# 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 : FIXMETAL

Product code : 312.
UFI : YX62-U02F-F00U-AS3W

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

Blocking

Fixing

Professional use

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

Registered company name : ORAPI.

Address : PARC INDUSTRIEL DE LA PLAINE DE L'AIN - 225 ALLEE DES CEDRES.01150.SAINT-VULBAS.FRANCE.

Telephone : 33-(0)4-74-40-20-20. Fax : 33-(0)4-74-40-20-21.

fds@orapi.com

### 1.4. Emergency telephone number : 33-(0)1-45-42-59-59.

Association/Organisation : INRS .

### Other emergency numbers

Emergency Action: In the event of a medical enquiry involving this product, please contact your doctor or local hospital accident and emergency department.

## |>SECTION 2 : HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

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

Skin irritation, Category 2 (Skin Irrit. 2, H315).

Eye irritation, Category 2 (Eye Irrit. 2, H319).

Skin sensitisation, Category 1 (Skin Sens. 1, H317).

Specific target organ toxicity (single exposure), Category 3 (STOT SE 3, H335).

Hazardous to the aquatic environment - Chronic hazard, Category 3 (Aquatic Chronic 3, H412).

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 :

GHS07

Signal Word :

WARNING

Product identifiers :

| | |
|---|---|
| EC 212-782-2 | 2-HYDROXYETHYL METHACRYLATE |
| EC 231-403-1 | ISOBORNYL METHACRYLATE |
| EC 201-254-7 | ALPHA, ALPHA-DIMETHYLBENZYL HYDROPEROXIDE |
| EC 810-703-1 | 2-PROPENOIC ACID, 2-METHYL-, 2-HYDROXYETHYL ESTER, REACTION PRODUCTS WITH PHOSPHORUS OXIDE |
| EC 204-055-3 | 2'-PHENYLACETOHYDRAZIDE |

Hazard statements :

| | |
|---|---|
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |
| H412 | Harmful to aquatic life with long lasting effects. |

Precautionary statements - Prevention :

| | |
|---|---|
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ ... |

Precautionary statements - Response :

| | |
|---|---|
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P312 | Call a POISON CENTER or doctor if you feel unwell. |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P337 + P313 | If eye irritation persists: Get medical advice/attention. |
| P362 + P364 | Take off contaminated clothing and wash it before reuse. |

### |> 2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 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 contains substances> = 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 | (EC) 1272/2008 | Note | % |
|---|---|---|---|
| INDEX: 607_124_00_X<br>CAS: 868-77-9<br>EC: 212-782-2<br>REACH: 01-2119490169-29<br><br>2-HYDROXYETHYL METHACRYLATE | GHS07<br>Wng<br>Skin Irrit. 2, H315<br>Skin Sens. 1, H317<br>Eye Irrit. 2, H319 | | 25 <= x % < 50 |
| INDEX: 1942<br>CAS: 7631-86-9<br>EC: 231-545-4<br>REACH: 01-2119379499-16<br><br>SILICON DIOXIDE | | [1]<br>[nano] | 2.5 <= x % < 10 |
| INDEX: 0106<br>CAS: 3290-92-4<br>EC: 221-950-4<br>REACH: 01-2119542176-41<br><br>TRIMETHACRYLATE DE TRIMETHYLOLPROPANE | GHS09<br>Aquatic Chronic 2, H411 | | 2.5 <= x % < 10 |
| INDEX: 0039<br>CAS: 7534-94-3<br>EC: 231-403-1<br><br>ISOBORNYL METHACRYLATE | GHS07<br>Wng<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>STOT SE 3, H335<br>Aquatic Chronic 3, H412 | | 2.5 <= x % < 10 |
| INDEX: 41637_38_1<br>CAS: 41637-38-1<br>EC: 609-946-4<br>REACH: 01-2119980659-17<br><br>ETHOXYLATED BISPHENOL A DIMETHACRYLATE | Aquatic Chronic 4, H413 | | 2.5 <= x % < 10 |
| INDEX: 617_002_00_8<br>CAS: 80-15-9<br>EC: 201-254-7<br>REACH: 01-2119475796-19<br><br>ALPHA, ALPHA-DIMETHYLBENZYL HYDROPEROXIDE | GHS06, GHS05, GHS09, GHS08, GHS02<br>Dgr<br>Org. Perox. E, H242<br>Acute Tox. 4, H302<br>Acute Tox. 4, H312<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>Acute Tox. 3, H331<br>STOT SE 3, H335<br>STOT RE 2, H373<br>Aquatic Chronic 2, H411 | | 1 <= x % < 2.5 |

