



according to Regulation (EC) No 1907/2006

**Kisling - 4451** 

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

#### 1.1. Product identifier

Kisling - 4451

UFI: TDA0-K06H-W00T-3KQF

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

#### Use of the substance/mixture

Adhesives and sealants

#### Uses advised against

No information available.

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

Manufacturer

Company name: Kisling AG

Street: Motorenstrasse 102
Place: CH-8620 Wetzikon
Telephone: +41 58 272 0 272

E-mail: customerservice@kisling.com

Internet: www.kisling.com

Supplier

Company name: Kisling (Deutschland) GmbH

Street: Salzstraße 15
Place: D-74676 Niedernhall
Telephone: +49 7940 50961 61

E-mail: customerservice@kisling.com

Contact person: Dr. Hans Götz Telephone: +49 7940 5096 143

E-mail: compliance@kisling.com

Internet: www.kisling.com

1.4. Emergency telephone 24 hr. emergency phone number +1 872 5888271 (KAR)

number: Medicines & Poisons Info Office +356 2545 6508

# **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

### Regulation (EC) No 1272/2008

Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317 STOT SE 3; H335 Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

# 2.2. Label elements

# Regulation (EC) No 1272/2008

# Hazard components for labelling

Methacrylic acid, monoester with propane-1,2-diol

acrylic acid; prop-2-enoic acid

alpha,alpha-dimethylbenzyl hydroperoxide; cumene hydroperoxide

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane

Signal word: Danger





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# Pictograms:





#### **Hazard statements**

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.
 H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

#### **Precautionary statements**

P261 Avoid breathing Vapour.

P280 Wear protective gloves and eye/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.

#### Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:





# **Hazard statements**

H317-H318-H412

#### **Precautionary statements**

P261-P280-P305+P351+P338-P310-P333+P313-P362+P364

# **SECTION 3: Composition/information on ingredients**

## 3.2. Mixtures

# **Chemical characterization**

Mixture of substances listed below with nonhazardous components.



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#### **Hazardous components**

| CAS No     | Chemical name   |   |                    | Quantity    |
|------------|---|---|--------------------|-------------|
|            | EC No   | Index No  | REACH No           |             |
|            | Classification (Regulation (EC) No                                | 1272/2008)  |                    |             |
| 27813-02-1 | Methacrylic acid, monoester with p                                | ropane-1,2-diol   |                    | 15 - < 30 % |
|            | 248-666-3   |   |                    |             |
|            | Eye Irrit. 2, Skin Sens. 1; H319 H3                               | 17  | •                  |             |
| 79-10-7    | acrylic acid; prop-2-enoic acid                                   |   |                    | 1 - < 5 %   |
|            | 201-177-9   | 607-061-00-8  |                    |             |
|            |   | ox. 4, Acute Tox. 4, Skin Corr. 1A, E;<br>; H226 H332 H312 H302 H314 H318 |                    |             |
| 80-15-9    | alpha,alpha-dimethylbenzyl hydrop                                 |   | 1 - < 5 %          |             |
|            | 201-254-7   | 617-002-00-8  |                    |             |
|            | Org. Perox. E, Acute Tox. 3, Acute Chronic 2; H242 H331 H312 H302 | Tox. 4, Acute Tox. 4, Skin Corr. 1B, H314 H373 H411                       | STOT RE 2, Aquatic |             |
| 2530-83-8  | [3-(2,3-epoxypropoxy)propyl]trimet                                | hoxysilane  |                    | 1 - < 5 %   |
|            | 219-784-2   |   | 01-2119513212-58   |             |
|            | Eye Dam. 1, Aquatic Chronic 3; H3                                 | 18 H412   |                    |             |
| 114-83-0   | 2-phenylacetohydrazide  |   |                    | 0.1 - < 1 % |
|            | 204-055-3   |   |                    |             |
|            | Acute Tox. 3; H301  |   |                    |             |

Full text of H and EUH statements: see section 16.

