



## SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

### SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product identifier

Product name : SD 4775  
Product code : 2709.  
HARDENER  
UFI : GNR6-40JN-S00W-HN13

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

Recommended use : Hardener  
Uses advised against : data not available

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

Registered company name : SICOMIN Composites.  
Address : 31 avenue de la Lardiere - BP 23.13161.Chateauneuf les Martigues.France.  
Telephone : +33 (0)4 42 42 30 20. Fax : +33 (0)4 42 81 29 29.  
composites@sicomin.com  
Site web : <http://www.sicomin.com>  
AUSTRALIAN Importer : Lavender CE Pty Ltd - 108 Westgate Street - Wacol, Qld, 4076 AUSTRALIA / M: 0409 892 032 / Ph: +61 7 3255 6924 /  
Fax: +61 7 3255 6923 / Web: [www.lavender-ce.com](http://www.lavender-ce.com) / Email: [sheading@lavender-ce.com](mailto:sheading@lavender-ce.com)

#### 1.4. Emergency telephone number : .

Association/Organisation : INRS / ORFILA tél: +33(0)1.45.42.59.59 - (FRANCE) .

#### Other emergency numbers

Health and Safety Executive (HSE) Chemicals Regulation Directorate - Telephone: +44 151 951 3317 - USA : +1/ 800/ 424.9300 -  
AUSTRALIA : Emergency Poison Advice : 131 126

### SECTION 2 : HAZARDS IDENTIFICATION

#### 2.1. Classification of the substance or mixture

##### In compliance with EC regulation No. 1272/2008 and its amendments.

Acute oral toxicity, Category 4 (Acute Tox. 4, H302).  
Skin corrosion, Category 1B (Skin Corr. 1B, H314).  
Serious eye damage, Category 1 (Eye Dam. 1, H318).  
Skin sensitisation, Category 1 (Skin Sens. 1, H317).  
Hazardous to the aquatic environment - Chronic hazard, Category 1 (Aquatic Chronic 1, H410).  
This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

#### 2.2. Label elements

##### In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :



GHS05

GHS09

GHS07

Signal Word :

DANGER

Product identifiers :

EC 268-626-9

EC 219-941-5

EC 500-105-6

Hazard statements :

POLYETHYLENEPOLYAMINES

1,3-CYCLOHEXANEDIMETHANAMINE

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA

H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.  
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements - General :  
P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.

Precautionary statements - Prevention :  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/  
...

Precautionary statements - Response :  
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER/doctor/...  
P391 Collect spillage.

Precautionary statements - Storage :  
P405 Store locked up.

Precautionary statements - Disposal :  
P501 Dispose of contents/container to hazardous waste.

### 2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC)  $\geq 0.1\%$  published by the European Chemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>  
The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.  
The mixture does not contain substances  $\geq 0.1\%$  with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

## SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

#### Composition :

| Identification                                                                                                                                                  | Classification (EC) 1272/2008                                                                                                                                                       | Note | %                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---------------------|
| CAS: 68131-73-7<br>EC: 268-626-9<br>REACH: 01-2119485823-28-XXXX<br><br>POLYETHYLENEPOLYAMINES                                                                  | GHS07, GHS05, GHS09<br>Dgr<br>Acute Tox. 4, H302<br>Acute Tox. 4, H312<br>Skin Corr. 1B, H314<br>Skin Sens. 1, H317<br>Eye Dam. 1, H318<br>Aquatic Chronic 1, H410<br>M Chronic = 1 |      | 50 $\leq$ x % < 100 |
| CAS: 9046-10-0<br>EC: 618-561-0<br>REACH: 01-2119557899-12-XXXX<br><br>REACTION PRODUCTS OF DI-, TRI<br>AND TETRA-PROPOXYLATED<br>PROPANE-1,2-DIOL WITH AMMONIA | GHS05<br>Dgr<br>Skin Corr. 1C, H314<br>Eye Dam. 1, H318<br>Aquatic Chronic 3, H412                                                                                                  |      | 25 $\leq$ x % < 50  |
| CAS: 2579-20-6<br>EC: 219-941-5<br>REACH: 01-2119543741-41-XXXX<br><br>1,3-CYCLOHEXANEDIMETHANAMINE                                                             | GHS07, GHS05<br>Dgr<br>Acute Tox. 4, H302<br>Acute Tox. 4, H312<br>Skin Corr. 1A, H314<br>Eye Dam. 1, H318<br>Aquatic Chronic 3, H412                                               |      | 2.5 $\leq$ x % < 10 |
| CAS: 39423-51-3<br>EC: 500-105-6                                                                                                                                | GHS07, GHS05, GHS09<br>Dgr                                                                                                                                                          |      | 2.5 $\leq$ x % < 10 |

|                                                                                                                |                                                                                                                                                     |     |                 |
|----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------------|
| REACH: 01-2119556886-20-XXXX<br><br>PROPYLIDYNETRIMETHANOL,<br>PROPOXYLATED, REACTION PRODUCTS<br>WITH AMMONIA | Acute Tox. 4, H302<br>Acute Tox. 4, H312<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>Aquatic Chronic 2, H411                                      |     |                 |
| CAS: 100-51-6<br>EC: 202-859-9<br>REACH: 01-2119492630-38-XXXX<br><br>BENZYL ALCOHOL                           | GHS07<br>Wng<br>Acute Tox. 4, H302<br>Eye Irrit. 2, H319<br>Acute Tox. 4, H332                                                                      | [1] | 2.5 <= x % < 10 |
| CAS: 770-35-4<br>EC: 212-222-7<br>REACH: 01-2119486566-23-XXXX<br><br>1-PHENOXYPROPAN-2-OL                     | GHS05<br>Dgr<br>Eye Dam. 1, H318                                                                                                                    |     | 1 <= x % < 2.5  |
| CAS: 75-75-2<br>EC: 200-898-6<br>REACH: 01-2119491166-34-XXXX<br><br>METHANESULPHONIC ACID                     | GHS07, GHS05<br>Dgr<br>Met. Corr. 1, H290<br>Acute Tox. 4, H302<br>Acute Tox. 4, H312<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>STOT SE 3, H335 | [1] | 1 <= x % < 2.5  |