| | | | |
|---|---|---|---|
| INDEX: 1187441_10_6<br>CAS: 1187441-10-6<br>EC: 810-703-1<br>REACH: 01-2120140608-57<br><br>2-PROPENOIC ACID, 2-METHYL-, 2-HYDROXYETHYL ESTER, REACTION PRODUCTS WITH PHOSPHORUS OXIDE | GHS05, GHS07<br>Dgr<br>Skin Sens. 1B, H317<br>Eye Dam. 1, H318 | | 0 <= x % < 1 |
| INDEX: 1242<br>CAS: 114-83-0<br>EC: 204-055-3<br><br>2'-PHENYLACETOHYDRAZIDE | GHS06<br>Dgr<br>Acute Tox. 3, H301<br>Skin Irrit. 2, H315<br>Skin Sens. 1, H317<br>Eye Irrit. 2, H319<br>STOT SE 3, H335 | | 0 <= x % < 1 |

**|> Specific concentration limits:**

| Identification | Specific concentration limits | ATE |
|---|---|---|
| INDEX: 617_002_00_8<br>CAS: 80-15-9<br>EC: 201-254-7<br>REACH: 01-2119475796-19<br><br>ALPHA, ALPHA-DIMETHYLBENZYL HYDROPEROXIDE | Skin Corr. 1B: H314 C>= 10%<br>Skin Irrit. 2: H315 3% <= C < 10%<br>Eye Dam. 1: H318 C>= 3%<br>Eye Irrit. 2: H319 1% <= C < 3%<br>STOT SE 3: H335 C>= 1% | oral: ATE = 382 mg/kg BW |
| INDEX: 1242<br>CAS: 114-83-0<br>EC: 204-055-3<br><br>2'-PHENYLACETOHYDRAZIDE | | oral: ATE = 270 mg/kg BW |

**|> Nanoform**

| Identification | Nanoform |
|---|---|
| INDEX: 1942<br>CAS: 7631-86-9<br>EC: 231-545-4<br>REACH: 01-2119379499-16<br><br>SILICON DIOXIDE | Name of nanoform(s):<br><br>Number based particle size distribution:<br>d10 :<br>d50 :<br>d90 :<br>Shape and aspect ratio of particles:<br><br>Crystallinity:<br>Surface functionalisation / treatment:<br>Process:<br>Specific surface area: 175 - 225 m2/g<br>Additional information: |

**|> Information on ingredients :**

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

[Nano] Nanoform.

[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 :**

In the event of massive inhalation, remove the person exposed to fresh air. Keep warm and at rest.

If the person is unconscious, place in recovery position. Notify a doctor in all events, to ascertain whether observation and supportive hospital care will be necessary.

If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

Consult a doctor in case of disorder.

**|> In the event of splashes or contact with eyes :**

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

If there is any redness, pain or visual impairment, consult an ophthalmologist.

Consult a specialist.

**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.

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

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

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

Consult a doctor if irritation occurs.

**|> 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 and consult a doctor.

Seek medical attention immediately, showing the label.

Do not induce vomiting.

**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**

No data available.

## |>SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

**5.1. Extinguishing media**

**Suitable methods of extinction**

In the event of a fire, use :

- powder
- foam
- carbon dioxide ($CO_2$)

**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 ($CO_2$)

**5.3. Advice for firefighters**

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

## 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 inhaling the vapors.

Avoid any contact with the skin and eyes.

If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

**For first aid worker**

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

**6.2. Environmental precautions**

Prevent any material from entering drains or waterways.

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

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.

Avoid contact with skin, eyes and clothings.

Do not breathe vapors, fumes, mists.

**Fire prevention :**

Handle in well-ventilated areas.

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.

