systemic effects inhalation | 22 mg/m <sup>3</sup>    |        |
|                                  | Acute systemic effects inhalation     | 110 mg/m <sup>3</sup>   |        |
|                                  | Long-term systemic effects dermal     | 8 mg/kg bw/day          |        |
|                                  | Acute systemic effects dermal         | 40 mg/kg bw/day         |        |
| -aminomethyl-3,5,5-trimethylcyd  | lohexylamine                          |                         |        |
| Effect level (DNEL/DMEL)         | Туре                                  | Value                   | Remark |
| DNEL                             | Long-term local effects inhalation    | 0.073 mg/m <sup>3</sup> |        |
|                                  | Acute local effects inhalation        | 0.073 mg/m <sup>3</sup> |        |
| -methylpentane-1,5-diamine       |                                       |                         | •      |
| Effect level (DNEL/DMEL)         | Туре                                  | Value                   | Remark |
| DNEL                             | Long-term local effects inhalation    | 0.25 mg/m <sup>3</sup>  |        |
|                                  | Acute local effects inhalation        | 0.5 mg/m <sup>3</sup>   |        |
|                                  | Long-term systemic effects dermal     | 1.5 mg/kg bw/day        |        |
| 2,4,6-tris(dimethylaminomethyl)p | henol                                 | •                       | •      |
| Effect level (DNEL/DMEL)         | Туре                                  | Value                   | Remark |
| DNEL                             | Long-term systemic effects inhalation | 0.53 mg/m <sup>3</sup>  |        |
|                                  | Acute systemic effects inhalation     | 2.1 mg/m <sup>3</sup>   |        |
|                                  | long-term systemic effects dermal     | 0.15 mg/kg bw/day       |        |

# **DNEL/DMEL - General population**

benzyl alcohol Effect level (DNEL/DMEL) Туре Value Remark DNEL Long-term systemic effects inhalation 5.4 mg/m<sup>3</sup> Acute systemic effects inhalation 27 mg/m³ 4 mg/kg bw/day Long-term systemic effects dermal 20 mg/kg bw/day Acute systemic effects dermal Long-term systemic effects oral 4 mg/kg bw/day Acute systemic effects oral 20 mg/kg bw/day 3-aminomethyl-3,5,5-trimethylcyclohexylamine Effect level (DNEL/DMEL) Value Remark Type DNEL Long-term systemic effects oral 0.526 mg/kg bw/day 2-methylpentane-1,5-diamine Effect level (DNEL/DMEL) Value Remark Туре DNEL Long-term local effects inhalation 0.125 mg/m<sup>3</sup> Acute local effects inhalation 0.25 mg/m<sup>3</sup> 0.75 mg/kg bw/day Long-term systemic effects dermal 0.75 mg/kg bw/day Long-term systemic effects oral

Reason for revision: 2; 3; 9; 12

Publication date: 2006-08-03 Date of revision: 2022-06-29

0.6 mg/kg bw/day

| 2 4 6-tris(dimethylaminomethyl)ph   | enol          |                          |            |          |         |
|-------------------------------------|---------------|--------------------------|------------|----------|---------|
| Effect level (DNEL/DMEL)            | Type          |                          | Value      |          | Remark  |
|                                     |               | tomic offects inhelation | 0.12 mg/m3 |          | Keinark |
| DNEL                                | Long-term sys |                          | 0.13 mg/m  |          |         |
|                                     | Acute system  |                          | 0.13 mg/m  | - h/da   |         |
|                                     | Long-term sys | stemic ellects dermai    | 0.075 mg/k | g bw/day |         |
|                                     | Acute system  | ic effects dermal        | 0.075 mg/k | g bw/day |         |
|                                     | Long-term sys | stemic effects oral      | 0.075 mg/k | g bw/day |         |
| <u>PNEC</u><br>benzyl alcohol       |               |                          |            |          |         |
| Compartments                        |               | Value                    |            | Remark   |         |
| Fresh water                         |               | 1 mg/l                   |            |          |         |
| Marine water                        |               | 0.1 mg/l                 |            |          |         |
| Fresh water (intermittent release   | s)            | 2.3 mg/l                 |            |          |         |
| STP                                 |               | 39 mg/l                  |            |          |         |
| Fresh water sediment                |               | 5.27 mg/kg sediment dw   |            |          |         |
| Marine water sediment               |               | 0.527 mg/kg sediment dw  |            |          |         |
| Soil                                |               | 0.456 mg/kg soil dw      |            |          |         |
| 3-aminomethyl-3,5,5-trimethylcyclo  | ohexylamine   |                          |            |          |         |
| Compartments                        |               | Value                    |            | Remark   |         |
| Fresh water                         |               | 0.06 mg/l                |            |          |         |
| Marine water                        |               | 0.006 mg/l               |            |          |         |
| Fresh water (intermittent release   | s)            | 0.23 mg/l                |            |          |         |
| STP                                 |               | 3.18 mg/l                |            |          |         |
| Fresh water sediment                |               | 5.784 mg/kg sediment dw  |            |          |         |
| Marine water sediment               |               | 0.578 mg/kg sediment dw  |            |          |         |
| Soil                                |               | 1.121 mg/kg soil dw      |            |          |         |
| 2-methylpentane-1,5-diamine         |               |                          |            |          |         |
| Compartments                        |               | Value                    |            | Remark   |         |
| Fresh water                         |               | 0.42 mg/l                |            |          |         |
| Marine water                        |               | 0.042 mg/l               |            |          |         |
| Fresh water (intermittent release   | s)            | 0.42 mg/l                |            |          |         |
| STP                                 |               | 1.25 g/l                 |            |          |         |
| Fresh water sediment                |               | 7.58 mg/kg sediment dw   |            |          |         |
| Marine water sediment               |               | 0.758 mg/kg sediment dw  |            |          |         |
| Soil                                |               | 1.27 mg/kg soil dw       |            |          |         |
| 2,4,6-tris(dimethylaminomethyl)ph   | enol          | h                        |            |          |         |
| Compartments                        |               | Value                    |            | Remark   |         |
| Fresh water                         |               | 0.046 mg/l               |            |          |         |
| iviarine water                      | -)            |                          |            |          |         |
| Fresh water (Intermittent release   | 5)            | U.46 mg/l                |            |          |         |
| iviarine water (intermittent releas | ses)          | 0.046 mg/l               |            |          |         |
|                                     |               |                          |            |          |         |
| Fresh water sediment                |               | U.262 mg/kg sediment dw  |            |          |         |
| Marine water sediment               |               | 0.026 mg/kg sediment dw  |            |          |         |
| Soil                                |               | 0.025 mg/kg soil dw      |            |          |         |

8.1.5 Control banding If applicable and available it will be listed below.

#### 8.2. Exposure controls

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

### 8.2.1 Appropriate engineering controls

Keep away from naked flames/heat. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

## 8.2.2 Individual protection measures, such as personal protective equipment

Observe very strict hygiene - avoid contact. Do not eat, drink or smoke during work.

# a) Respiratory protection:

Full face mask with filter type A at conc. in air > exposure limit.

b) Hand protection: Protective gloves against chemicals (EN 374).

| Materials      | Remark          |
|----------------|-----------------|
| nitrile rubber | Good resistance |
|                |                 |

c) Eye protection:

Face shield (EN 166).

d) Skin protection:

Corrosion-proof clothing (EN 14605).

8.2.3 Environmental exposure controls:

See sections 6.2, 6.3 and 13

Reason for revision: 2; 3; 9; 12

# SECTION 9: Physical and chemical properties

# 9.1. Information on basic physical and chemical properties

| Liquid                              |
|-------------------------------------|
| Amine-like odour                    |
| No data available in the literature |
| Yellow                              |
| Not applicable (liquid)             |
| No data available in the literature |
| Not classified as flammable         |
| Not applicable (mixture)            |
| 220 mPa.s ; 20 °C                   |
| No data available in the literature |
| No data available in the literature |
| > 200 °C                            |
| No data available in the literature |
| No data available in the literature |
| Water ; miscible                    |
| 1.03 ; 20 °C                        |
| 1030 kg/m³ ; 20 °C                  |
| No data available in the literature |
| No data available in the literature |
| > 100 °C                            |
| 12 ; 20 °C                          |
|                                     |

# 9.2. Other information

No data available

# SECTION 10: Stability and reactivity

# 10.1. Reactivity

Heating increases the fire hazard. Basic reaction.

# 10.2. Chemical stability

No data available.

# 10.3. Possibility of hazardous reactions

No data available.

# 10.4. Conditions to avoid

Precautionary measures

Keep away from naked flames/heat.

# 10.5. Incompatible materials

Oxidizing agents, (strong) acids, (strong) bases, metals.

# 10.6. Hazardous decomposition products

On burning: release of toxic and corrosive gases/vapours (nitrous vapours, carbon monoxide - carbon dioxide).

# **SECTION 11: Toxicological information**

# 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

11.1.1 Test results

# Acute toxicity

# POXYCON B

No (test)data on the mixture available Classification is based on the relevant ingredients

| <u>penzyl alcohol</u> |           |                  |                 |               |                           |                    |        |
|-----------------------|-----------|------------------|-----------------|---------------|---------------------------|--------------------|--------|
| Route of exposure     | Parameter | Method           | Value           | Exposure time | Species                   | Value              | Remark |
|                       |           |                  |                 |               |                           | determination      |        |
| Oral                  | LD50      |                  | 1620 mg/kg bw   |               | Rat (male)                | Experimental value |        |
| Dermal                | LD50      | EPA OTS 798.1100 | > 2000 mg/kg    | 24 h          | Rabbit (male /<br>female) | Experimental value |        |
| Inhalation (aerosol)  | LC50      | OECD 403         | > 4.18 mg/l air | 4 h           | Rat (male /<br>female)    | Experimental value |        |