**Specific concentration limits:**

| Identification                                                                                                                                                  | Specific concentration limits | ATE                                                          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|--------------------------------------------------------------|
| CAS: 68131-73-7<br>EC: 268-626-9<br>REACH: 01-2119485823-28-XXXX<br><br>POLYETHYLENEPOLYAMINES                                                                  |                               | dermal: ATE = 1465.4 mg/kg BW<br>oral: ATE = 1716.2 mg/kg BW |
| CAS: 9046-10-0<br>EC: 618-561-0<br>REACH: 01-2119557899-12-XXXX<br><br>REACTION PRODUCTS OF DI-, TRI<br>AND TETRA-PROPOXYLATED<br>PROPANE-1,2-DIOL WITH AMMONIA |                               | dermal: ATE = 2979.7 mg/kg BW<br>oral: ATE = 2885.3 mg/kg BW |
| CAS: 2579-20-6<br>EC: 219-941-5<br>REACH: 01-2119543741-41-XXXX<br><br>1,3-CYCLOHEXANEDIMETHANAMINE                                                             |                               | dermal: ATE = 1700 mg/kg BW<br>oral: ATE = 880 mg/kg BW      |
| CAS: 39423-51-3<br>EC: 500-105-6<br>REACH: 01-2119556886-20-XXXX<br><br>PROPYLIDYNETRIMETHANOL,<br>PROPOXYLATED, REACTION PRODUCTS<br>WITH AMMONIA              |                               | oral: ATE = 550 mg/kg BW                                     |
| CAS: 100-51-6<br>EC: 202-859-9<br>REACH: 01-2119492630-38-XXXX<br><br>BENZYL ALCOHOL                                                                            |                               | dermal: ATE = 2000 mg/kg BW<br>oral: ATE = 1230 mg/kg BW     |
| CAS: 75-75-2<br>EC: 200-898-6<br>REACH: 01-2119491166-34-XXXX<br><br>METHANESULPHONIC ACID                                                                      |                               | oral: ATE = 649 mg/kg BW                                     |

**Information on ingredients :**

(Full text of H-phrases: see section 16)

[1] Substance for which maximum workplace exposure limits are available.

## SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

### 4.1. description of first aid measures

#### In the event of exposure by inhalation :

If inhaled, move the patient to fresh air and keep warm and rest.

#### In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

Regardless of the initial state, refer the patient to an ophthalmologist and show him the label.

Flush with large amounts of water. Remove contact lenses if the victim is. Continue to rinse. Seek medical attention if symptoms persist.

#### In the event of splashes or contact with skin :

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Remove any soiled or splashed clothing immediately.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

In the event of an allergic reaction, seek medical attention.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

#### In the event of swallowing :

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water, administer activated medical charcoal and consult a doctor.

Seek medical attention immediately, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

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

No data available.

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

#### Information for the doctor :

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to remain under medical supervision for 48 hours.

## SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

### 5.1. Extinguishing media

#### Suitable methods of extinction

In the event of a fire, use :

- sprayed water or water mist
- foam
- powder

#### Unsuitable methods of extinction

In the event of a fire, do not use :

- water jet

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

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO<sub>2</sub>)
- nitrogen oxide (NO)
- nitrogen dioxide (NO<sub>2</sub>)

### 5.3. Advice for firefighters

Firefighters should wear suitable protective clothing and a respirator mask with self- full operated in positive pressure mode.

Wear conform with the European standard EN 469.

## SECTION 6 : ACCIDENTAL RELEASE MEASURES

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

Consult the safety measures listed under headings 7 and 8.

**For non first aid worker**

Avoid any contact with the skin and eyes.

**For first aid worker**

First aid workers will be equipped with suitable personal protective equipment (See section 8).

**6.2. Environmental precautions**

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

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

Neutralise with an acidic decontaminant.

If the ground is contaminated, once the product has been recovered by sponging with an inert and non-combustible absorbent material, wash the contaminated area in plenty of water.

Clean preferably with a detergent, do not use solvents.

**6.4. Reference to other sections**

No data available.

**SECTION 7 : HANDLING AND STORAGE**

Requirements relating to storage premises apply to all facilities where the mixture is handled.

Individuals with a history of skin sensitisation should not, under any circumstance, handle this mixture.

**7.1. Precautions for safe handling**

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Emergency showers and eye wash stations will be required in facilities where the mixture is handled constantly.

**Fire prevention :**

Prevent access by unauthorised personnel.

**Recommended equipment and procedures :**

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

**Prohibited equipment and procedures :**

No smoking, eating or drinking in areas where the mixture is used.

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

No data available.

**Storage**

Keep out of reach of children.

Keep away from food and drink, including those for animals.

Store in original container protected from direct sunlight in a dry, cool and well ventilated area away from heat sources.

Keep container tightly closed in a dry place.

**Packaging**

Always keep in packaging made of an identical material to the original.

**7.3. Specific end use(s)**

Scope advised: Stratification

**SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1. Control parameters****Occupational exposure limits :**

- Germany - AGW (BAuA - TRGS 900, 02/2022) :

| CAS      | VME : | VME :             | Excess | Notes |  |
|----------|-------|-------------------|--------|-------|--|
| 100-51-6 |       | 5 ppm<br>22 mg/m3 |        | 2 (I) |  |
| 75-75-2  |       | 0.7 mg/m3         |        | 1(I)  |  |

**Derived no effect level (DNEL) or derived minimum effect level (DMEL):**

METHANESULPHONIC ACID (CAS: 75-75-2)

**Final use:**

Exposure method:

Potential health effects:

DNEL :

**Workers.**

Dermal contact.

Long term systemic effects.