Avoid inhaling vapors. Carry out any industrial operation which may give rise to this in a sealed apparatus.

Provide vapor extraction at the emission source and also general ventilation of the premises.

Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions.

In all cases, recover emissions at source.

Avoid skin and eye contact with this mixture.

**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 the container tightly closed in a dry, well-ventilated place.

Store away from heat, weather, moisture and frost.

**Packaging**

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

### 7.3. Specific end use(s)

No data available.

## |>SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

### |> 8.1. Control parameters

**|> Occupational exposure limits :**

- Germany - AGW (BAuA - TRGS 900, 08/08/2019) :

| CAS | VME : | VME : | Excess | Notes |
|---|---|---|---|---|
| 7631-86-9 | | 4E mg/m³ | | |

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

ALPHA, ALPHA-DIMETHYLBENZYL HYDROPEROXIDE (CAS: 80-15-9)

**|> Final use:** **Workers.**

| | |
|---|---|
| Exposure method: | Inhalation. |
| Potential health effects: | Long term systemic effects. |
| DNEL : | 6 mg of substance/m3 |

2-HYDROXYETHYL METHACRYLATE (CAS: 868-77-9)

**Final use:** **Workers.**

| | |
|---|---|
| Exposure method: | Dermal contact. |
| Potential health effects: | Long term systemic effects. |
| DNEL : | 1.3 mg/kg body weight/day |
| Exposure method: | Inhalation. |
| Potential health effects: | Long term systemic effects. |
| DNEL : | 4.9 mg of substance/m3 |

| **Final use:** | **Consumers.** |
|---|---|
| Exposure method: | Ingestion. |
| Potential health effects: | Long term systemic effects. |
| DNEL : | 0.83 mg/kg body weight/day |
| Exposure method: | Dermal contact. |
| Potential health effects: | Long term systemic effects. |
| DNEL : | 0.83 mg/kg body weight/day |
| Exposure method: | Inhalation. |
| Potential health effects: | Long term systemic effects. |
| DNEL : | 2.9 mg of substance/m3 |

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

ALPHA, ALPHA-DIMETHYLBENZYL HYDROPEROXIDE (CAS: 80-15-9)

| | |
|---|---|
| Environmental compartment: | Soil. |
| PNEC : | 0.0029 mg/kg |
| Environmental compartment: | Fresh water. |
| PNEC : | 0.0031 mg/l |
| Environmental compartment: | Sea water. |
| PNEC : | 0.00031 mg/l |
| Environmental compartment: | Intermittent waste water. |
| PNEC : | 0.031 mg/l |
| Environmental compartment: | Fresh water sediment. |
| PNEC : | 0.023 mg/kg |
| Environmental compartment: | Marine sediment. |
| PNEC : | 0.0023 mg/kg |
| Environmental compartment: | Waste water treatment plant. |
| PNEC : | 0.35 mg/l |

TRIMETHACRYLATE DE TRIMETHYLOLPROPANE (CAS: 3290-92-4)

| | |
|---|---|
| Environmental compartment: | Soil. |
| PNEC : | 0.097 mg/kg |
| Environmental compartment: | Fresh water. |
| PNEC : | 2.76 µg/l |
| Environmental compartment: | Sea water. |
| PNEC : | 0.276 µg/l |
| Environmental compartment: | Intermittent waste water. |
| PNEC : | 0.02 mg/l |
| Environmental compartment: | Fresh water sediment. |
| PNEC : | 0.495 mg/kg |
| Environmental compartment: | Marine sediment. |
| PNEC : | 0.05 mg/kg |
| Environmental compartment: | Waste water treatment plant. |
| PNEC : | 10 mg/l |

2-HYDROXYETHYL METHACRYLATE (CAS: 868-77-9)

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

| | |
|---|---|
| PNEC : | 0.476 mg/kg |
| Environmental compartment: | Fresh water. |
| PNEC : | 0.482 mg/l |
| Environmental compartment: | Sea water. |
| PNEC : | 0.482 mg/l |
| Environmental compartment: | Intermittent waste water. |
| PNEC : | 1 mg/l |
| Environmental compartment: | Fresh water sediment. |
| PNEC : | 3.79 mg/kg |
| Environmental compartment: | Marine sediment. |
| PNEC : | 3.79 mg/kg |
| Environmental compartment: | Waste water treatment plant. |
| PNEC : | 10 mg/l |

**8.2. Exposure controls**

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

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))

**|> - 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.

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**

Avoid inhaling vapors.