Reason for revision: 2; 3; 9; 12

| Route of exposure     | Parameter    | Method                    | Value           | Exposure time | Species                | Value                  | Remark |
|-----------------------|--------------|---------------------------|-----------------|---------------|------------------------|------------------------|--------|
| •                     |              |                           |                 |               | 1.                     | determination          |        |
| Oral                  |              |                           | category 4      |               |                        | Annex VI               |        |
| Dermal                |              |                           | category 4      |               |                        | Annex VI               |        |
| Inhalation            | LC50         |                           | > 9.9 mg/l air  | 8 h           | Rat (male)             | Literature study       |        |
| minomethyl-3,5,5-tri  | methylcycloh | <u>exylamine</u>          |                 |               |                        |                        |        |
| Route of exposure     | Parameter    | Method                    | Value           | Exposure time | Species                | Value<br>determination | Remark |
| Oral                  | ATE          |                           | 1030 mg/kg bw   |               |                        | Annex VI               |        |
| Oral                  | LD50         | Equivalent to OECD<br>401 | 1030 mg/kg      |               | Rat (male)             | Experimental value     |        |
| Dermal                | LD50         | OECD 402                  | > 2000 mg/kg bw | 24 h          | Rat (male /<br>female) | Experimental value     |        |
| Inhalation (aerosol)  | LC50         | OECD 403                  | > 5.01 mg/l     | 4 h           | Rat (male /<br>female) | Experimental value     |        |
| nethylpentane-1,5-dia | <u>imine</u> |                           |                 |               |                        |                        |        |
| Route of exposure     | Parameter    | Method                    | Value           | Exposure time | Species                | Value<br>determination | Remark |
| Oral                  | LD50         | Equivalent to OECD<br>401 | 1690 mg/kg bw   |               | Rat (male)             | Experimental value     |        |
| Dermal                | LD50         | Equivalent to OECD<br>402 | 1870 mg/kg bw   |               | Rat (male /<br>female) | Read-across            |        |
| Inhalation (mist)     | LC50         | Equivalent to OECD<br>403 | 4.9 mg/l air    | 1 h           | Rat (male /<br>female) | Experimental value     |        |
| Inhalation (mist)     |              |                           | category 4      |               |                        | Literature study       |        |
| ,6-tris(dimethylaminc | methyl)phen  | ol                        |                 |               |                        |                        |        |
| Route of exposure     | Parameter    | Method                    | Value           | Exposure time | Species                | Value<br>determination | Remark |
| Oral                  | LD50         | OECD 401                  | 2169 mg/kg bw   |               | Rat (male /<br>female) | Experimental value     |        |
| 1                     |              |                           |                 |               |                        |                        |        |

Classification of this substance according to Annex VI is debatable as it does not correspond to the conclusion from the test

**Conclusion** 

Harmful if swallowed. Harmful if inhaled.

Not classified as acute toxic in contact with skin

# **Corrosion/irritation**

# POXYCON B

No (test)data on the mixture available Classification is based on the relevant ingredients

# benzyl alcohol

| P | oute of exposure | Result              | Method   | Exposure time | Time point       | Species | Value                 | Remark                        |
|---|------------------|---------------------|----------|---------------|------------------|---------|-----------------------|-------------------------------|
|   |                  |                     |          |               |                  |         | determination         |                               |
| E | Eye              | Irritating          | OECD 405 | 24 h          | 24; 48; 72 hours | Rabbit  | Experimental<br>value | Single treatment with rinsing |
| 5 | škin             | Slightly irritating | OECD 404 | 4 h           | 24; 48; 72 hours | Rabbit  | Experimental<br>value |                               |

# tetraethylenepentamine

|    | er a centry renep en reanni |                     |        |               |            |         |               |        |
|----|-----------------------------|---------------------|--------|---------------|------------|---------|---------------|--------|
|    | Route of exposure           | Result              | Method | Exposure time | Time point | Species | Value         | Remark |
|    |                             |                     |        |               |            |         | determination |        |
|    | Eye                         | Serious eye         | Other  |               |            | Rabbit  | Experimental  |        |
|    |                             | damage              |        |               |            |         | value         |        |
|    | Skin                        | Corrosive           | Other  | 4 h           |            | Rabbit  | Experimental  |        |
|    |                             |                     |        |               |            |         | value         |        |
| 3- | aminomethyl-3,5,5-t         | rimethylcyclohexyla | mine   |               |            |         |               |        |

| Route of exposure | Result                | Method      | Exposure time | Time point   | Species | Value<br>determination | Remark                              |
|-------------------|-----------------------|-------------|---------------|--------------|---------|------------------------|-------------------------------------|
| Eye               | Serious eye<br>damage | OECD 405    |               | 24 hours     | Rabbit  | Experimental<br>value  | Single treatment<br>without rinsing |
| Skin              | Corrosive             | Draize Test | 24 h          | 24; 72 hours | Rabbit  | Experimental value     |                                     |

Reason for revision: 2; 3; 9; 12

Publication date: 2006-08-03 Date of revision: 2022-06-29

Revision number: 0500

| 2-1        | methylpentane-1,5-o  | diamine_                     |                           |               |                  |         |                        |                  |
|------------|----------------------|------------------------------|---------------------------|---------------|------------------|---------|------------------------|------------------|
|            | Route of exposure    | Result                       | Method                    | Exposure time | Time point       | Species | Value<br>determination | Remark           |
|            | Eye                  | Serious eye<br>damage        |                           | ≥ 20 seconds  |                  | Rabbit  | Experimental value     | Single treatment |
|            | Skin                 | Corrosive                    | Equivalent to<br>OECD 404 | 3 minutes     | 24; 48 hours     | Rabbit  | Experimental<br>value  |                  |
|            | Inhalation (mist)    | Irritating;<br>STOT SE cat.3 |                           |               |                  |         | Literature study       |                  |
| <u>2,4</u> | 1,6-tris(dimethylami | nomethyl)phenol              |                           |               |                  |         |                        | -                |
|            | Route of exposure    | Result                       | Method                    | Exposure time | Time point       | Species | Value<br>determination | Remark           |
|            | Eye                  | Serious eye<br>damage        | 16 CFR 1500.42            |               | 24; 48; 72 hours | Rabbit  | Experimental value     | Single treatment |
|            | Skin                 | Corrosive                    | OECD 404                  | 4 h           | 7 days           | Rabbit  | Experimental<br>value  |                  |
|            | Skin                 | Irritating;<br>category 2    |                           |               |                  |         | Annex VI               |                  |

Classification of this substance according to Annex VI is debatable as it does not correspond to the conclusion from the test

**Conclusion** 

Causes severe skin burns and eye damage.

Not classified as irritating to the respiratory system

# Respiratory or skin sensitisation

# POXYCON B

No (test)data on the mixture available

Classification is based on the relevant ingredients

| Route of exposure       | Result            | Method   | Exposure time | Observation time<br>point | Species                       | Value determination | Remark |
|-------------------------|-------------------|----------|---------------|---------------------------|-------------------------------|---------------------|--------|
| Dermal (on the<br>ears) | Not sensitizing   | OECD 429 |               |                           | Mouse (female)                | Experimental value  |        |
| etraethylenepentam      | ine               | •        | •             | •                         | •                             |                     |        |
| Route of exposure       | Result            | Method   | Exposure time | Observation time<br>point | Species                       | Value determination | Remark |
| Skin                    | Sensitizing       |          |               |                           | Guinea pig                    | Experimental value  |        |
| -aminomethyl-3,5,5      | -trimethylcyclohe | kylamine |               | •                         | •                             | •                   |        |
| Route of exposure       | Result            | Method   | Exposure time | Observation time<br>point | Species                       | Value determination | Remark |
| Skin                    | Sensitizing       | OECD 406 |               |                           | Guinea pig<br>(male)          | Experimental value  |        |
| -methylpentane-1,5      | -diamine          | •        |               |                           | 4. · ·                        |                     |        |
| Route of exposure       | Result            | Method   | Exposure time | Observation time<br>point | Species                       | Value determination | Remark |
| Skin                    | Not sensitizing   |          |               |                           | Guinea pig (male<br>/ female) | Experimental value  |        |
| ,4,6-tris(dimethylam    | ninomethyl)pheno  | 1        |               |                           |                               |                     |        |
| Route of exposure       | Recult            | Method   | Exposure time | Observation time          | Species                       | Value determination | Romark |

| Ro | oute of exposure | Result                          | Method   | Exposure time | Observation time<br>point | Species              | Value determination | Remark |
|----|------------------|---------------------------------|----------|---------------|---------------------------|----------------------|---------------------|--------|
| SI | kin              | Limited positive<br>test result | OECD 406 |               |                           | Guinea pig<br>(male) | Experimental value  |        |

Classification of this substance according to Annex VI is debatable as it does not correspond to the conclusion from the test

**Conclusion** 

May cause an allergic skin reaction.

Not classified as sensitizing for inhalation

# Specific target organ toxicity

### POXYCON B

No (test)data on the mixture available

Judgement is based on the relevant ingredients benzyl alcohol

| Route of exposure      | Parameter | Method                    | Value                  | Organ | Effect    | Exposure time                        | Species                | Value                 |
|------------------------|-----------|---------------------------|------------------------|-------|-----------|--------------------------------------|------------------------|-----------------------|
|                        |           |                           |                        |       |           |                                      |                        | determination         |
| Oral (stomach<br>tube) | NOAEL     | Equivalent to<br>OECD 451 | 400 mg/kg<br>bw/day    |       | No effect | 103 weeks (5 days /<br>week)         | Rat (male /<br>female) | Experimental<br>value |
| Dermal                 |           |                           |                        |       |           |                                      |                        | Data waiving          |
| Inhalation (aerosol)   | NOAEC     | OECD 412                  | 1072 mg/m <sup>3</sup> |       | No effect | 4 weeks (6h / day, 5<br>days / week) | Rat (male /<br>female) | Experimental<br>value |