# Specific Conc. Limits, M-factors and ATE

| CAS No     | EC No          | Chemical name   | Quantity    |  |  |  |
|------------|----------------|---|-------------|--|--|--|
|            | Specific Conc. | Limits, M-factors and ATE   |             |  |  |  |
| 27813-02-1 | 248-666-3      | 248-666-3 Methacrylic acid, monoester with propane-1,2-diol   |             |  |  |  |
|            | dermal: LD50   | = > 5000 mg/kg  |             |  |  |  |
| 79-10-7    | 201-177-9      | acrylic acid; prop-2-enoic acid   | 1 - < 5 %   |  |  |  |
|            |                | 50 = > 5,1 mg/l (vapours); inhalation: ATE = 1.5 mg/l (dusts or mists); dermal: 0 mg/kg; oral: LD50 = ca. 1000 - < 2000 mg/kg STOT SE 3; H335: >= 1 - 100 |             |  |  |  |
| 80-15-9    | 201-254-7      | alpha,alpha-dimethylbenzyl hydroperoxide; cumene hydroperoxide  | 1 - < 5 %   |  |  |  |
|            | 1100 mg/kg; o  | E = 3 mg/l (vapours); inhalation: ATE = 0.5 mg/l (dusts or mists); dermal: ATE = ral: LD50 = 382 mg/kg  |             |  |  |  |
| 2530-83-8  | 219-784-2      | [3-(2,3-epoxypropoxy)propyl]trimethoxysilane  | 1 - < 5 %   |  |  |  |
|            | dermal: LD50   | = 4248 mg/kg; oral: LD50 = 8025 mg/kg   |             |  |  |  |
| 114-83-0   | 204-055-3      | 2-phenylacetohydrazide  | 0.1 - < 1 % |  |  |  |
|            | oral: LD50 = 2 | .70 mg/kg   |             |  |  |  |

# **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

# **General information**

Take off immediately all contaminated clothing.

#### After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Medical treatment necessary. When in doubt or if symptoms are observed, get medical advice.



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#### After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary. After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.

#### After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing.

#### After ingestion

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink 1 glass of of water. Do NOT induce vomiting. Get immediate medical advice/attention.

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

No further relevant information available.

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

Treat symptomatically. No further relevant information available.

# **SECTION 5: Firefighting measures**

# 5.1. Extinguishing media

#### Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings. Co-ordinate fire-fighting measures to the fire surroundings.

#### Unsuitable extinguishing media

No information available.

# 5.2. Special hazards arising from the substance or mixture

In case of fire and/or explosion do not breathe fumes.

#### 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

#### Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

## **SECTION 6: Accidental release measures**

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

#### General advice

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Provide adequate ventilation. Wear breathing apparatus if exposed to vapours/dusts/aerosols.

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

# 6.3. Methods and material for containment and cleaning up

# For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

# 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

## **SECTION 7: Handling and storage**



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#### 7.1. Precautions for safe handling

#### Advice on safe handling

No special handling advices are necessary.

#### Advice on protection against fire and explosion

No special fire protection measures are necessary.

#### Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

#### Further information on handling

Keep only in the original container in a cool, well-ventilated place.

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

# Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations.

# Hints on joint storage

none

# Further information on storage conditions

Store in a cool dry place. Protect from direct sunlight.

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

No further relevant information available.

# **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

# Occupational exposure limit values

| CAS No  | Name of agent                   | ppm | mg/m³ | fib/cm³ | Category     | Origin |
|---------|---------------------------------|-----|-------|---------|--------------|--------|
| 79-10-7 | Acrylic acid; Prop-2-enoic acid | 10  | 29    |         | TWA (8 h)    |        |
|         |                                 | 20  | 59    |         | STEL (1 min) |        |