If the ventilation is insufficient, wear appropriate breathing apparatus.

When workers are confronted with concentrations that are above occupational exposure limits, they must wear a suitable, approved, respiratory protection device.

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

- A1 (Brown)

## |>SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

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

**Physical state**

| | |
|---|---|
| Physical state : | Paste. |

**|> Colour**

N/A

**|> 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 : | Not relevant. |

**Auto-ignition temperature**

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

**Decomposition temperature**

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

**|> pH**

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

**|> Kinematic viscosity**

| | |
|---|---|
| Viscosity : | Not stated. |

**|> Solubility**

| | |
|---|---|
| Water solubility : | Insoluble. |
| 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 : | Not stated. |

**|> Relative vapour density**

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

### |> 9.2. Other information

No data available.

### |> 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 :

- heat
- exposure to light
- accumulation of electrostatic charges.

The product polymerizes in absence of oxygen.

**|> 10.5. Incompatible materials**

Keep away from :

- alkali metals
- peroxides
- amines
- radical initiators

**10.6. Hazardous decomposition products**

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO2)

## |>SECTION 11 : TOXICOLOGICAL INFORMATION

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

May cause irreversible damage to the skin; namely inflammation of the skin or the formation of erythema and eschar or oedema following exposure up to four hours.

May have reversible effects on the eyes, such as eye irritation which is totally reversible by the end of observation at 21 days.

Respiratory tract irritation may occur, together with symptoms such as coughing, choking and breathing difficulties.

May cause an allergic reaction by skin contact.

**11.1.1. Substances**

**|> Acute toxicity :**

2'-PHENYLACETOHYDRAZIDE (CAS: 114-83-0)

| | |
|---|---|
| Oral route : | LD50 = 270 mg/kg<br>Species : Mouse |

ALPHA, ALPHA-DIMETHYLBENZYL HYDROPEROXIDE (CAS: 80-15-9)

| | |
|---|---|
| Oral route : | LD50 = 382 mg/kg<br>Species : Rat |
| Dermal route : | LD50 <= 1520 mg/kg<br>Species : Rabbit |

SILICON DIOXIDE (CAS: 7631-86-9)

| | |
|---|---|
| Oral route : | LD50 >= 5000 mg/kg<br>Species : Rat<br>OECD Guideline 401 (Acute Oral Toxicity) |
| Dermal route : | LD50 >= 2000 mg/kg<br>Species : Rabbit<br>OECD Guideline 402 (Acute Dermal Toxicity) |

**11.1.2. Mixture**

No toxicological data available for the mixture.

## |>SECTION 12 : ECOLOGICAL INFORMATION

Harmful 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**

ALPHA, ALPHA-DIMETHYLBENZYL HYDROPEROXIDE (CAS: 80-15-9)

| | |
|---|---|
| Fish toxicity : | LC50 = 3.9 mg/l<br>Species : Oncorhynchus mykiss<br>Duration of exposure : 96 h |
| Crustacean toxicity : | EC50 = 18.84 mg/l<br>Duration of exposure : 48 h |
| Algae toxicity : | ECr50 = 3.1 mg/l<br>Species : Phaeodactylum tricornutum<br>Duration of exposure : 72 h |

ISOBORNYL METHACRYLATE (CAS: 7534-94-3)

| | |
|---|---|
| Fish toxicity : | LC50 = 1.79 mg/l<br>Species : Danio rerio<br>Duration of exposure : 96 h |
| Crustacean toxicity : | NOEC = 0.233 mg/l<br>Species : Daphnia magna<br>Duration of exposure : 21 days<br>OECD Guideline 211 (Daphnia magna Reproduction Test) |
| Algae toxicity : | ECr50 = 2.28 mg/l<br>Species : Pseudokirchnerella subcapitata<br>Duration of exposure : 72 h<br>OECD Guideline 201 (Alga, Growth Inhibition Test) |