Reason for revision: 2; 3; 9; 12

Publication date: 2006-08-03 Date of revision: 2022-06-29

| Route of exposure  | Parameter  | Method  | Value  | Organ   | Effect  | Exposure time   | Species  | Value<br>determinat  |
|--|--|---|--|---|---|---|--|----------------------|
| Oral (drinking<br>water)   | NOAEL  | OECD 408  | 59 mg/kg<br>bw/day - 62<br>mg/kg bw/day  | Kidney  | No effect   | 13 weeks (daily)  | Rat (male /<br>female)   | Experiment<br>value  |
| Oral (drinking<br>water)   | LOAEL  | OECD 408  | 160 mg/kg<br>bw/day  | Kidney  | Histopatholog<br>y  | 13 weeks (daily)  | Rat (male /<br>female)   | Experimen<br>value   |
| Dermal   |  |   |  |   |   |   |  | Data waivir          |
| Inhalation (mixture<br>of vapour and<br>aerosol)   | LOEC   | Subacute<br>toxicity test   | 18 mg/m³ air   | Nose  | Local effects   |   | Rat (male)   | Experiment<br>value  |
| nethylpentane-1,5-d  | lamine   | <b>b a b b b b b b b b b b</b>  | h. 1   |   |   |   |  | h. I                 |
| Route of exposure  | Parameter  | Ivietnoa  | value  | Organ   | Effect  | exposure time   | species  | determinat           |
| Oral (diet)  | NOAEL  | OECD 407  | 581 mg/kg<br>bw/day - 617<br>mg/kg bw/day  |   | No effect   | 28 day(s)   | Rat (male /<br>female)   | Experiment<br>value  |
| Dermal   |  |   |  |   |   |   |  | Data waivir          |
| Inhalation (aerosol)   | NOAEC  | Equivalent to<br>OECD 413   | 16 mg/m³ air   |   | No effect   | 13 weeks (6h / da<br>5 days / week)   | ay, Rat (male /<br>female)   | Read-acros           |
| ,6-tris(dimethylamin   | omethyl)ph   | enol  |  |   | -   |   |  |                      |
| Route of exposure  | Parameter  | Method  | Value  | Organ   | Effect  | Exposure time   | Species  | Value                |
| Oral (stomach  | NOAEL  | OECD 408  | 15 mg/kg   |   | No effect   | 90 day(s)   | Rat (male /  | Experiment           |
| tube)<br>Dermal  | NOEL   | Subchronic  | 5 mg/kg  | Skin  | No effect   | 4 weeks (5 days ,   | / Rat  | Experiment           |
| Inhalation   |  | toxicity test   | Dw/uay   |   |   | WEEK  |  | Data waite           |
| <u>CON B</u><br>(test)data on the m<br>lgement is based on   | xture availa<br>the relevant   | ble<br>t ingredients  |  |   |   |   |  |                      |
| <u>CON B</u><br>(test)data on the m<br>Jgement is based on<br>12yl alcohol<br>Result   | ixture availa<br>the relevant  | ble<br>t ingredients<br><b>hod</b>  | Test su  | bstrate   | Effect  | Va  | alue determination   | Remark               |
| CON B<br>(test)data on the m<br>dgement is based on<br>nzyl alcohol<br>Result<br>Negative with meta<br>activation, negative<br>without metabolic<br>activation   | xture availa<br>the relevant<br><b>Met</b><br>bolic Equ  | ble<br>t ingredients<br><b>hod</b><br>ivalent to OECD   | Test su<br>471 Bacteri   | <b>bstrate</b><br>a (S.typhimuriu   | Effect<br>Im)   | <b>Va</b><br>Ex   | alue determination<br>operimental value  | Remark               |
| CON B<br>(test)data on the midgement is based on<br>azyl alcohol<br>Result<br>Negative with meta<br>activation, negative<br>without metabolic<br>activation<br>Positive without<br>metabolic activation<br>negative with meta<br>activation  | xture availa<br>the relevant<br>bolic Equ<br>n,<br>bolic Equ   | ble<br>t ingredients<br><b>hod</b><br>ivalent to OECD   | Test su       471     Bacteri       476     Mouse cells)   | bstrate<br>a (S.typhimuriu<br>(lymphoma L5:   | Im) Effect  | E>  | alue determination<br>kperimental value<br>kperimental value   | Remark               |
| CON B<br>(test)data on the m<br>dgement is based on<br>nzyl alcohol<br>Result<br>Negative with meta<br>activation, negative<br>without metabolic<br>activation<br>Positive without<br>metabolic activation<br>negative with meta<br>activation<br>minomethyl-3,5,5-tr  | ixture availa<br>the relevant<br>bolic Equ<br>n,<br>bolic Equ<br>imethylcyclo  | ble<br>t ingredients<br><b>hod</b><br>ivalent to OECD<br>ivalent to OECD  | Test su       471     Bacteri       476     Mouse cells)   | bstrate<br>a (S.typhimuriu<br>(lymphoma L5:   | Effect<br>Im)<br>178Y   | Va<br>Ex<br>Ex  | alue determination<br>(perimental value<br>(perimental value   | Remark               |
| CON B<br>(test)data on the m<br>dgement is based on<br>nzyl alcohol<br>Result<br>Negative with meta<br>activation, negative<br>without metabolic<br>activation<br>Positive without<br>metabolic activatio<br>negative with meta<br>activation<br>minomethyl-3,5,5-tr<br>Result<br>Negative with meta   | hylice availa<br>the relevant<br>bolic Equ<br>n,<br>bolic Equ<br><u>imethylcycla</u><br>Met  | ble<br>t ingredients<br>hod<br>ivalent to OECD<br>ivalent to OECD<br><u>ohexylamine</u><br>hod  | Test su       471     Bacteri       476     Mouse cells)       Test su       Chinese   | bstrate<br>a (S.typhimuriu<br>(lymphoma L5:<br>bstrate  | Effect<br>Im)<br>178Y<br>Effect   | Ex<br>Ex<br>Ex<br>Ex  | alue determination<br>operimental value<br>operimental value   | Remark               |
| CON B<br>(test)data on the m<br>dgement is based on<br>nzyl alcohol<br>Result<br>Negative with meta<br>activation, negative<br>without metabolic<br>activation<br>Positive without<br>metabolic activation<br>negative with meta<br>activation<br>minomethyl-3,5,5-tr<br>Result<br>Negative with meta<br>activation, negative<br>without metabolic<br>activation   | xture availa<br>the relevant<br>bolic Equ<br>n,<br>bolic Equ<br>imethylcyclo<br>bolic OEC  | ble<br>t ingredients<br>hod<br>ivalent to OECD<br>ivalent to OECD<br>bhexylamine<br>hod<br>D 473  | Test su       471     Bacteri       476     Mouse cells)       Test su       Chiness (CHO)   | bstrate<br>a (S.typhimuriu<br>(lymphoma L5:<br>bstrate<br>e hamster ovary   | Effect       Im)     Im)       178Y     Im)       Effect     No effect  | Va<br>Ex<br>Ex<br>Ex<br>Ex<br>Ex  | alue determination<br>(perimental value<br>(perimental value<br>alue determination<br>(perimental value  | Remark               |
| CON B<br>(test)data on the m<br>dgement is based on<br>nzyl alcohol<br>Result<br>Negative with meta<br>activation, negative<br>without metabolic<br>activation<br>Positive without<br>metabolic activation<br>negative with meta<br>activation<br>Megative with meta<br>activation, negative<br>without metabolic<br>activation<br>Negative with meta<br>activation, negative<br>without metabolic<br>activation<br>Negative with meta<br>activation, negative<br>without metabolic<br>activation, negative<br>without metabolic<br>activation, negative<br>without metabolic<br>activation, negative<br>without metabolic<br>activation   | ixture availa<br>the relevant<br>bolic Equ<br>n,<br>bolic Equ<br>imethylcycle<br>bolic OEC<br>bolic OEC                                  | ble<br>t ingredients<br>hod<br>ivalent to OECD<br>ivalent to OECD<br>bhexylamine<br>hod<br>D 473  | Test su       471     Bacteri       476     Mouse cells)       Test su       Chinese (CHO)       Chinese (CHO)                             | bstrate<br>a (S.typhimuriu<br>(lymphoma L5:<br>bstrate<br>e hamster ovary<br>e hamster ovary  | Effect       Im)     Im)       178Y     Im)       178Y     Im)       y     No effect       y     No effect  | Va<br>E><br>E><br>E><br>E><br>E><br>E>  | alue determination<br>(perimental value<br>(perimental value<br>alue determination<br>(perimental value<br>(perimental value   | Remark<br>Remark     |
| CON B<br>(test)data on the m<br>dgement is based on<br>nzyl alcohol<br>Result<br>Negative with meta<br>activation, negative<br>without metabolic<br>activation<br>Positive without<br>metabolic activation<br>negative with meta<br>activation<br>Megative with meta<br>activation, negative<br>without metabolic<br>activation<br>Negative with meta<br>activation, negative<br>without metabolic<br>activation<br>Negative with meta<br>activation, negative<br>without metabolic<br>activation<br>Negative with meta<br>activation, negative<br>without metabolic<br>activation<br>Negative with meta<br>activation, negative<br>without metabolic<br>activation  | ixture availa<br>the relevant<br>bolic Equ<br>n,<br>bolic Equ<br>imethylcyclo<br>bolic OEC<br>bolic OEC<br>bolic Equ                     | ble<br>tingredients<br>hod<br>ivalent to OECD<br>ivalent to OECD<br>bhexylamine<br>hod<br>D 473<br>D 476<br>ivalent to OECD                           | Test su       471     Bacteri       476     Mouse cells)       200     Test su       Chinese (CHO)     Chinese (CHO)       471     Bacteri | bstrate<br>a (S.typhimuriu<br>(lymphoma L5:<br>bstrate<br>e hamster ovary<br>e hamster ovary<br>a (S.typhimuriu                           | Effect       Im)     Im)       178Y     Im)       Effect       y     No effect       y     No effect       y     No effect       im)     No effect  | Va           Ex   | alue determination<br>operimental value<br>operimental value<br>alue determination<br>operimental value<br>operimental value<br>operimental value  | Remark               |
| CON B<br>(test)data on the m<br>dgement is based on<br>nzyl alcohol<br>Result<br>Negative with meta<br>activation, negative<br>without metabolic<br>activation<br>Positive without<br>metabolic activation<br>negative with meta<br>activation<br>Megative with meta<br>activation, negative<br>without metabolic<br>activation<br>Negative with meta<br>activation<br>Negative with meta | ixture availa<br>the relevant<br>bolic Equ<br>n,<br>bolic Equ<br>imethylcyclo<br>bolic OEC<br>bolic OEC<br>bolic Equ                     | ble<br>tingredients<br>hod<br>ivalent to OECD<br>ivalent to OECD<br>bhexylamine<br>hod<br>D 473<br>D 476<br>ivalent to OECD                           | Test su       471     Bacteri       476     Mouse cells)       476     Chiness (CHO)       Chiness (CHO)       471     Bacteri             | bstrate<br>a (S.typhimuriu<br>(lymphoma L5:<br>bstrate<br>e hamster ovary<br>e hamster ovary<br>a (S.typhimuriu                           | Effect Im) Effect Im Konstant | Va<br>Ex<br>Ex<br>Ex<br>Ex<br>Ex<br>Ex  | alue determination<br>(perimental value<br>(perimental value<br>alue determination<br>(perimental value<br>(perimental value<br>(perimental value  | Remark Remark        |
| CON B<br>(test)data on the midgement is based on<br>tayl alcohol<br>Result<br>Negative with meta<br>activation, negative<br>without metabolic<br>activation<br>Positive without<br>metabolic activation<br>negative with meta<br>activation<br>Megative with meta<br>activation, negative<br>without metabolic<br>activation, negative<br>without metabolic<br>activation, negative<br>without metabolic<br>activation<br>Negative with meta<br>activation, negative<br>without metabolic<br>activation<br>Negative with meta<br>activation, negative<br>without metabolic<br>activation<br>Negative with meta<br>activation, negative<br>without metabolic<br>activation<br>Negative with meta<br>activation, negative<br>without metabolic<br>activation<br>Megative with meta<br>activation, negative<br>without metabolic<br>activation, negative<br>without metabolic  | ixture availa<br>the relevant<br>bolic Equ<br>n,<br>bolic Equ<br>bolic OEC<br>bolic OEC<br>bolic QEC<br>bolic Equ<br>iamine<br>bolic Equ | ble<br>tingredients<br>hod<br>ivalent to OECD<br>ivalent to OECD<br>bhexylamine<br>hod<br>D 473<br>D 476<br>ivalent to OECD<br>hod<br>ivalent to OECD | Test su471Bacteri476Mouse<br>cells)76Test suChinese<br>(CHO)Chinese<br>(CHO)471Bacteri473Human   | bstrate<br>a (S.typhimuriu<br>(lymphoma L5:<br>bstrate<br>e hamster ovary<br>a (S.typhimuriu<br>a (S.typhimuriu<br>bstrate<br>lymphocytes | Effect       Im)     Fifect       178Y     Fifect       y     No effect       y     No effect       im)     No effect       im)     No effect   | Va           Ex           Ex | alue determination<br>cperimental value<br>cperimental value<br>alue determination<br>cperimental value<br>cperimental value<br>cperimental value<br>alue determination<br>cperimental value | Remark Remark Remark |