19.44 mg/kg body weight/day

Exposure method: Inhalation.  
Potential health effects: Long term systemic effects.  
DNEL : 6.76 mg of substance/m3

Exposure method: Inhalation.  
Potential health effects: Long term local effects.  
DNEL : 0.7 mg of substance/m3

**Final use:**

Exposure method: Ingestion.  
Potential health effects: Long term systemic effects.  
DNEL : 8.33 mg/kg body weight/day

Exposure method: Dermal contact.  
Potential health effects: Long term systemic effects.  
DNEL : 8.33 mg/kg body weight/day

Exposure method: Inhalation.  
Potential health effects: Long term systemic effects.  
DNEL : 1.44 mg of substance/m3

Exposure method: Inhalation.  
Potential health effects: Long term local effects.  
DNEL : 0.42 mg of substance/m3

## 1-PHENOXYPROPAN-2-OL (CAS: 770-35-4)

**Final use:**

Exposure method: Dermal contact.  
Potential health effects: Long term systemic effects.  
DNEL : 42 mg/kg body weight/day

Exposure method: Inhalation.  
Potential health effects: Long term systemic effects.  
DNEL : 25.7 mg of substance/m3

**Final use:**

Exposure method: Ingestion.  
Potential health effects: Long term systemic effects.  
DNEL : 3.65 mg/kg body weight/day

Exposure method: Dermal contact.  
Potential health effects: Long term systemic effects.  
DNEL : 21 mg/kg body weight/day

Exposure method: Inhalation.  
Potential health effects: Long term systemic effects.  
DNEL : 12.7 mg of substance/m3

## BENZYL ALCOHOL (CAS: 100-51-6)

**Final use:**

Exposure method: Dermal contact.  
Potential health effects: Short term systemic effects.  
DNEL : 40 mg/kg body weight/day

Exposure method: Dermal contact.  
Potential health effects: Long term systemic effects.  
DNEL : 8 mg/kg body weight/day

Exposure method: Inhalation.  
Potential health effects: Short term systemic effects.  
DNEL : 110 mg of substance/m3

Exposure method: Inhalation.  
Potential health effects: Long term systemic effects.

**Consumers.****Workers.****Consumers.****Workers.**

DNEL : 22 mg of substance/m3

**Final use:**

Exposure method:

Potential health effects:

DNEL :

**Consumers.**

Ingestion.

Long term systemic effects.

4 mg/kg body weight/day

Exposure method:

Potential health effects:

DNEL :

Ingestion.

Short term systemic effects.

20 mg/kg body weight/day

Exposure method:

Potential health effects:

DNEL :

Dermal contact.

Long term systemic effects.

4 mg/kg body weight/day

Exposure method:

Potential health effects:

DNEL :

Dermal contact.

Short term systemic effects.

20 mg/kg body weight/day

Exposure method:

Potential health effects:

DNEL :

Inhalation.

Long term systemic effects.

5.4 mg of substance/m3

Exposure method:

Potential health effects:

DNEL :

Inhalation.

Short term systemic effects.

27 mg of substance/m3

## PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)

**Final use:**

Exposure method:

Potential health effects:

DNEL :

**Workers.**

Dermal contact.

Long term systemic effects.

4 mg/kg body weight/day

Exposure method:

Potential health effects:

DNEL :

Inhalation.

Long term systemic effects.

4.9 mg of substance/m3

**Final use:**

Exposure method:

Potential health effects:

DNEL :

**Consumers.**

Ingestion.

Long term systemic effects.

0.5 mg/kg body weight/day

## 1,3-CYCLOHEXANEDIMETHANAMINE (CAS: 2579-20-6)

**Final use:**

Exposure method:

Potential health effects:

DNEL :

**Workers.**

Dermal contact.

Long term systemic effects.

0.1 mg/kg body weight/day

Exposure method:

Potential health effects:

DNEL :

Inhalation.

Long term local effects.

0.00947 mg of substance/m3

## REACTION PRODUCTS OF DI-, TRI AND TETRA-PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA (CAS: 9046-10-0)

**Final use:**

Exposure method:

Potential health effects:

DNEL :

**Workers.**

Dermal contact.

Long term systemic effects.

2.5 mg/kg body weight/day

Exposure method:

Potential health effects:

DNEL :

Dermal contact.

Long term local effects.

0.623 mg of substance/cm2

**Final use:**

Exposure method:

**Consumers.**

Ingestion.

|                                                         |                                                                              |
|---------------------------------------------------------|------------------------------------------------------------------------------|
| Potential health effects:<br>DNEL :                     | Long term systemic effects.<br>0.04 mg/kg body weight/day                    |
| Exposure method:<br>Potential health effects:<br>DNEL : | Dermal contact.<br>Long term systemic effects.<br>1.25 mg/kg body weight/day |
| Exposure method:<br>Potential health effects:<br>DNEL : | Dermal contact.<br>Long term local effects.<br>0.311 mg of substance/cm2     |
| POLYETHYLENEPOLYAMINES (CAS: 68131-73-7)                |                                                                              |
| <b>Final use:</b>                                       | <b>Workers.</b>                                                              |
| Exposure method:<br>Potential health effects:<br>DNEL : | Dermal contact.<br>Long term systemic effects.<br>0.91 mg/kg body weight/day |
| Exposure method:<br>Potential health effects:<br>DNEL : | Dermal contact.<br>Long term local effects.<br>0.44 mg of substance/cm2      |
| Exposure method:<br>Potential health effects:<br>DNEL : | Inhalation.<br>Short term systemic effects.<br>8550 mg of substance/m3       |
| Exposure method:<br>Potential health effects:<br>DNEL : | Inhalation.<br>Long term systemic effects.<br>1.59 mg of substance/m3        |
| <b>Final use:</b>                                       | <b>Consumers.</b>                                                            |
| Exposure method:<br>Potential health effects:<br>DNEL : | Ingestion.<br>Short term systemic effects.<br>32 mg/kg body weight/day       |
| Exposure method:<br>Potential health effects:<br>DNEL : | Ingestion.<br>Long term systemic effects.<br>0.65 mg/kg body weight/day      |
| Exposure method:<br>Potential health effects:<br>DNEL : | Dermal contact.<br>Short term systemic effects.<br>13 mg/kg body weight/day  |
| Exposure method:<br>Potential health effects:<br>DNEL : | Dermal contact.<br>Short term local effects.<br>1.59 mg of substance/cm2     |
| Exposure method:<br>Potential health effects:<br>DNEL : | Dermal contact.<br>Long term systemic effects.<br>0.4 mg/kg body weight/day  |
| Exposure method:<br>Potential health effects:<br>DNEL : | Dermal contact.<br>Long term local effects.<br>0.68 mg of substance/cm2      |
| Exposure method:<br>Potential health effects:<br>DNEL : | Inhalation.<br>Short term systemic effects.<br>2542 mg of substance/m3       |
| Exposure method:<br>Potential health effects:<br>DNEL : | Inhalation.<br>Long term systemic effects.<br>0.46 mg of substance/m3        |