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# **DNEL/DMEL values**

| CAS No      | Name of agent                                     |                |          |                  |
|-------------|---|----------------|----------|------------------|
| DNEL type   |   | Exposure route | Effect   | Value            |
| 27813-02-1  | Methacrylic acid, monoester with propane-1,2-diol |                |          |                  |
| Worker DNEL | , long-term                                       | inhalation     | systemic | 14,7 mg/m³       |
| Worker DNEL | , long-term                                       | dermal         | systemic | 4,2 mg/kg bw/day |
| Consumer DN | IEL, long-term                                    | inhalation     | systemic | 4,35 mg/m³       |
| Consumer DN | IEL, long-term                                    | dermal         | systemic | 2,5 mg/kg bw/day |
| Consumer DN | IEL, long-term                                    | oral           | systemic | 2,5 mg/kg bw/day |
| 79-10-7     | acrylic acid; prop-2-enoic acid                   |                |          |                  |
| Worker DNEL | , long-term                                       | inhalation     | systemic | 30 mg/m³         |
| Worker DNEL | , acute   | inhalation     | systemic | 30 mg/m³         |
| Worker DNEL | , long-term                                       | inhalation     | local    | 30 mg/m³         |
| Worker DNEL | , acute   | inhalation     | local    | 30 mg/m³         |
| Consumer DN | IEL, long-term                                    | inhalation     | systemic | 3,6 mg/m³        |
| Consumer DN | IEL, acute  | inhalation     | systemic | 3,6 mg/m³        |
| Consumer DN | IEL, long-term                                    | inhalation     | local    | 3,6 mg/m³        |
| Consumer DN | IEL, acute  | inhalation     | local    | 3,6 mg/m³        |
| Consumer DN | IEL, long-term                                    | oral           | systemic | 0,4 mg/kg bw/day |
| Consumer DN | IEL, acute  | oral           | systemic | 1,2 mg/kg bw/day |
| 2530-83-8   | [3-(2,3-epoxypropoxy)propyl]trimethoxysilane      |                |          |                  |
| Worker DNEL | , long-term                                       | inhalation     | systemic | 70.5 mg/m³       |
| Worker DNEL | , long-term                                       | dermal         | systemic | 10 mg/kg bw/day  |
| Consumer DN | IEL, long-term                                    | inhalation     | systemic | 17 mg/m³         |
| Consumer DN | IEL, acute  | inhalation     | systemic | 26400 mg/m³      |
| Consumer DN | IEL, long-term                                    | dermal         | systemic | 5 mg/kg bw/day   |
| Consumer DN | IEL, long-term                                    | oral           | systemic | 5 mg/kg bw/day   |



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#### **PNEC values**

| CAS No              | Name of agent                                     |             |
|---------------------|---|-------------|
| Environment         | al compartment                                    | Value       |
| 27813-02-1          | Methacrylic acid, monoester with propane-1,2-diol | ·           |
| Freshwater          | ·   | 0,904 mg/l  |
| Freshwater (        | intermittent releases)                            | 0,972 mg/l  |
| Marine water        |   | 0,09 mg/l   |
| Freshwater s        | sediment  | 6,28 mg/kg  |
| Marine sedin        | nent  | 6,28 mg/kg  |
| Micro-organi        | sms in sewage treatment plants (STP)              | 10 mg/l     |
| Soil                |   | 0,727 mg/kg |
| 79-10-7             | acrylic acid; prop-2-enoic acid                   |             |
| Freshwater          |   | 0,003 mg/l  |
| Freshwater (        | intermittent releases)                            | 0,001 mg/l  |
| Marine water        | r   | 0,0003 mg/l |
| Freshwater sediment |   | 0,024 mg/kg |
| Marine sediment     |   | 0,002 mg/kg |
| Secondary p         | oisoning  | 30 mg/kg    |
| Micro-organi        | sms in sewage treatment plants (STP)              | 0,9 mg/l    |
| Soil                |   | 1 mg/kg     |
| 2530-83-8           | [3-(2,3-epoxypropoxy)propyl]trimethoxysilane      |             |
| Freshwater          |   | 0.45 mg/l   |
| Freshwater (        | intermittent releases)                            | 0.45 mg/l   |
| Marine water        | r   | 0.045 mg/l  |
| Freshwater s        | sediment  | 1.6 mg/kg   |
| Marine sedin        | nent  | 0.16 mg/kg  |
| Micro-organi        | sms in sewage treatment plants (STP)              | 8.2 mg/l    |
| Soil                |   | 0.063 mg/kg |

## 8.2. Exposure controls





# Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

# Individual protection measures, such as personal protective equipment

# Eye/face protection

Suitable eye protection: goggles.

# **Hand protection**

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Tested protective gloves must be worn.