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| D  |          | To at automatic                          | F.6    |                     | Damaant |
|--|----------|--|--------|---------------------|---------|
| Result   | Niethod  | lest substrate                           | Effect | Value determination | Remark  |
| Negative with metabolic<br>activation, negative<br>without metabolic<br>activation | OECD 471 | Bacteria (S. typhimurium<br>and E. coli) |        | Experimental value  |         |
| Negative with metabolic<br>activation, negative<br>without metabolic<br>activation | OECD 473 | Human lymphocytes                        |        | Experimental value  |         |
| Negative with metabolic<br>activation, negative<br>without metabolic<br>activation | OECD 476 | Mouse (lymphoma L5178Y cells)            |        | Experimental value  |         |

# Mutagenicity (in vivo)

# POXYCON B

No (test)data on the mixture available

Judgement is based on the relevant ingredients

benzyl alcohol

|            | Result                               | Method             | Exposure time         | Test substrate        | Organ       | Value determination |
|------------|--------------------------------------|--------------------|-----------------------|-----------------------|-------------|---------------------|
|            | Negative (Intraperitoneal)           | Equivalent to OECD |                       | Mouse (male)          | Bone marrow | Experimental value  |
|            |                                      | 474                |                       |                       |             |                     |
| <u>tet</u> | raethylenepentamine                  |                    |                       |                       |             |                     |
|            | Result                               | Method             | Exposure time         | Test substrate        | Organ       | Value determination |
|            | Negative                             |                    |                       | Mouse (male / female) |             | Literature study    |
| <u>3-a</u> | minomethyl-3,5,5-trimethylcyclohexyl | amine              |                       | -                     |             | -                   |
|            | Result                               | Method             | Exposure time         | Test substrate        | Organ       | Value determination |
|            | Negative (Oral)                      | OECD 474           |                       | Mouse (male / female) | Blood       | Experimental value  |
| <u>2-n</u> | nethylpentane-1,5-diamine            |                    |                       |                       |             |                     |
|            | Result                               | Method             | Exposure time         | Test substrate        | Organ       | Value determination |
|            | Negative (Inhalation (aerosol))      | Equivalent to OECD | 13 weeks (6h / day, 5 | Mouse (male / female) | Blood       | Read-across         |
|            |                                      | 474                | days / week)          |                       |             |                     |

# **Conclusion**

Not classified for mutagenic or genotoxic toxicity

# Carcinogenicity

# POXYCON B

No (test)data on the mixture available

Judgement is based on the relevant ingredients

| ber        | nzyl alcohol              |                 |                           |                     |                               |                        |                           |       |                     |
|------------|---------------------------|-----------------|---------------------------|---------------------|-------------------------------|------------------------|---------------------------|-------|---------------------|
|            | Route of                  | Parameter       | Method                    | Value               | Exposure time                 | Species                | Effect                    | Organ | Value determination |
|            | exposure                  |                 |                           |                     |                               |                        |                           |       |                     |
|            | Oral<br>(stomach<br>tube) | Dose level      | Equivalent to<br>OECD 451 | 400 mg/kg<br>bw/day | 1003 weeks (5 days<br>/ week) | Rat (male /<br>female) | No carcinogenic<br>effect |       | Experimental value  |
| <u>3-a</u> | minomethyl-3              | ,5,5-trimethylc | <u>yclohexylamine</u>     |                     |                               |                        |                           |       |                     |
|            | Route of<br>exposure      | Parameter       | Method                    | Value               | Exposure time                 | Species                | Effect                    | Organ | Value determination |
|            | Unknown                   |                 |                           |                     |                               |                        |                           |       | Data waiving        |

**Conclusion** 

Not classified for carcinogenicity

### Reproductive toxicity

## POXYCON B

No (test)data on the mixture available

Judgement is based on the relevant ingredients benzyl alcohol

|   | Parameter | Method                           | Value                 | Exposure time      | Species                | Effect    | Organ | Value<br>determination |
|---|-----------|----------------------------------|-----------------------|--------------------|------------------------|-----------|-------|------------------------|
| Developmental toxicity<br>(Oral (stomach tube)) | NOAEL     | Developmenta<br>l toxicity study | 175 mg/kg<br>bw/day   | 10 days (1x / day) | Rat                    | No effect |       | Read-across            |
| Maternal toxicity (Oral<br>(stomach tube))      | NOAEL     | Developmenta<br>I toxicity study | 175 mg/kg<br>bw/day   | 10 days (1x / day) | Rat                    | No effect |       | Read-across            |
| Effects on fertility (Oral (diet))              | NOAEL     |                                  | ≥ 750 mg/kg<br>bw/day |                    | Rat (male /<br>female) | No effect |       | Read-across            |

Reason for revision: 2; 3; 9; 12

| <u>3-a</u> | minomethyl-3,5,5-trimeth                        | nylcyclohexylan | nine                      |                       |                            |                        |           |        |                        |
|------------|---|-----------------|---------------------------|-----------------------|----------------------------|------------------------|-----------|--------|------------------------|
|            |   | Parameter       | Method                    | Value                 | Exposure time              | Species                | Effect    | Organ  | Value<br>determination |
|            | Developmental toxicity<br>(Oral (stomach tube)) | NOAEL           | OECD 414                  | > 250 mg/kg<br>bw/day | 2 weeks (daily)            | Rat                    | No effect | Foetus | Experimental value     |
|            | Maternal toxicity (Oral<br>(stomach tube))      | NOEL            | OECD 414                  | 50 mg/kg<br>bw/day    | 2 weeks (daily)            | Rat                    | No effect |        | Experimental value     |
|            | Effects on fertility (Oral<br>(drinking water)) | NOAEL           | OECD 421                  | > 160 mg/kg<br>bw/day |                            | Rat (male /<br>female) | No effect |        | Experimental<br>value  |
| <u>2-n</u> | ethylpentane-1,5-diamin                         | e               |                           |                       |                            |                        | -         | -      |                        |
|            |   | Parameter       | Method                    | Value                 | Exposure time              | Species                | Effect    | Organ  | Value<br>determination |
|            | Developmental toxicity<br>(Oral (stomach tube)) | NOAEL           | Equivalent to<br>OECD 414 | 300 mg/kg<br>bw/day   | 10 days (gestation, daily) | Rat                    | No effect |        | Read-across            |
|            | Maternal toxicity (Oral<br>(stomach tube))      | NOAEL           | Equivalent to<br>OECD 414 | 184 mg/kg<br>bw/day   | 10 days (gestation, daily) | Rat                    | No effect |        | Read-across            |
|            | Effects on fertility (Oral (diet))              | NOAEL           | Equivalent to<br>OECD 416 | 500 mg/kg<br>bw/day   |                            | Rat (male /<br>female) | No effect |        | Read-across            |
| <u>2,4</u> | .6-tris(dimethylaminomet                        | hyl)phenol      |                           |                       |                            |                        |           |        |                        |
|            |   | Parameter       | Method                    | Value                 | Exposure time              | Species                | Effect    | Organ  | Value<br>determination |
|            | Developmental toxicity<br>(Oral (stomach tube)) | NOAEL           | OECD 414                  | 150 mg/kg<br>bw/day   | 15 days (gestation, daily) | Rat                    | No effect |        | Experimental value     |
|            | Maternal toxicity (Oral<br>(stomach tube))      | NOAEL           | OECD 414                  | 50 mg/kg<br>bw/day    | 15 days (gestation, daily) | Rat                    | No effect |        | Experimental value     |
|            | Effects on fertility (Oral<br>(stomach tube))   | NOAEL           | OECD 443                  | > 150 mg/kg<br>bw/day |                            | Rat (male /<br>female) | No effect |        | Experimental<br>value  |

#### **Conclusion**

Not classified for reprotoxic or developmental toxicity

# Toxicity other effects

# POXYCON B

No (test)data on the mixture available

# Chronic effects from short and long-term exposure

POXYCON B

Skin rash/inflammation.