**Predicted no effect concentration (PNEC):**

## METHANESULPHONIC ACID (CAS: 75-75-2)

Environmental compartment: Soil.  
PNEC : 0.00183 mg/kg

Environmental compartment: Fresh water.  
PNEC : 0.012 mg/l

Environmental compartment: Sea water.  
PNEC : 0.0012 mg/l

Environmental compartment: Intermittent waste water.  
PNEC : 0.12 mg/l

Environmental compartment: Fresh water sediment.  
PNEC : 0.0251 mg/kg

Environmental compartment: Waste water treatment plant.  
PNEC : 100 mg/l

## 1-PHENOXYPROPAN-2-OL (CAS: 770-35-4)

Environmental compartment: Soil.  
PNEC : 0.02 mg/kg

Environmental compartment: Fresh water.  
PNEC : 0.1 mg/l

Environmental compartment: Sea water.  
PNEC : 0.01 mg/l

Environmental compartment: Intermittent waste water.  
PNEC : 1 mg/l

Environmental compartment: Fresh water sediment.  
PNEC : 0.38 mg/kg

Environmental compartment: Marine sediment.  
PNEC : 0.038 mg/kg

Environmental compartment: Waste water treatment plant.  
PNEC : 10 mg/l

## BENZYL ALCOHOL (CAS: 100-51-6)

Environmental compartment: Soil.  
PNEC : 0.456 mg/kg

Environmental compartment: Fresh water.  
PNEC : 1 mg/l

Environmental compartment: Sea water.  
PNEC : 0.1 mg/l

Environmental compartment: Intermittent waste water.  
PNEC : 2.3 mg/l

Environmental compartment: Fresh water sediment.  
PNEC : 5.27 mg/kg

Environmental compartment: Marine sediment.  
PNEC : 0.527 mg/kg

Environmental compartment: Waste water treatment plant.  
PNEC : 39 mg/l

## PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)

|                            |                              |
|----------------------------|------------------------------|
| Environmental compartment: | Soil.                        |
| PNEC :                     | 0.002 mg/kg                  |
| Environmental compartment: | Fresh water.                 |
| PNEC :                     | 0.004 mg/l                   |
| Environmental compartment: | Sea water.                   |
| PNEC :                     | 0.00044 mg/l                 |
| Environmental compartment: | Intermittent waste water.    |
| PNEC :                     | 0.044 mg/l                   |
| Environmental compartment: | Fresh water sediment.        |
| PNEC :                     | 0.0224 mg/kg                 |
| Environmental compartment: | Marine sediment.             |
| PNEC :                     | 0.00224 mg/kg                |
| Environmental compartment: | Waste water treatment plant. |
| PNEC :                     | 10 mg/l                      |

## 1,3-CYCLOHEXANEDIMETHANAMINE (CAS: 2579-20-6)

|                            |                              |
|----------------------------|------------------------------|
| Environmental compartment: | Soil.                        |
| PNEC :                     | 0.024 mg/kg                  |
| Environmental compartment: | Fresh water.                 |
| PNEC :                     | 0.033 mg/l                   |
| Environmental compartment: | Sea water.                   |
| PNEC :                     | 0.003 mg/l                   |
| Environmental compartment: | Fresh water sediment.        |
| PNEC :                     | 0.218 mg/kg                  |
| Environmental compartment: | Marine sediment.             |
| PNEC :                     | 0.022 mg/kg                  |
| Environmental compartment: | Waste water treatment plant. |
| PNEC :                     | 10 mg/l                      |

## REACTION PRODUCTS OF DI-, TRI AND TETRA-PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA (CAS: 9046-10-0)

|                            |                              |
|----------------------------|------------------------------|
| Environmental compartment: | Soil.                        |
| PNEC :                     | 0.0176 mg/kg                 |
| Environmental compartment: | Fresh water.                 |
| PNEC :                     | 0.015 mg/l                   |
| Environmental compartment: | Sea water.                   |
| PNEC :                     | 0.0143 mg/l                  |
| Environmental compartment: | Intermittent waste water.    |
| PNEC :                     | 0.15 mg/l                    |
| Environmental compartment: | Fresh water sediment.        |
| PNEC :                     | 0.132 mg/kg                  |
| Environmental compartment: | Marine sediment.             |
| PNEC :                     | 0.125 mg/kg                  |
| Environmental compartment: | Waste water treatment plant. |
| PNEC :                     | 7.5 mg/l                     |

## POLYETHYLENEPOLYAMINES (CAS: 68131-73-7)

|                            |       |
|----------------------------|-------|
| Environmental compartment: | Soil. |
|----------------------------|-------|

|                            |                              |
|----------------------------|------------------------------|
| PNEC :                     | 10 mg/kg                     |
| Environmental compartment: | Fresh water.                 |
| PNEC :                     | 1.6 µg/l                     |
| Environmental compartment: | Sea water.                   |
| PNEC :                     | 1.6 µg/l                     |
| Environmental compartment: | Fresh water sediment.        |
| PNEC :                     | 0.14 mg/kg                   |
| Environmental compartment: | Marine sediment.             |
| PNEC :                     | 0.14 mg/kg                   |
| Environmental compartment: | Waste water treatment plant. |
| PNEC :                     | 3.19 mg/l                    |

## 8.2. Exposure controls

Use only with adequate ventilation or provided with ventilation at the source.

### Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

#### - Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles with protective sides accordance with standard EN166.

In the event of high danger, protect the face with a face shield.

Prescription glasses are not considered as protection.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly.

#### - Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

- Butyl Rubber (Isobutylene-isoprene copolymer)

#### - Body protection

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing :

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605/A1 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034/A1 to prevent skin contact.

Wear suitable protective clothing and, in particular, an apron and boots. These items of clothing shall be maintained in good condition and cleaned after use.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

#### - Respiratory protection

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387 :

Mask with filter type A, B, E, K, P

Attention! If the protection group is insufficient.

**SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES****9.1. Information on basic physical and chemical properties****Physical state**

|                  |               |
|------------------|---------------|
| Physical state : | Fluid liquid. |
|------------------|---------------|

**Colour**

|         |        |
|---------|--------|
| Color : | yellow |
|---------|--------|

**Odour**

|                   |             |
|-------------------|-------------|
| Odour threshold : | Not stated. |
|-------------------|-------------|

**Melting point**

|                               |               |
|-------------------------------|---------------|
| Melting point/melting range : | Not relevant. |
|-------------------------------|---------------|

**Freezing point**

|                                   |             |
|-----------------------------------|-------------|
| Freezing point / Freezing range : | Not stated. |
|-----------------------------------|-------------|

**Boiling point or initial boiling point and boiling range**

|                               |               |
|-------------------------------|---------------|
| Boiling point/boiling range : | Not relevant. |
|-------------------------------|---------------|

**Flammability**

|                             |             |
|-----------------------------|-------------|
| Flammability (solid, gas) : | Not stated. |
|-----------------------------|-------------|

**Lower and upper explosion limit**

|                                                     |             |
|-----------------------------------------------------|-------------|
| Explosive properties, lower explosivity limit (%) : | Not stated. |
|-----------------------------------------------------|-------------|

|                                                     |             |
|-----------------------------------------------------|-------------|
| Explosive properties, upper explosivity limit (%) : | Not stated. |
|-----------------------------------------------------|-------------|

**Flash point**

|                        |             |
|------------------------|-------------|
| Flash Point Interval : | FP > 100°C. |
|------------------------|-------------|

**Auto-ignition temperature**

|                             |               |
|-----------------------------|---------------|
| Self-ignition temperature : | Not relevant. |
|-----------------------------|---------------|

**Decomposition temperature**

|                                           |               |
|-------------------------------------------|---------------|
| Decomposition point/decomposition range : | Not relevant. |
|-------------------------------------------|---------------|

**pH**

|                         |             |
|-------------------------|-------------|
| pH (aqueous solution) : | Not stated. |
|-------------------------|-------------|

|      |             |
|------|-------------|
| pH : | Not stated. |
|------|-------------|

|  |                 |
|--|-----------------|
|  | Slightly basic. |
|--|-----------------|

**Kinematic viscosity**

|             |                       |
|-------------|-----------------------|
| Viscosity : | 95 ± 20 mPa.s @ 25 °C |
|-------------|-----------------------|

**Solubility**

|                    |          |
|--------------------|----------|
| Water solubility : | Soluble. |
|--------------------|----------|

|                  |             |
|------------------|-------------|
| Fat solubility : | Not stated. |
|------------------|-------------|

**Partition coefficient n-octanol/water (log value)**

|                                          |             |
|------------------------------------------|-------------|
| Partition coefficient: n-octanol/water : | Not stated. |
|------------------------------------------|-------------|

**Vapour pressure**

|                          |               |
|--------------------------|---------------|
| Vapour pressure (50°C) : | Not relevant. |
|--------------------------|---------------|

**Density and/or relative density**

|           |                     |
|-----------|---------------------|
| Density : | 1.00 ± 0.02 @ 20 °C |
|-----------|---------------------|

**Relative vapour density**

|                  |             |
|------------------|-------------|
| Vapour density : | Not stated. |
|------------------|-------------|

**Particle characteristics**

The mixture does not contain nanoforms.

**9.2. Other information**

|                       |                        |
|-----------------------|------------------------|
| Index of refraction : | 1.4912 ± 0.002 @ 25 °C |
|-----------------------|------------------------|

|  |                                              |
|--|----------------------------------------------|
|  | Method of determining the refractive index : |
|--|----------------------------------------------|

|  |                           |
|--|---------------------------|
|  | NF ISO 280:1999 (T75-112) |
|--|---------------------------|

**9.2.1. Information with regard to physical hazard classes**

No data available.

**9.2.2. Other safety characteristics**

No data available.

**SECTION 10 : STABILITY AND REACTIVITY****10.1. Reactivity**

No data available.

## 10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

## 10.3. Possibility of hazardous reactions

No data available.

## 10.4. Conditions to avoid

Avoid :

- contact with air
- humidity

## 10.5. Incompatible materials

Keep away from :

- strong oxidising agents

## 10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO<sub>2</sub>)
- nitrogen oxide (NO)
- nitrogen dioxide (NO<sub>2</sub>)

# SECTION 11 : TOXICOLOGICAL INFORMATION

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

Harmful if swallowed.

May cause irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis, following exposure between three minutes and one hour.

Corrosive reactions are typified by ulcers, bleeding, bloody scabs, and, by the end of observation at 14 days, by discolouration due to blanching of the skin, complete areas of alopecia, and scars.

May cause an allergic reaction by skin contact.

### 11.1.1. Substances

#### Acute toxicity :

METHANESULPHONIC ACID (CAS: 75-75-2)

Oral route :

LD50 = 649 mg/kg bodyweight/day  
Species : Rat  
OECD Guideline 401 (Acute Oral Toxicity)

Dermal route :

LD50 > 1000 mg/kg bodyweight/day  
Species : Rabbit  
OECD Guideline 402 (Acute Dermal Toxicity)

1-PHENOXYPROPAN-2-OL (CAS: 770-35-4)

Oral route :

LD50 > 2000 mg/kg bodyweight/day  
Species : Rat  
OECD Guideline 401 (Acute Oral Toxicity)

Dermal route :

LD50 > 2000 mg/kg bodyweight/day  
Species : Rat  
OECD Guideline 402 (Acute Dermal Toxicity)

Inhalation route (Dusts/mist) :

LC50 > 5 mg/l  
Species : Rat  
OECD Guideline 403 (Acute Inhalation Toxicity)

BENZYL ALCOHOL (CAS: 100-51-6)

Oral route :

LD50 = 1230 mg/kg bodyweight/day  
Species : Rat

Dermal route :

LD50 = 2000 mg/kg bodyweight/day  
Species : Rat

Inhalation route (Dusts/mist) :

LC50 > 4.178 mg/l  
Species : Rat  
OECD Guideline 403 (Acute Inhalation Toxicity)  
Duration of exposure : 4 h

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)

Oral route : LD50 = 550 mg/kg bodyweight/day  
Species : Rat  
OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure)