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For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

#### Skin protection

Wear suitable protective clothing. The type of personal protection equipment has to be chosen based on the concentration and amount of the dangerous substance at the workplace.

#### Respiratory protection

In case of inadequate ventilation wear respiratory protection. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

## **SECTION 9: Physical and chemical properties**

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

Physical state:

Colour:

Odour:

Odour:

Odour threshold:

Description:

Liquid
green
characteristic
not determined

Test method

Melting point/freezing point:

Boiling point or initial boiling point and

not determined
not determined

boiling range:

Flammability: not applicable Lower explosion limits: not determined Upper explosion limits: not determined Flash point: >100 °C Auto-ignition temperature: not determined Decomposition temperature: not determined pH-Value (at 20 °C): 4-5 Viscosity / kinematic: not determined Water solubility: practically insoluble

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:

Vapour pressure:

Density (at 20 °C):

Relative density:

Relative vapour density:

not determined
not determined
not determined
not determined
not determined

#### 9.2. Other information

# Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive.

Oxidizing properties

The product is not: Spontaneously flammable.

# Other safety characteristics

Evaporation rate: not determined Solid content: not determined

Viscosity / dynamic: 2000 mPa·s Brookfield (3/20)

(at 20 °C)

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No further relevant information available.



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#### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

#### 10.3. Possibility of hazardous reactions

No known hazardous reactions.

#### 10.4. Conditions to avoid

The product is chemically stable under recommended conditions of storage, use and temperature.

# 10.5. Incompatible materials

No further relevant information available.

# 10.6. Hazardous decomposition products

No further relevant information available.

# **SECTION 11: Toxicological information**

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

#### Toxicocinetics, metabolism and distribution

No data available

## **Acute toxicity**

Based on available data, the classification criteria are not met.

# **ATEmix** calculated

ATE (oral) 9500 mg/kg; ATE (dermal) 20377 mg/kg; ATE (inhalation vapour) 118.5 mg/l; ATE (inhalation dust/mist) 18.05 mg/l



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| CAS No     | Chemical name  |                    |                   |         |                               |  |  |  |
|------------|--|--------------------|-------------------|---------|-------------------------------|--|--|--|
|            | Exposure route   | Dose               |                   | Species | Source                        | Method                                   |  |  |
| 27813-02-1 | Methacrylic acid, monoe  | ster with pro      | pane-1,2-dio      | ıl j    |                               |  |  |  |
|            | dermal   | LD50<br>mg/kg      | > 5000            | Rabbit  | Study report (1982)           | The test substance, as received, was hel |  |  |
| 79-10-7    | acrylic acid; prop-2-enoid                                     | c acid             |                   |         |                               |  |  |  |
|            | oral   | LD50<br>- < 2000 r | ca. 1000<br>ng/kg | Rat     | Study report (2015)           | OECD Guideline 423                       |  |  |
|            | dermal   | LD50<br>mg/kg      | > 2000            | Rabbit  | Study report (2011)           | OECD Guideline 402                       |  |  |
|            | inhalation (4 h) vapour  | LC50<br>mg/l       | > 5,1             | Rat     | Study report (1980)           | OECD Guideline 403                       |  |  |
|            | inhalation dust/mist   | ATE                | 1.5 mg/l          |         |                               |  |  |  |
| 80-15-9    | alpha,alpha-dimethylbenzyl hydroperoxide; cumene hydroperoxide |                    |                   |         |                               |  |  |  |
|            | oral   | LD50<br>mg/kg      | 382               | Rat     | IUCLID                        |  |  |  |
|            | dermal   | ATE<br>mg/kg       | 1100              |         |                               |  |  |  |
|            | inhalation vapour  | ATE                | 3 mg/l            |         |                               |  |  |  |
|            | inhalation dust/mist   | ATE                | 0.5 mg/l          |         |                               |  |  |  |
| 2530-83-8  | [3-(2,3-epoxypropoxy)pro                                       | opyl]trimeth       | oxysilane         |         |                               |  |  |  |
|            | oral   | LD50<br>mg/kg      | 8025              | Rat     | Pre-supplier/manufact<br>urer | OECD Guideline 401                       |  |  |
|            | dermal   | LD50<br>mg/kg      | 4248              | Rabbit  | Pre-supplier/manufact<br>urer | OECD 402                                 |  |  |
| 114-83-0   | 2-phenylacetohydrazide   |                    |                   |         |                               |  |  |  |
|            | oral   | LD50<br>mg/kg      | 270               | Mouse   | Pre-supplier/manufact<br>urer |  |  |  |

# Irritation and corrosivity

Causes skin irritation.