#### 11.2. Information on other hazards

No evidence of endocrine disrupting properties

# SECTION 12: Ecological information

# 12.1. Toxicity

### POXYCON B

No (test)data on the mixture available

Classification is based on the relevant ingredients

### <u>benzyl alcohol</u>

|   | Parameter | Method          | Value       | Duration  | Species                             | Test design           | Fresh/salt<br>water | Value determination                             |
|---|-----------|-----------------|-------------|-----------|-------------------------------------|-----------------------|---------------------|---|
| Acute toxicity fishes                   | LC50      |                 | 460 mg/l    | 96 h      | Pimephales<br>promelas              | Static<br>system      | Fresh water         | Experimental value;<br>Nominal<br>concentration |
| Acute toxicity crustacea                | EC50      | OECD 202        | 230 mg/l    | 48 h      | Daphnia magna                       |                       | Fresh water         | Experimental value;<br>GLP                      |
| Toxicity algae and other aquatic plants | NOEC      | OECD 201        | 310 mg/l    | 72 h      | Pseudokirchneri<br>ella subcapitata | Static<br>system      | Fresh water         | Experimental value;<br>GLP                      |
|   | ErC50     | OECD 201        | 770 mg/l    | 72 h      | Pseudokirchneri<br>ella subcapitata | Static<br>system      | Fresh water         | Experimental value;<br>GLP                      |
| Long-term toxicity fish                 | NOEC      | ECOSAR<br>v1.00 | 48.897 mg/l | 30 day(s) | Pisces                              |                       | Fresh water         | QSAR; Nominal<br>concentration                  |
| Long-term toxicity aquatic crustacea    | NOEC      | OECD 211        | 51 mg/l     | 21 day(s) | Daphnia magna                       | Semi-static<br>system | Fresh water         | Experimental value;<br>GLP                      |
| Toxicity aquatic micro-<br>organisms    | IC50      | ISO 8192        | 2100 mg/l   | 49 h      | Activated sludge                    | Static<br>system      | Fresh water         | Experimental value                              |
|   | IC50      | ISO 8192        | 390 mg/l    | 24 h      | Nitrosomonas                        | Static<br>system      | Fresh water         | Experimental value;<br>Inhibition               |