Dermal route : LD50 > 1000 mg/kg bodyweight/day  
Species : Rat  
OECD Guideline 402 (Acute Dermal Toxicity)

1,3-CYCLOHEXANEDIMETHANAMINE (CAS: 2579-20-6)

Oral route : LD50 = 880 mg/kg bodyweight/day  
Species : Rat

Dermal route : LD50 = 1700 mg/kg bodyweight/day  
Species : Rabbit

REACTION PRODUCTS OF DI-, TRI AND TETRA-PROPOXYLATED PROPANE-1.2-DIOL WITH AMMONIA (CAS: 9046-10-0)

Oral route : LD50 = 2885.3 mg/kg bodyweight/day  
Species : Rat

Dermal route : LD50 = 2979.7 mg/kg bodyweight/day  
Species : Rabbit

POLYETHYLENEPOLYAMINES (CAS: 68131-73-7)

Oral route : LD50 = 1716.2 mg/kg bodyweight/day  
Species : Rat  
OECD Guideline 401 (Acute Oral Toxicity)

Dermal route : LD50 = 1465.4 mg/kg bodyweight/day  
Species : Rabbit  
OECD Guideline 402 (Acute Dermal Toxicity)

**Skin corrosion/skin irritation :**

BENZYL ALCOHOL (CAS: 100-51-6)

Species : Rabbit  
OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)

Species : Rabbit  
OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Species : Rabbit  
OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

REACTION PRODUCTS OF DI-, TRI AND TETRA-PROPOXYLATED PROPANE-1.2-DIOL WITH AMMONIA (CAS: 9046-10-0)

Corrosivity : Causes severe skin burns.  
Species : Rabbit  
OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

**Respiratory or skin sensitisation :**

BENZYL ALCOHOL (CAS: 100-51-6)

Guinea Pig Maximisation Test (GMPT) : Non-sensitiser.  
Species : Guinea pig  
OECD Guideline 406 (Skin Sensitisation)

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)

Guinea Pig Maximisation Test (GMPT) : Non-sensitiser.  
Species : Guinea pig  
OECD Guideline 406 (Skin Sensitisation)

**Germ cell mutagenicity :**

1,3-CYCLOHEXANEDIMETHANAMINE (CAS: 2579-20-6)

Ames test (in vitro) : Negative.

BENZYL ALCOHOL (CAS: 100-51-6)  
Mutagenesis (in vivo) : Negative.  
Species : Mouse  
OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Mutagenesis (in vitro) : Negative.  
Species : Bacteria  
OECD Guideline 471 (Bacterial Reverse Mutation Assay)

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)  
Mutagenesis (in vivo) : Negative.  
Species : Mouse  
OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)  
  
OECD Guideline 471 (Bacterial Reverse Mutation Assay)

Ames test (in vitro) : Negative.  
With or without metabolic activation.

METHANESULPHONIC ACID (CAS: 75-75-2)  
  
No mutagenic effect.

Mutagenesis (in vivo) : Negative.  
Species : Mouse  
OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Mutagenesis (in vitro) : Negative.  
Species : Mammalian Cell Line  
OECD Guideline 471 (Bacterial Reverse Mutation Assay)

Ames test (in vitro) : Negative.

REACTION PRODUCTS OF DI-, TRI AND TETRA-PROPOXYLATED PROPANE-1.2-DIOL WITH AMMONIA (CAS: 9046-10-0)  
No mutagenic effect.

POLYETHYLENEPOLYAMINES (CAS: 68131-73-7)  
  
No mutagenic effect.

Mutagenesis (in vivo) : Negative.  
OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

**Carcinogenicity :**

BENZYL ALCOHOL (CAS: 100-51-6)  
Carcinogenicity Test : Negative.  
No carcinogenic effect.  
Species : Mouse  
OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

**Reproductive toxicant :**

METHANESULPHONIC ACID (CAS: 75-75-2)  
No toxic effect for reproduction  
Study on fertility : Species : Rat  
OECD Guideline 414 (Prenatal Developmental Toxicity Study)

BENZYL ALCOHOL (CAS: 100-51-6)  
No toxic effect for reproduction

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)  
No toxic effect for reproduction  
Study on fertility : Species : Rat  
OECD Guideline 414 (Prenatal Developmental Toxicity Study)

Study on development : Species : Rat  
OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test)

REACTION PRODUCTS OF DI-, TRI AND TETRA-PROPOXYLATED PROPANE-1.2-DIOL WITH AMMONIA (CAS: 9046-10-0)

No toxic effect for reproduction

Study on development : Species : Rat  
OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test)

POLYETHYLENEPOLYAMINES (CAS: 68131-73-7)

OECD Guideline 414 (Prenatal Developmental Toxicity Study)

**Specific target organ systemic toxicity - single exposure :**

METHANESULPHONIC ACID (CAS: 75-75-2)

Inhalation route : C 0.23

**Specific target organ systemic toxicity - repeated exposure :**

BENZYL ALCOHOL (CAS: 100-51-6)

Oral route : C = 400 mg/kg bodyweight/day  
Species : Rat  
Duration of exposure : 90 days

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)

Oral route : C >= 100 mg/kg bodyweight/day  
Species : Rat  
Duration of exposure : 90 days  
OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

Dermal route : C >= 160 mg/kg bodyweight/day  
Species : Rat  
Duration of exposure : 90 days  
OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)

REACTION PRODUCTS OF DI-, TRI AND TETRA-PROPOXYLATED PROPANE-1.2-DIOL WITH AMMONIA (CAS: 9046-10-0)

Oral route : C = 239 mg/kg bodyweight/day  
Species : Rat  
Duration of exposure : 28 days  
OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)

Dermal route : C = 250 mg/kg bodyweight/day  
Duration of exposure : 90 days  
OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)

POLYETHYLENEPOLYAMINES (CAS: 68131-73-7)

Species : Rat

**11.1.2. Mixture**

No toxicological data available for the mixture.