TRIMETHACRYLATE DE TRIMETHYLOLPROPANE (CAS: 3290-92-4)

| | |
|---|---|
| Fish toxicity : | LC50 = 2 mg/l<br>Species : Oncorhynchus mykiss<br>Duration of exposure : 96 h<br>OECD Guideline 203 (Fish, Acute Toxicity Test) |
| Crustacean toxicity : | EC50 > 9.22 mg/l<br>Species : Daphnia magna<br>Duration of exposure : 48 h<br>OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Algae toxicity : | ECr50 = 3.88 mg/l<br>Species : Pseudokirchnerella subcapitata<br>Duration of exposure : 72 h<br>OECD Guideline 201 (Alga, Growth Inhibition Test)<br><br>NOEC = 0.177 mg/l<br>Species : Pseudokirchnerella subcapitata<br>Duration of exposure : 72 h<br>OECD Guideline 201 (Alga, Growth Inhibition Test) |

SILICON DIOXIDE (CAS: 7631-86-9)

| | |
|---|---|
| Fish toxicity : | LC50 > 10000 mg/l<br>Species : Brachydanio rerio<br>Duration of exposure : 96 h<br>OECD Guideline 203 (Fish, Acute Toxicity Test) |

2-HYDROXYETHYL METHACRYLATE (CAS: 868-77-9)

| | |
|---|---|
| Fish toxicity : | LC50 > 100 mg/l<br>Duration of exposure : 96 h<br>OECD Guideline 203 (Fish, Acute Toxicity Test) |
| Crustacean toxicity : | EC50 = 380 mg/l<br>Species : Daphnia magna |

Duration of exposure : 48 h
OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

NOEC > 10 mg/l
Species : Daphnia magna
OECD Guideline 211 (Daphnia magna Reproduction Test)

Algae toxicity : ECr50 = 836 mg/l
Duration of exposure : 72 h
OECD Guideline 201 (Alga, Growth Inhibition Test)

**12.1.2. Mixtures**

No aquatic toxicity data available for the mixture.

**12.2. Persistence and degradability**

|> **12.2.1. Substances**

ALPHA, ALPHA-DIMETHYLBENZYL HYDROPEROXIDE (CAS: 80-15-9)
Biodegradability : Non-rapidly degradable.

ISOBORNYL METHACRYLATE (CAS: 7534-94-3)
Biodegradability : Rapidly degradable.

TRIMETHACRYLATE DE TRIMETHYLOLPROPANE (CAS: 3290-92-4)
Biodegradability : Non-rapidly degradable.

2-HYDROXYETHYL METHACRYLATE (CAS: 868-77-9)
Biodegradability : Rapidly degradable.

**12.3. Bioaccumulative potential**

|> **12.3.1. Substances**

ALPHA, ALPHA-DIMETHYLBENZYL HYDROPEROXIDE (CAS: 80-15-9)
Bioaccumulation : BCF < 1

**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.

## 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, preferably 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.

## SECTION 14 : TRANSPORT INFORMATION

Exempt from transport classification and labelling.

**14.1. UN number or ID number**

-

**14.2. UN proper shipping name**

-

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

-

**14.4. Packing group**

-

**14.5. Environmental hazards**

-

**14.6. Special precautions for user**

-

## |>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. 2021/643 (ATP 16)
- EU Regulation No. 1272/2008 amended by EU Regulation No. 2021/849 (ATP 17)

**- Container information:**

No data available.

**- Particular provisions :**

No data available.

**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 :**

| | |
|---|---|
| H242 | Heating may cause a fire. |
| H301 | Toxic if swallowed. |
| 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 irritation. |
| H331 | Toxic if inhaled. |
| H335 | May cause respiratory irritation. |
| H373 | May cause damage to organs through prolonged or repeated exposure . |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |
| H413 | May cause long lasting harmful effects to aquatic life. |

**|> Abbreviations :**

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
TMP : French Occupational Illness table
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 : Wassergefahrdungsklasse (Water Hazard Class).
GHS07 : Exclamation mark
PBT: Persistent, bioaccumulable and toxic.
vPvB : Very persistent, very bioaccumulable.
SVHC : Substances of very high concern.
|> Modification compared to the previous version