Reason for revision: 2; 3; 9; 12

Publication date: 2006-08-03 Date of revision: 2022-06-29

Revision number: 0500

| ParameterMethodValueDurationSpeciesTest designFresh/salt<br>waterValue deter<br>waterAcute toxicity fishesLC50EU Method<br>C.1420 mg/l<br>C.196 hPoecilia<br>reticulataSemi-static<br>systemFresh waterExperimer<br>GLPAcute toxicity crustaceaEC50EU Method<br>C.224.1 mg/l<br>QL48 hDaphnia magna<br>capricornutumStatic<br>systemExperimer<br>GLPToxicity algae and other<br>aquatic plantsNOECOECD 2010.5 mg/l<br>QECD 20172 hSelenastrum<br>capricornutumExperimer<br>Growth ra<br>capricornutumExperimer<br>GLPToxicity aquatic micro-<br>organismsECS0OECD 2016.8 mg/l<br>1600 mg/l1 hActivated sludgeExperimer<br>GLPToxicity aquatic micro-<br>organismsECS0OECD 201186 mg/l<br>17 h17 hPseudomonas<br>putidaExperimer<br>GLP2-aminomethyl-3.5.5-trimethylcyclohexylamineLC50EU Method<br>C.1110 mg/l96 hLeuciscus idusSemi-static<br>systemFresh water<br>fresh waterValue dete<br>MeterAcute toxicity fishesLC50EU Method<br>C.3110 mg/l96 hLeuciscus idusSemi-static<br>systemFresh water<br>fresh waterNoinal<br>concentral<br>concentral<br>concentral<br>concentral<br>concentralAcute toxicity fishesLC50EU Method<br>C.31.2 mg/l72 hDesmodersmus<br>systemStatic<br>systemFresh water<br>fresh waterExperimer<br>SystemAcute toxicity fishesLC50EU Met  | ermination<br>Ital value;<br>Ital value;<br>Ital value;<br>Ital value;<br>te |
|--|--|
| Acute toxicity fishesLC50EU Method<br>C.1420 mg/l96 hPoecilia<br>reticulata<br>systemSemi-static<br>systemFresh water<br>GLPExperimer<br>GLPAcute toxicity crustaceaEC50EU Method<br>C.224.1 mg/l48 hDaphnia magna<br>capricornutumStatic<br>systemExperimer<br>GLPToxicity algae and other<br>aquatic plantsNOECOECD 2010.5 mg/l72 hSelenastrum<br>capricornutumExperimer<br>Growth ra<br>GapricornutumExperimer<br>GLPToxicity aquatic micro-<br>  | ntal value;<br>ntal value;<br>ntal value;<br>te                              |
| Acute toxicity crustacea       ECS0       EU Method<br>C.2       24.1 mg/l       48 h       Daphnia magna<br>Static<br>system       Static<br>system       Experimer<br>GLP         Toxicity algae and other<br>aquatic plants       NOEC       OECD 201       0.5 mg/l       72 h       Selenastrum<br>capricornutum       Experimer<br>Growth ra<br>capricornutum       Experimer<br>GLP         Toxicity aquatic micro-<br>organisms       ECS0       OECD 201       6.8 mg/l       72 h       Selenastrum<br>capricornutum       Experimer<br>GLP         Toxicity aquatic micro-<br>organisms       ECS0       OECD 209       1600 mg/l       1 h       Activated sludge       Experimer<br>GLP         3-aminomethyl-3.5.5-trimethylcyclohexylamine       EC10       186 mg/l       17 h       Pseudomonas<br>putida       Fresh/salt<br>water       Value dete<br>water         Acute toxicity fishes       LCS0       EU Method<br>C.1       110 mg/l       96 h       Leuciscus idus       Semi-static<br>system       Fresh water       Experimer<br>Nominal<br>concentral<br>concentral         Acute toxicity crustacea       EC50       OECD 202       23 mg/l       48 h       Daphnia magna       Static<br>system       Fresh water       Experimer<br>GLP         Toxicity algae and other<br>aquatic plants       EC50       OECD 202       23 mg/l       72 h       Desmodesmus<br>subspicatus       Static<br>system       Fresh water       Expe  | ntal value;<br>ntal value;<br>te   |
| Toxicity algae and other<br>aquatic plantsNOECOECD 2010.5 mg/l72 hSelenastrum<br>capricornutumExperimer<br>Growth ra<br>Erc50Toxicity aquatic micro-<br>organismsEC50OECD 2016.8 mg/l72 hSelenastrum<br>capricornutumExperimer<br>Growth raToxicity aquatic micro-<br>organismsEC50OECD 2091600 mg/l1 hActivated sludgeExperimer<br>GLP3-aminomethyl-3,5,5-trimethylcyclohexylamineEC10186 mg/l17 hPseudomonas<br>putidaExperimer<br>GLP3-aminomethyl-3,5,5-trimethylcyclohexylamineParameterMethodValueDurationSpeciesTest designFresh/salt<br>waterValue dete<br>materAcute toxicity fishesLC50EU Method<br>C.1110 mg/l96 hLeuciscus idusSemi-static<br>systemFresh waterExperimer<br>Nominal<br>concentralToxicity algae and other<br>aquatic plantsEC50OECD 20223 mg/l48 hDaphnia magnaStatic<br>systemFresh waterExperimer<br>GLPToxicity algae and other<br>aquatic plantsEC50EU Method<br>C.311.2 mg/l72 hDesmodesmus<br>subspicatusStatic<br>systemFresh waterExperimer<br>GCLPLong-term toxicity fishII11.2 mg/l72 hDesmodesmus<br>subspicatusStatic<br>systemFresh waterExperimer<br>GPLPLong-term toxicity fishIIIIIPseudomonas<br>subspicatusStatic<br>systemFresh waterExperimer<br>GPLPLong-term toxi  | ntal value;<br>te  |
| ErC50OECD 2016.8 mg/l72 hSelenastrum<br>capricornutumExperimerToxicity aquatic micro-<br>organismsEC50OECD 2091600 mg/l1 hActivated sludgeExperimerEC10186 mg/l17 hPseudomonas<br>putidaExperimerExperimer3-aminomethyl-3.5.5-trimethylcyclohexylamineParameterMethodValueDurationSpeciesTest designFresh/salt<br>waterValue dete<br>waterAcute toxicity fishesLC50EU Method<br>C.1110 mg/l96 hLeuciscus idusSemi-static<br>systemFresh waterExperimer<br>Nominal<br>concentral<br>  | مبيادير ادير   |
| Toxicity aquatic micro-<br>organismsECS0OECD 2091600 mg/l1 hActivated sludgeExperimer<br>GLPEC10186 mg/l17 hPseudomonas<br>putidaExperimer<br>GLP3-aminomethyl-3,5,5-trimethylcyclohexylamineParameterMethodValueDurationSpeciesTest design<br>systemFresh/salt<br>waterValue dete<br>waterAcute toxicity fishesLC50EU Method<br>C.1110 mg/l96 hLeuciscus idusSemi-static<br>systemFresh/salt<br>concentral<br>concentral<br>concentral<br>concentral<br>concentralSpeciesTest design<br>systemFresh/salt<br>waterValue dete<br>waterAcute toxicity crustaceaEC50OECD 20223 mg/l48 hDaphnia magna<br>subspicatusStatic<br>systemFresh water<br>systemExperimer<br>Nominal<br>concentral<br>concentral<br>concentral<br>concentralToxicity algae and other<br>aquatic plantsErC50EU Method<br>C.3550 mg/l72 hDesmodesmus<br>subspicatusStatic<br>systemFresh water<br>GLPExperimer<br>GLPLong-term toxicity fishIntermode<br>C.3Intermode<br>C.321 day(s)Daphnia magna<br>subspicatusSemi-static<br>systemFresh water<br>stricExperimer<br>Rominal<br>concentral<br>concentral<br>concentral<br>systemLong-term toxicity fishIntermode<br>C.3Intermode<br>C.3Intermode<br>C.3Intermode<br>Static<br>systemFresh water<br>systemExperimer<br>SystemLong-term toxicity aquatic<br>crustaceaNOECOECD 2023 m  |  |
| EC10186 mg/l17 hPseudomonas<br>putidaExperimer<br>GLP3-aminomethyl-3,5,5-trimethylcyclohexylamineParameterMethodValueDurationSpeciesTest designFresh/salt<br>waterValue dete<br>waterAcute toxicity fishesLC50EU Method<br>C.1110 mg/l96 hLeuciscus idusSemi-static<br>systemFresh waterExperimer<br>Nominal<br>concentral<br>concentral<br>concentralAcute toxicity crustaceaEC50OECD 20223 mg/l48 hDaphnia magnaStatic<br>systemFresh waterExperimer<br>Nominal<br>concentral<br>concentral<br>concentral<br>concentralToxicity algae and other<br>aquatic plantsErC50EU Method<br>C.350 mg/l72 hDesmodesmus<br>subspicatusStatic<br>systemFresh water<br>GLPExperimer<br>GLPLong-term toxicity fishEC10EU Method<br>C.311.2 mg/l72 hDesmodesmus<br>subspicatusStatic<br>systemFresh water<br>GLPExperimer<br>GLPLong-term toxicity aquatic<br>crustaceaNOECOECD 2023 mg/l21 day(s)Daphnia magna<br>subspicatusSemi-static<br>systemFresh water<br>systemExperimer<br>Mominal<br>concentral<br>concentral<br>concentral<br>systemLong-term toxicity aquatic<br>crustaceaNOECOECD 2023 mg/l21 day(s)Daphnia magna<br>systemSemi-static<br>systemFresh water<br>systemExperimer<br>Nominal<br>concentral<br>concentral<br>concentral<br>concentral<br>concentralLong-term toxicity aquatic<br>crustaceaNOECOECD 2023 mg/   | ntal value;  |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine         Parameter         Method         Value         Duration         Species         Test design         Fresh/salt water         Value determine           Acute toxicity fishes         LC50         EU Method         110 mg/l         96 h         Leuciscus idus         Semi-static system         Fresh water         Experimer Nominal concentral concent  | ntal value;  |
| ParameterMethodValueDurationSpeciesTest designFresh/salt<br>waterValue determAcute toxicity fishesLC50EU Method<br>C.1110 mg/l96 hLeuciscus idusSemi-static<br>systemFresh waterExperimer<br>Nominal<br>concentral<br>concentral<br>concentralAcute toxicity crustaceaEC50OECD 20223 mg/l48 hDaphnia magnaStatic<br>systemFresh waterExperimer<br>Nominal<br>concentral<br>concentral<br>concentralToxicity algae and other<br>aquatic plantsErC50EU Method<br>C.3>50 mg/l72 hDesmodesmus<br>subspicatusStatic<br>systemFresh waterExperimer<br>Resh waterLong-term toxicity fishEC10EU Method<br>C.311.2 mg/l72 hDesmodesmus<br>subspicatusStatic<br>systemFresh waterExperimer<br>GLPLong-term toxicity fishImage: Constrained<br>C.3Image: Constrained<br>C.3Image: Constrained<br>SubspicatusSemi-static<br>systemFresh waterExperimer<br>GLPLong-term toxicity fishImage: Constrained<br>ConstrainedImage: Constrained<br>SystemImage: Constrained<br>SystemSemi-static<br>systemFresh waterExperimer<br>Nominal<br>concentral<br>Concentral<br>SystemToxicity aquatic micro-<br>organismsEC10Image: Constrained<br>LingImage: Constrained<br>SystemStatic<br>SystemFresh waterExperimer<br>Nominal<br>concentral<br>SystemToxicity aquatic micro-<br>organismsEC10Image: Constrained<br>SystemImage: Constrained<br>SystemStatic<br>St   |  |
| Acute toxicity fishesLC50EU Method<br>C.1110 mg/l96 hLeuciscus idusSemi-static<br>systemFresh waterExperimer<br>Nominal<br>concentraAcute toxicity crustaceaEC50OECD 20223 mg/l48 hDaphnia magnaStatic<br>systemFresh waterExperimer<br>Nominal<br>concentraAcute toxicity algae and other<br>aquatic plantsErC50EU Method<br>C.3> 50 mg/l72 hDesmodesmus<br>subspicatusStatic<br>systemFresh waterExperimer<br>Nominal<br>concentraToxicity algae and other<br>aquatic plantsErC50EU Method<br>C.3> 50 mg/l72 hDesmodesmus<br>subspicatusStatic<br>systemFresh waterExperimer<br>GLPLong-term toxicity fishEC10EU Method<br>C.311.2 mg/l72 hDesmodesmus<br>subspicatusStatic<br>systemFresh waterExperimer<br>Growth ra<br>Growth raLong-term toxicity fishOECD 2023 mg/l21 day(s)Daphnia magnaSemi-static<br>systemFresh waterExperimer<br>Nominal<br>concentraToxicity aquatic<br>organismsNOECOECD 2023 mg/l21 day(s)Daphnia magna<br>subspicatusSemi-static<br>systemFresh waterExperimer<br>Nominal<br>concentra   | ermination   |
| Acute toxicity crustacea       EC50       OECD 202       23 mg/l       48 h       Daphnia magna       Static<br>system       Fresh water       Experimer<br>Nominal<br>concentral<br>concentral<br>concentral<br>concentral         Toxicity algae and other<br>aquatic plants       ErC50       EU Method<br>C.3       > 50 mg/l       72 h       Desmodesmus<br>subspicatus       Static<br>system       Fresh water       Experimer<br>Reprimer<br>GLP         Long-term toxicity fish       EC10       EU Method<br>C.3       11.2 mg/l       72 h       Desmodesmus<br>subspicatus       Static<br>system       Fresh water       Experimer<br>GLP         Long-term toxicity fish       EC10       EU DecD 202       3 mg/l       21 day(s)       Daphnia magna       Semi-static<br>system       Fresh water       Experimer<br>Growth ra<br>Concentral<br>Growth ra         Long-term toxicity aquatic<br>crustacea       NOEC       OECD 202       3 mg/l       21 day(s)       Daphnia magna       Semi-static<br>system       Fresh water       Experimer<br>Nominal<br>concentral<br>Nominal<br>concentral         Toxicity aquatic micro-<br>organisms       EC10       1120 mg/l       18 h       Pseudomonas<br>putida       Static<br>system       Fresh water       Experimer<br>Nominal  | ital value;<br>tion  |
| Toxicity algae and other aquatic plants       ErC50       EU Method C.3       > 50 mg/l       72 h       Desmodesmus subspicatus       Static system       Fresh water       Experimer GLP         EC10       EU Method C.3       1.2 mg/l       72 h       Desmodesmus subspicatus       Static system       Fresh water       Experimer GLP         Long-term toxicity fish       Image: Crustacea       Image:  | ntal value;<br>tion  |
| EC10     EU Method<br>C.3     11.2 mg/l     72 h     Desmodesmus<br>subspicatus     Static<br>system     Fresh water     Experimer<br>Growth ra       Long-term toxicity fish     Image: Comparison of the top of the top of top | ntal value;  |
| Long-term toxicity fish         Data waivi           Long-term toxicity aquatic         NOEC         OECD 202         3 mg/l         21 day(s)         Daphnia magna         Semi-static<br>system         Fresh water         Experimer<br>Nominal<br>concentral<br>organisms           Toxicity aquatic micro-<br>organisms         EC10         1120 mg/l         18 h         Pseudomonas<br>putida         Static<br>system         Fresh water         Experimen<br>Nominal<br>concentral  | ntal value;<br>te  |
| Long-term toxicity aquatic<br>crustacea       NOEC       OECD 202       3 mg/l       21 day(s)       Daphnia magna       Semi-static<br>system       Fresh water       Experimer<br>Nominal<br>concentration         Toxicity aquatic micro-<br>organisms       EC10       1120 mg/l       18 h       Pseudomonas<br>putida       Static<br>system       Fresh water       Experimer<br>Nominal<br>concentration   | ing  |
| Toxicity aquatic micro-<br>organisms         EC10         1120 mg/l         18 h         Pseudomonas         Static         Fresh water         Experimer           Nominal  | ntal value;<br>tion  |
| concentra  | ital value;  |
| 2-methylpentane-1,5-diamine  |  |
| Parameter Method Value Duration Species Test design Fresh/salt Value deter   | erminatior   |
| Acute toxicity fishes     LC50     Equivalent to<br>OECD 203     1825 mg/l     96 h     Pimephales<br>promelas     Static     Fresh water     Read-acrono<br>Nominal<br>concentral   | ss;<br>tion  |
| Acute toxicity crustacea     EC50     Equivalent to<br>OECD 202     19.8 mg/l -<br>23.4 mg/l     48 h     Daphnia magna     Static<br>system     Fresh water     Read-acrossion<br>Nominal<br>concentral   | ss;<br>tion  |
| Toxicity algae and other         ErC50         OECD 201         > 100 mg/l         72 h         Pseudokirchneri         Static         Fresh water         Read-acros           aquatic plants         ella subcapitata         system         sys  | ss; GLP  |
| NOEC OECD 201 10 mg/l 72 h Pseudokirchneri Static Fresh water Read-acro-<br>ella subcapitata system Growth ra  | ss;<br>te  |
| Long-term toxicity fish Data waivi   | ing  |
| Long-term toxicity aquatic     NOEC     OECD 211     4.16 mg/l     21 day(s)     Daphnia magna     Semi-static     Fresh water     Read-acrossing       crustacea     Read-acrossing     Semi-static     Fresh water     Read-acrossing  | ss; GLP  |
| 2,4,6-tris(dimethylaminomethyl)phenol  |  |
| Parameter Method Value Duration Species Test design Fresh/salt Value dete<br>water   | erminatior   |
| Acute toxicity fishes     LC50     APHA     175 mg/l     96 h     Cyprinus carpio     Static<br>system     Fresh water     Experiment<br>Nominal<br>concentration  | ital value;<br>tion  |
| Acute toxicity crustacea     LC50     Other     718 mg/l     96 h     Palaemonetes<br>vulgaris     Static     Salt water     Experimen<br>Nominal<br>concentra   | ntal value;  |
|  | tion   |
| Toxicity algae and other<br>aquatic plants     ErC50     OECD 201     84 mg/l     72 h     Desmodesmus<br>subspicatus     Static     Fresh water     Experiment<br>GLP   | tion<br>ntal value;  |
| Toxicity algae and other<br>aquatic plants       ErC50       OECD 201       84 mg/l       72 h       Desmodesmus<br>subspicatus       Static<br>system       Fresh water       Experimer<br>GLP         Long-term toxicity fish       Image: Comparison of the system       Image: Comparison of the system <t< td=""><td>tion<br/>ntal value;<br/>ng</td></t<>  | tion<br>ntal value;<br>ng  |
| Toxicity algae and other<br>aquatic plants     ErC50     OECD 201     84 mg/l     72 h     Desmodesmus<br>subspicatus     Static<br>system     Fresh water     Experimer<br>GLP       Long-term toxicity fish     Image: Comparison of the provide          | tion<br>ntal value;<br>ing<br>ing  |

<u>Conclusion</u>

Reason for revision: 2; 3; 9; 12

Publication date: 2006-08-03 Date of revision: 2022-06-29

Harmful to aquatic life with long lasting effects.