**11.2. Information on other hazards**

**SECTION 12 : ECOLOGICAL INFORMATION**

Very toxic to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

**12.1. Toxicity**

**12.1.1. Substances**

METHANESULPHONIC ACID (CAS: 75-75-2)

Fish toxicity : LC50 = 73 mg/l  
Species : Oncorhynchus mykiss  
Duration of exposure : 96 h  
OCDE Ligne directrice 203 (Poisson, essai de toxicité aiguë)

Crustacean toxicity : EC50 = 260 mg/l

Species : *Daphnia magna*  
Duration of exposure : 48 h  
OCDE Ligne directrice 202 (*Daphnia* sp., essai d'immobilisation immédiate)

Algae toxicity :  
ECr50 >= 12 mg/l  
Species : *Selenastrum capricornutum*  
Duration of exposure : 72 h  
OCDE Ligne directrice 201 (Algues, Essai d'inhibition de la croissance)

NOEC = 5.8 mg/l  
Species : *Selenastrum capricornutum*  
Duration of exposure : 72 h  
OCDE Ligne directrice 201 (Algues, Essai d'inhibition de la croissance)

Aquatic plant toxicity :  
NOEC > 1 mg/l

1-PHENOXYPROPAN-2-OL (CAS: 770-35-4)

Fish toxicity :  
LC50 > 100 mg/l  
Duration of exposure : 96 h  
OCDE Ligne directrice 203 (Poisson, essai de toxicité aiguë)

Crustacean toxicity :  
EC50 > 100 mg/l  
Species : *Daphnia magna*  
Duration of exposure : 48 h  
OCDE Ligne directrice 202 (*Daphnia* sp., essai d'immobilisation immédiate)

Algae toxicity :  
ECr50 > 100 mg/l  
Species : *Scenedesmus subspicatus*  
Duration of exposure : 72 h  
Autres lignes directrices

Aquatic plant toxicity :  
ECr50 > 100 mg/l  
Duration of exposure : 72 h

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)

Fish toxicity :  
LC50 > 100 mg/l  
Species : *Oncorhynchus mykiss*  
Duration of exposure : 96 h  
OCDE Ligne directrice 203 (Poisson, essai de toxicité aiguë)

Crustacean toxicity :  
EC50 = 13 mg/l  
Species : *Daphnia magna*  
Duration of exposure : 48 h  
OCDE Ligne directrice 202 (*Daphnia* sp., essai d'immobilisation immédiate)

Algae toxicity :  
ECr50 = 4.4 mg/l  
Species : *Selenastrum capricornutum*  
Duration of exposure : 72 h  
OCDE Ligne directrice 201 (Algues, Essai d'inhibition de la croissance)

1,3-CYCLOHEXANEDIMETHANAMINE (CAS: 2579-20-6)

Fish toxicity :  
LC50 = 130 mg/l  
Species : *Leuciscus idus*  
Duration of exposure : 96 h  
OCDE Ligne directrice 203 (Poisson, essai de toxicité aiguë)

Crustacean toxicity :  
EC50 = 65.4 mg/l  
Species : *Daphnia magna*  
Duration of exposure : 48 h  
OCDE Ligne directrice 202 (*Daphnia* sp., essai d'immobilisation immédiate)

Algae toxicity :  
ECr50 = 58.4 mg/l  
Species : *Pseudokirchnerella subcapitata*  
Duration of exposure : 72 h

OCDE Ligne directrice 201 (Algues, Essai d'inhibition de la croissance)

NOEC = 14.4 mg/l

Species : *Pseudokirchnerella subcapitata*

Duration of exposure : 72 h

OCDE Ligne directrice 201 (Algues, Essai d'inhibition de la croissance)

#### REACTION PRODUCTS OF DI-, TRI AND TETRA-PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA (CAS: 9046-10-0)

Fish toxicity :

LC50 > 15 mg/l

Species : Others

Duration of exposure : 96 h

OCDE Ligne directrice 203 (Poisson, essai de toxicité aiguë)

Crustacean toxicity :

EC50 = 80 mg/l

Species : Others

Duration of exposure : 48 h

OCDE Ligne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)

#### BENZYL ALCOHOL (CAS: 100-51-6)

Fish toxicity :

LC50 = 460 mg/l

Species : *Pimephales promelas*

Duration of exposure : 96 h

OCDE Ligne directrice 203 (Poisson, essai de toxicité aiguë)

Crustacean toxicity :

EC50 = 230 mg/l

Species : *Daphnia magna*

Duration of exposure : 48 h

OCDE Ligne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)

NOEC = 51 mg/l

Species : *Daphnia magna*

Duration of exposure : 21 jours

OCDE Ligne directrice 211 (Daphnia magna, essai de reproduction)

Algae toxicity :

ECr50 = 770 mg/l

Species : *Pseudokirchnerella subcapitata*

Duration of exposure : 72 h

OCDE Ligne directrice 201 (Algues, Essai d'inhibition de la croissance)

NOEC = 310 mg/l

Duration of exposure : 72 h

OCDE Ligne directrice 201 (Algues, Essai d'inhibition de la croissance)

#### POLYETHYLENEPOLYAMINES (CAS: 68131-73-7)

Fish toxicity :

LC50 = 100 mg/l

Species : *Poecilia reticulata*

Duration of exposure : 96 h

Crustacean toxicity :

EC50 = 2.2 mg/l

Species : *Daphnia magna*

Duration of exposure : 48 h

Algae toxicity :

ECr50 = 0.23 mg/l

Species : *Pseudokirchnerella subcapitata*

Duration of exposure : 72 h

### 12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

### 12.2. Persistence and degradability

#### 12.2.1. Substances

##### METHANESULPHONIC ACID (CAS: 75-75-2)

Biodegradability :

Rapidly degradable.

## 1-PHENOXYPROPAN-2-OL (CAS: 770-35-4)

Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

## BENZYL ALCOHOL (CAS: 100-51-6)

Biodegradability : Rapidly degradable.

## PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)

Biodegradability : Non-rapidly degradable.

## 1,3-CYCLOHEXANEDIMETHANAMINE (CAS: 2579-20-6)

Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

## REACTION PRODUCTS OF DI-, TRI AND TETRA-PROPOXYLATED PROPANE-1.2-DIOL WITH AMMONIA (CAS: 9046-10-0)

Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

## POLYETHYLENEPOLYAMINES (CAS: 68131-73-7)

Biodegradability : Non-rapidly degradable.