# 12.2. Persistence and degradability

# benzyl alcohol

| /lethod                         | Value                           | Duration                              | Value determination |
|---------------------------------|---------------------------------|---------------------------------------|---------------------|
| quivalent to OECD 301C          | 92 % - 96 %; Oxygen consumption | 14 day(s)                             | Experimental value  |
| ethylenepentamine               |                                 | •                                     |                     |
| odegradation water              |                                 | 1                                     |                     |
| Method                          | Value                           | Duration                              | Value determination |
| DECD 301A                       | < 10 %; GLP                     | 28 day(s)                             | Experimental value  |
| ninomethyl-3,5,5-trimethylcyc   | lohexylamine                    |                                       |                     |
| odegradation water              |                                 |                                       |                     |
| Method                          | Value                           | Duration                              | Value determination |
| EU Method C.4-A                 | 8 %; GLP                        | 28 day(s)                             | Experimental value  |
| <u>ethylpentane-1,5-diamine</u> |                                 |                                       |                     |
| odegradation water              |                                 |                                       |                     |
| Method                          | Value                           | Duration                              | Value determination |
| OECD 301D                       | 100 %; GLP                      | 28 day(s)                             | Experimental value  |
| nototransformation air (DT50    | air)                            |                                       |                     |
| Method                          | Value                           | Conc. OH-radicals                     | Value determination |
| AOPWIN v1.92                    | 1.852 h                         | 1.5E6 /cm <sup>3</sup>                | Calculated value    |
| alf-life water (t1/2 water)     |                                 |                                       |                     |
| Method                          | Value                           | Primary<br>degradation/mineralisation | Value determination |
|                                 |                                 |                                       | Data waiving        |
| 6-tris(dimethylaminomethyl)p    | henol                           |                                       |                     |
| odegradation water              |                                 |                                       |                     |
| Method                          | Value                           | Duration                              | Value determination |
| OECD 301D                       | 4 %; GLP                        | 28 day(s)                             | Experimental value  |
| odegradation soil               |                                 |                                       |                     |
|                                 | Malua                           | Duration                              | Value determination |
| Method                          | value                           | 24.44.0                               |                     |

# Log Kow

| /lethod            | Remark Value      |           | Т                 | emperature | Value determination |                   |                     |
|--------------------|-------------------|-----------|-------------------|------------|---------------------|-------------------|---------------------|
|                    | No                | t applica | ble (mixture)     |            |                     |                   |                     |
| enzyl alcohol      |                   |           |                   |            |                     |                   |                     |
| Log Kow            |                   |           |                   |            |                     |                   |                     |
| Method             |                   | Remark    |                   | Value      |                     | Temperature       | Value determination |
|                    |                   |           |                   | 1.05       |                     | 20 °C             | Experimental value  |
| etraethylenepenta  | <u>mine</u>       |           |                   |            |                     |                   |                     |
| BCF other aquation | c organisms       |           |                   |            |                     |                   |                     |
| Parameter          | Method            |           | Value             | Duration   | Specie              | S                 | Value determination |
| BCF                | BCFBAF v          | 3.01      | 3.162 l/kg; Fresh |            |                     |                   | Estimated value     |
|                    |                   |           | weight            |            |                     |                   |                     |
| Log Kow            |                   |           |                   |            |                     |                   |                     |
| Method             |                   | Remark    |                   | Value      |                     | Temperature       | Value determination |
| KOWWIN             |                   |           | -3.16             |            |                     | Estimated value   |                     |
| -aminomethyl-3,5   | ,5-trimethylcy    | clohexyla | mine              |            |                     |                   |                     |
| Log Kow            |                   |           |                   |            |                     |                   |                     |
| Method             |                   | Remark    |                   | Value      |                     | Temperature       | Value determination |
| EU Method A.8      |                   |           |                   | 0.99       |                     | 23 °C             | Experimental value  |
| -methylpentane-1   | <u>,5-diamine</u> |           |                   |            |                     |                   |                     |
| BCF fishes         |                   |           |                   |            |                     |                   |                     |
| Parameter          | Method            |           | Value             | Duration   | Specie              | s                 | Value determination |
|                    |                   |           |                   |            |                     |                   | Data waiving        |
| Log Kow            |                   | _         |                   |            |                     |                   |                     |
| Method             |                   | Remark    |                   | Value      |                     | Temperature       | Value determination |
| US EPA             |                   |           |                   | ≤1         |                     | 25 °C             | Experimental value  |
|                    |                   |           |                   |            |                     |                   |                     |
|                    |                   |           |                   |            |                     |                   |                     |
|                    |                   |           |                   |            |                     |                   |                     |
| <pre>c</pre>       | 0.12              |           |                   |            |                     | Dublication data: |                     |

Date of revision: 2022-06-29

| Parameter  | Method  | Value   | Dur                  | ation            | Specie        | es         |            |                     | Value determination |
|--|---|---|----------------------|------------------|---------------|------------|------------|---------------------|---------------------|
|  |   |   |                      |                  |               |            |            |                     | Data waiving        |
| og Kow   | •   | •   |                      |                  |               |            |            |                     |                     |
| Method   | Re  | emark   | Val                  | alue Temperature |               |            | ature      | Value determination |                     |
| EPA OPPTS 830.   | 7550  |   | -0.6                 | 60               |               | 21.5 °C    |            |                     | Experimental value  |
| es not contain bio<br>• Mobility in<br>Izyl alcohol  | oaccumulative co<br><b>soil</b>   | mponent(s)  |                      |                  |               |            |            |                     |                     |
| Deremeter  |   |   |                      | Mathod           |               |            | Value      |                     | Value determination |
|  |   |   |                      |                  | W/IN v2 0     |            | 1 122 -    | 1 222               | Calculated value    |
| aethylenepenta   | mine  |   |                      | Sherekoe         | VIII V2.0     |            | 1.122      | 1.552               |                     |
| og) Koc  |   |   |                      |                  |               |            |            |                     |                     |
| Parameter  |   |   |                      | Method           |               |            | Value      |                     | Value determination |
| log Koc  |   |   |                      |                  |               |            | 3.04       |                     | Calculated value    |
| ercent distributi  | on  |   |                      |                  |               |            |            |                     |                     |
| Method   | Fraction air  | Fraction biota  | Fraction<br>sediment | Fr<br>t          | action soil   | Fraction   | water      | Value deterr        | nination            |
| Fugacity Model<br>Level III  | 7.45E-16 %  |   | 0.155 %              | 81               | 1.8 %         | 18 %       |            | Calculated va       | alue                |
| minomethyl-3,5,  | 5-trimethylcycloł   | <u>iexylamine</u>   |                      |                  |               |            |            |                     |                     |
| og) Koc  |   |   |                      |                  |               |            |            |                     |                     |
| Parameter  |   |   |                      | Method           |               |            | Value      |                     | Value determination |
| log Koc  | 5-diamine   |   |                      |                  |               |            | 2.97       |                     | QSAR                |
| ng) Koc  | <u>o didifinite</u>   |   |                      |                  |               |            |            |                     |                     |
| Parameter  |   |   |                      | Method           |               |            | Value      |                     | Value determination |
| log Koc  |   |   |                      | SRC PCKOC        | WIN v2.0      |            | 2.159      |                     | Calculated value    |
| .6-tris(dimethyla<br>og) Koc   | minomethyl)phei   | <u>lol</u>  |                      |                  |               |            |            |                     | •                   |
| Parameter  |   |   |                      | Method           |               |            | Value      |                     | Value determination |
| Кос  |   |   |                      | SRC PCKOC        | WIN v2.0      |            | 20.98      |                     | QSAR                |
| log Koc  |   |   |                      |                  |               |            | 1.32       |                     | Calculated value    |
| ercent distributi  | on  |   | _                    |                  |               |            |            |                     |                     |
| Method   | Fraction air  | Fraction biota  | Fraction<br>sediment | Fr<br>t          | action soil   | Fraction   | water      | Value deterr        | nination            |
| Mackay level I   | 0.001 %   | 0 %   | 0.002 %              | 0.               | 002 %         | 99.996 %   | 6          | Calculated va       | alue                |
| lusion<br>Itains componen<br>Itains componen<br>I. <b>Results of P</b><br>es not contain o | t(s) with potentia<br>t(s) that adsorb(s<br>BT and vPvB<br>component(s) the<br>lisrupting pro | al for mobility in the s<br>) into the soil<br>assessment<br>nat meet(s) the crite<br>perties | oil<br>eria of PBT   | and/or vF        | PvB as listed | in Annex ) | (III of Re | egulation (EC)      | No 1907/2006.       |

**Ozone-depleting potential (ODP)** Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

Groundwater

Groundwater pollutant Water ecotoxicity pH pH shift

<u>tetraethylenepentamine</u> Water ecotoxicity pH pH shift

3-aminomethyl-3,5,5-trimethylcyclohexylamine Groundwater Groundwater pollutant

Reason for revision: 2; 3; 9; 12

2,4,6-tris(dimethylaminomethyl)phenol Groundwater Groundwater pollutant

Water ecotoxicity pH pH shift

# SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

## 13.1. Waste treatment methods

### 13.1.1 Provisions relating to waste

#### **European Union**

Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997. Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

08 01 11\* (wastes from MFSU and removal of paint and varnish: waste paint and varnish containing organic solvents or other hazardous substances). Depending on branch of industry and production process, also other waste codes may be applicable.

### 13.1.2 Disposal methods

Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Dispose of small quantities of cured product as household waste. Do not discharge into drains or the environment. Dispose of at authorized waste collection point.

### 13.1.3 Packaging/Container

**European Union** 

Waste material code packaging (Directive 2008/98/EC).

15 01 10\* (packaging containing residues of or contaminated by dangerous substances).

# SECTION 14: Transport information

### Road (ADR)

14.1. UN number

| UN number                                | 2735  |
|--|---|
| 14.2. UN proper shipping name            |   |
| Proper shipping name                     | amines, liquid, corrosive, n.o.s. (3-                                 |
|  | aminomethyl-3,5,5-trimethylcyclohexylamine)                           |
| 14.3. Transport hazard class(es)         |   |
| Hazard identification number             | 80  |
| Class                                    | 8   |
| Classification code                      | C7  |
| 14.4. Packing group                      |   |
| Packing group                            | 11  |
| Labels                                   | 8   |
| 14. <u>5. Environmental hazards</u>      |   |
| Environmentally hazardous substance mark | no  |
| 14.6. Special precautions for user       |   |
| Special provisions                       | 274   |
| Limited quantities                       | Combination packagings: not more than 1 liter per inner packaging for |
|  | liquids. A package shall not weigh more than 30 kg. (gross mass)      |

# Rail (RID)

| 14. <u>1. UN number</u>                  |   |
|--|---|
| UN number                                | 2735  |
| 14.2. UN proper shipping name            |   |
| Proper shipping name                     | amines, liquid, corrosive, n.o.s. (3-                                 |
|  | aminomethyl-3,5,5-trimethylcyclohexylamine)                           |
| 14.3. Transport hazard class(es)         |   |
| Hazard identification number             | 80  |
| Class                                    | 8   |
| Classification code                      | C7  |
| 14.4. Packing group                      |   |
| Packing group                            | II  |
| Labels                                   | 8   |
| 14. <u>5. Environmental hazards</u>      |   |
| Environmentally hazardous substance mark | no  |
| 14.6. Special precautions for user       |   |
| Special provisions                       | 274   |
| Limited quantities                       | Combination packagings: not more than 1 liter per inner packaging for |
|  | liquids. A package shall not weigh more than 30 kg. (gross mass)      |

### Inland waterways (ADN)

Reason for revision: 2; 3; 9; 12

| 14. <u>1</u> . UN number                 |   |
|--|---|
| UN number                                | 2735  |
| 14.2. UN proper shipping name            |   |
| Proper shipping name                     | amines, liquid, corrosive, n.o.s. (3-                                 |
|  | aminomethyl-3,5,5-trimethylcyclohexylamine)                           |
| 14.3. Transport hazard class(es)         |   |
| Class                                    | 8   |
| Classification code                      | C7  |
| 14.4. Packing group                      |   |
| Packing group                            | 11  |
| Labels                                   | 8   |
| 14.5. Environmental hazards              |   |
| Environmentally hazardous substance mark | no  |
| 14.6. Special precautions for user       |   |
| Special provisions                       | 274   |
| Limited quantities                       | Combination packagings: not more than 1 liter per inner packaging for |
|  | liquids. A package shall not weigh more than 30 kg. (gross mass)      |

# Sea (IMDG/IMSBC)

| 14. <u>1. UN number</u>                                       |   |
|---|---|
| UN number   | 2735  |
| 14.2. UN proper shipping name                                 |   |
| Proper shipping name  | amines, liquid, corrosive, n.o.s. (3-                                 |
|   | aminomethyl-3,5,5-trimethylcyclohexylamine)                           |
| 14.3. Transport hazard class(es)                              |   |
| Class   | 8   |
| 14.4. Packing group   |   |
| Packing group   | И   |
| Labels  | 8   |
| 14. <u>5. Environmental hazards</u>                           |   |
| Marine pollutant  | -   |
| Environmentally hazardous substance mark                      | no  |
| 14.6. Special precautions for user                            |   |
| Special provisions  | 274   |
| Limited quantities  | Combination packagings: not more than 1 liter per inner packaging for |
|   | liquids. A package shall not weigh more than 30 kg. (gross mass)      |
| 14.7. Maritime transport in bulk according to IMO instruments |   |
| Annex II of MARPOL 73/78                                      | Not applicable, based on available data                               |

# Air (ICAO-TI/IATA-DGR)

| 14. <u>1. UN number</u>                                |   |
|--|---|
| UN number  | 2735  |
| L4.2. UN proper shipping name                          |   |
| Proper shipping name                                   | amines, liquid, corrosive, n.o.s. (3-       |
|  | aminomethyl-3,5,5-trimethylcyclohexylamine) |
| 14.3. Transport hazard class(es)                       |   |
| Class  | 8   |
| 14. <mark>4. Packing group</mark>                      |   |
| Packing group  | II.   |
| Labels   | 8   |
| L4. <u>5</u> . Environmental hazards                   |   |
| Environmentally hazardous substance mark               | no  |
| 4.6. Special precautions for user                      |   |
| Special provisions                                     | A3  |
| Special provisions                                     | A803  |
| Passenger and cargo transport                          |   |
| Limited quantities: maximum net quantity per packaging | 0.5 L                                       |
|  |   |

# SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture <u>European legislation:</u>

VOC content Directive 2010/75/EU

| VOC content         | Remark |
|---------------------|--------|
| 3 % - 5 %           |        |
| 30.9 g/l - 51.5 g/l |        |

Directive 2012/18/EU (Seveso III)

Not subject to registration according to Directive 2012/18/EU (Seveso III)

Reason for revision: 2; 3; 9; 12

# **REACH Annex XVII - Restriction**

Contains component(s) subject to restrictions of Annex XVII of Regulation (EC) No 1907/2006: restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

|   | Designation of the substance, of the group of substances or of the mixture  | Conditions of restriction   |
|---|---|---|
| <ul> <li>benzyl alcohol</li> <li>tetraethylenepentamine</li> <li>3-aminomethyl-3,5,5-<br/>trimethylcyclohexylamine</li> <li>2-methylpentane-1,5-diamine</li> <li>2,4,6-tris(dimethylaminomethyl)phenol</li> </ul> | Liquid substances or mixtures fulfilling the<br>criteria for any of the following hazard classes<br>or categories set out in Annex I to Regulation<br>(EC) No 1272/2008:<br>(a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8<br>types A and B, 2.9, 2.10, 2.12, 2.13 categories<br>1 and 2, 2.14 categories 1 and 2, 2.15 types A<br>to F;<br>(b) hazard classes 3.1 to 3.6, 3.7 adverse<br>effects on sexual function and fertility or on<br>development, 3.8 effects other than narcotic<br>effects, 3.9 and 3.10;<br>(c) hazard class 5.1.  | <ol> <li>Shall not be used in:         <ul> <li>ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,</li> <li>tricks and jokes,</li> <li>games for one or more participants, or any article intended to be used as such, even with ornamental aspects,</li> </ul> </li> <li>Articles not complying with paragraph 1 shall not be placed on the market.</li> <li>Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:             <ul> <li>ans be used as fuel in decorative oil lamps for supply to the general public, and,</li></ul></li></ol> |
| <ul> <li>tetraethylenepentamine</li> <li>3-aminomethyl-3,5,5-<br/>trimethylcyclohexylamine</li> <li>2,4,6-tris(dimethylaminomethyl)phenol</li> </ul>  | Substances falling within one or more of the following points:<br>(a) substances classified as any of the following in Part 3 of Annex VI to Regulation (EC) No 1272/2008:<br>— carcinogen category 1A, 1B or 2, or germ cell mutagen category 1A, 1B or 2, but excluding any such substances classified due to effects only following exposure by inhalation<br>— reproductive toxicant category 1A, 1B or 2 but excluding any such substances classified due to effects only following exposure by inhalation<br>— reproductive toxicant category 1A, 1B or 2 but excluding any such substances classified due to effects only following exposure by inhalation<br>— skin sensitiser category 1, 1A or 1B<br>— skin corrosive category 1, 1A or 1B or 1C or skin irritant category 2<br>— serious eye damage category 1 or eye irritant category 2<br>(b) substances listed in Annex II to Regulation (EC) No 1223/2009 of the European Parliament and of the Council<br>(C) substances listed in Annex IV to Regulation is specified in at least one of the columns g, h and i of the table in that Annex (d) substances listed in Appendix 13 to this Annex.<br>The ancillary requirements in paragraphs 7 and 8 of column 2 of this entry apply to all mixtures for use for tattooing purposes, whether or not they contain a substance falling within points (a) to (d) of this column of this entry. | Mixtures for tattooing purposes are subject to the restrictions of Regulation (EU) 2020/2081  |
| <u>National legislation Belgium</u><br><u>POXYCON B</u><br>No data available  |   |   |
| National legislation The Netherlan<br><u>POXYCON B</u>  | <u>ds</u>   |   |
| Waterbezwaarlijkheid  | JA (3); Algemene Beoordelingsmethodie   | к (АВМ)   |
| <u>POXYCON B</u><br><u>POXYCON B</u><br>No data available   |   |   |
| <u>National legislation Germany</u><br><u>POXYCON B</u>   |   |   |
| Lagerklasse (TRGS510)   | 8 A: Brennbare ätzende Gefahrstoffe   |   |
| ason for revision: 2; 3; 9; 12  |   | Publication date: 2006-08-03<br>Date of revision: 2022-06-29  |
| vision number: 0500   |   | BIG number: 43465 17 / 19   |

|  | WGK                   | 2; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017                          |  |  |
|--|-----------------------|---|--|--|
| benzyl alcohol                               |                       |   |  |  |
|  | TA-Luft               | 5.2.5/I   |  |  |
|  | TRGS900 - Risiko der  | Benzylalkohol; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen |  |  |
|  | Fruchtschädigung      | Grenzwertes nicht befürchtet zu werden  |  |  |
|  | Hautresorptive Stoffe | Benzylalkohol; H; Hautresorptiv   |  |  |
| tetraethylenepentamine                       |                       |   |  |  |
|  | TA-Luft               | 5.2.5   |  |  |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine |                       |   |  |  |
|  | TA-Luft               | 5.2.5/I   |  |  |
| 2-methylpentane-1,5-diamine                  |                       |   |  |  |
|  | TA-Luft               | 5.2.5   |  |  |
| 2,4,6-tris(dimethylaminomethyl)phenol        |                       |   |  |  |
|  | TA-Luft               | 5.2.5   |  |  |

# National legislation Austria

POXYCON B

No data available

#### National legislation United Kingdom

POXYCON B No data available

#### Other relevant data POXYCON B

No data available

#### 15.2. Chemical safety assessment

No chemical safety assessment has been conducted for the mixture.

# SECTION 16: Other information

Full text of any H- and EUH-statements referred to under section 3:

- H302 Harmful if swallowed.
  H312 Harmful 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 unitage.
  - HS19 Causes serious eye ii
  - H332 Harmful if inhaled.H335 May cause respiratory irritation.
  - H411 Toxic to aquatic life with long lasting effects.
  - 11411 Toxic to aquatic life with lang lasting effects.
  - H412 Harmful to aquatic life with long lasting effects.

| (*)          | INTERNAL CLASSIFICATION BY BIG   |
|--------------|--|
| ADI          | Acceptable daily intake  |
| AOEL         | Acceptable operator exposure level   |
| ATE          | Acute Toxicity Estimate  |
| CLP (EU-GHS) | Classification, labelling and packaging (Globally Harmonised System in Europe) |
| DMEL         | Derived Minimal Effect Level   |
| DNEL         | Derived No Effect Level  |
| EC50         | Effect Concentration 50 %  |
| ErC50        | EC50 in terms of reduction of growth rate                                      |
| LC50         | Lethal Concentration 50 %  |
| LD50         | Lethal Dose 50 %   |
| NOAEC/NOAEL  | No Observed Adverse Effect Concentration/No Observed Adverse Effect Level      |
| NOEC/NOEL    | No Observed Effect Concentration/No Observed Effect Level                      |
| OECD         | Organisation for Economic Co-operation and Development                         |
| PBT          | Persistent, Bioaccumulative & Toxic  |
| PNEC         | Predicted No Effect Concentration  |
| STP          | Sludge Treatment Process   |
| vPvB         | very Persistent & very Bioaccumulative   |

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of

Reason for revision: 2; 3; 9; 12

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Reason for revision: 2; 3; 9; 12

Publication date: 2006-08-03 Date of revision: 2022-06-29

Revision number: 0500