**12.3. Bioaccumulative potential****12.3.1. Substances**

## METHANESULPHONIC ACID (CAS: 75-75-2)

Octanol/water partition coefficient : log K<sub>ow</sub> = -2.38

## 1-PHENOXYPROPAN-2-OL (CAS: 770-35-4)

Octanol/water partition coefficient : log K<sub>ow</sub> = 1.41

Bioaccumulation : BCF < 100

## BENZYL ALCOHOL (CAS: 100-51-6)

Octanol/water partition coefficient : log K<sub>ow</sub> = 1.1

## PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)

Octanol/water partition coefficient : log K<sub>ow</sub> = -1.13

## 1,3-CYCLOHEXANEDIMETHANAMINE (CAS: 2579-20-6)

Octanol/water partition coefficient : log K<sub>ow</sub> = 0.783  
OCDE Ligne directrice 107 (Coefficient de partage (n-octanol/eau): méthode par agitation en flacon)

## REACTION PRODUCTS OF DI-, TRI AND TETRA-PROPOXYLATED PROPANE-1.2-DIOL WITH AMMONIA (CAS: 9046-10-0)

Octanol/water partition coefficient : log K<sub>ow</sub> = 1.34

## POLYETHYLENEPOLYAMINES (CAS: 68131-73-7)

Octanol/water partition coefficient : log K<sub>ow</sub> = -3.67

**12.4. Mobility in soil**

No data available.

**12.5. Results of PBT and vPvB assessment**

No data available.

**12.6. Endocrine disrupting properties**

No data available.

**12.7. Other adverse effects**

No data available.

**German regulations concerning the classification of hazards for water (WGK, AwSV Annex I, KBws) :**

WGK 3 : Extremely hazardous for water.

**SECTION 13 : DISPOSAL CONSIDERATIONS**

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

**13.1. Waste treatment methods**

Do not pour into drains or waterways.

**Waste :**

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

**Soiled packaging :**

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

**Codes of wastes (Decision 2014/955/EC, Directive 2008/98/EEC on hazardous waste) :**

07 01 08 \* other still bottoms and reaction residues

**SECTION 14 : TRANSPORT INFORMATION**

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2023 - IMDG 2022 [41-22] - ICAO/IATA 2023 [64]).

**14.1. UN number or ID number**

2735

**14.2. UN proper shipping name**

UN2735=POLYAMINES, LIQUID, CORROSIVE, N.O.S.

(polyethylenepolyamines, 1,3-cyclohexanedimethanamine)

**14.3. Transport hazard class(es)**

- Classification :



8

**14.4. Packing group**

II

**14.5. Environmental hazards**

- Environmentally hazardous material :

**14.6. Special precautions for user**

| ADR/RID | Class | Code    | Pack gr. | Label    | Ident.   | LQ      | Provis. | EQ               | Cat.        | Tunnel |
|---------|-------|---------|----------|----------|----------|---------|---------|------------------|-------------|--------|
|         | 8     | C7      | II       | 8        | 80       | 1 L     | 274     | E2               | 2           | E      |
| IMDG    | Class | 2°Label | Pack gr. | LQ       | EMS      | Provis. | EQ      | Stowage Handling | Segregation |        |
|         | 8     | -       | II       | 1 L      | F-A, S-B | 274     | E2      | Category A       | SGG18 SG35  |        |
| IATA    | Class | 2°Label | Pack gr. | Passager | Passager | Cargo   | Cargo   | note             | EQ          |        |
|         | 8     | -       | II       | 851      | 1 L      | 855     | 30 L    | A3 A803          | E2          |        |
|         | 8     | -       | II       | Y840     | 0.5 L    | -       | -       | A3 A803          | E2          |        |

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

Marine pollutant (IMDG 3.1.2.9):(polyethylenepolyamines)

**14.7. Maritime transport in bulk according to IMO instruments**

No data available.

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**Classification and labelling information included in section 2:**

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2022/692 (ATP 18)

**Container information:**

Packaging to be fitted with child-resistant fastenings (see EC Regulation No. 1272/2008, Annex II, Part 3).

Containers to be fitted with a tactile warning of danger (see EC Regulation No. 1272/2008, Annex II, Part 3).

**Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):**

The mixture does not contain any substance restricted under Annex XVII of Regulation (EC) No. 1907/2006 (REACH):

<https://echa.europa.eu/substances-restricted-under-reach>.

**Explosives precursors :**

The mixture does not contain any substance subject to Regulation (EU) 2019/1148 on the marketing and use of explosives precursors.

**Particular provisions :**

No data available.

**German regulations concerning the classification of hazards for water (WGK, AwSV Annex I, KBws) :**

WGK 3 : Extremely hazardous for water.

**15.2. Chemical safety assessment**

No data available.

**SECTION 16 : OTHER INFORMATION**

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

**Wording of the phrases mentioned in section 3 :**

|      |                                                       |
|------|-------------------------------------------------------|
| H290 | May be corrosive to metals.                           |
| H302 | Harmful if swallowed.                                 |
| H312 | Harmful in contact with skin.                         |
| H314 | Causes severe skin burns and eye damage.              |
| H317 | May cause an allergic skin reaction.                  |
| H318 | Causes serious eye damage.                            |
| H319 | Causes serious eye irritation.                        |
| H332 | Harmful if inhaled.                                   |
| H335 | May cause respiratory irritation.                     |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H411 | Toxic to aquatic life with long lasting effects.      |
| H412 | Harmful to aquatic life with long lasting effects.    |

**Abbreviations and acronyms :**

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.

LC50 : The concentration of a test substance resulting in 50% lethality in a given period.

EC50 : The effective concentration of substance that causes 50% of the maximum response.

ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.

NOEC : The concentration with no observed effect.

REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.

ATE : Acute Toxicity Estimate

BW : Body Weight

DNEL : Derived No-Effect Level

PNEC : Predicted No-Effect Concentration

UFI : Unique formulation identifier.

STEL : Short-term exposure limit

TWA : Time Weighted Averages

TLV : Threshold Limit Value (exposure)

AEV : Average Exposure Value.

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK : Wassergefährdungsklasse (Water Hazard Class).

GHS05 : Corrosion

GHS07 : Exclamation mark

GHS09 : Environment

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.