Causes serious eye damage.

#### Sensitising effects

May cause an allergic skin reaction. (Methacrylic acid, monoester with propane-1,2-diol)

# Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

# STOT-single exposure

May cause respiratory irritation. (acrylic acid; prop-2-enoic acid; alpha,alpha-dimethylbenzyl hydroperoxide; cumene hydroperoxide)

# STOT-repeated exposure

Based on available data, the classification criteria are not met.

#### **Aspiration hazard**

Based on available data, the classification criteria are not met.

# Specific effects in experiment on an animal

No data available

# Additional information on tests

No data available

#### **Practical experience**

May be harmful if swallowed, in contact with skin or if inhaled.



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# 11.2. Information on other hazards

# **Further information**

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

# **SECTION 12: Ecological information**

# 12.1. Toxicity

Harmful to aquatic life with long lasting effects.

| CAS No     | Chemical name                                |                |               |           |  |  |   |  |  |
|------------|--|----------------|---------------|-----------|--|--|---|--|--|
|            | Aquatic toxicity                             | Dose           |               | [h]   [d] | Species  | Source   | Method  |  |  |
| 27813-02-1 | Methacrylic acid, monoes                     | ter with prop  | pane-1,2-diol |           |  |  |   |  |  |
|            | Acute fish toxicity                          | LC50<br>mg/l   | > 100         | 96 h      | Oryzias latipes                                    | Study report<br>(1997)                         | OECD Guideline<br>203                         |  |  |
|            | Acute algae toxicity                         | ErC50<br>mg/l  | > 97,2        | 72 h      | Raphidocelis<br>subcapitata                        | REACh<br>Registration<br>Dossier               | OECD Guideline<br>201                         |  |  |
|            | Acute crustacea toxicity                     | EC50<br>mg/l   | > 143         | 48 h      | Daphnia magna                                      | REACh<br>Registration<br>Dossier               | OECD Guideline<br>202                         |  |  |
|            | Crustacea toxicity                           | NOEC<br>mg/l   | 45,2          | 21 d      | Daphnia magna                                      | REACh<br>Registration<br>Dossier               | OECD Guideline<br>211                         |  |  |
| 79-10-7    | acrylic acid; prop-2-enoic                   | acid           |               |           |  |  |   |  |  |
|            | Acute fish toxicity                          | LC50           | 27 mg/l       | 96 h      | Oncorhynchus mykiss                                | European Union<br>Risk Assessment<br>Report, 1 | EPA OTS<br>797.1400                           |  |  |
|            | Acute algae toxicity                         | ErC50<br>mg/l  | 0,13          | 72 h      | Desmodesmus subspicatus                            | Chemosphere 45: 653-658 (1994)                 | EU Method C.3                                 |  |  |
|            | Acute crustacea toxicity                     | EC50           | 95 mg/l       | 48 h      | Daphnia magna                                      | Chemosphere 40:<br>29 - 38 (1990)              | EPA OTS<br>797.1300                           |  |  |
|            | Fish toxicity                                | NOEC<br>mg/l   | >= 10,1       | 45 d      | Oryzias latipes                                    | REACh<br>Registration<br>Dossier               | OECD Guideline<br>210                         |  |  |
|            | Crustacea toxicity                           | NOEC           | 19 mg/l       | 21 d      | Daphnia magna                                      | Chemosphere 40: 29-38 (1996)                   | EPA OTS<br>797.1330                           |  |  |
| 2530-83-8  | [3-(2,3-epoxypropoxy)propyl]trimethoxysilane |                |               |           |  |  |   |  |  |
|            | Acute fish toxicity                          | LC50           | 55 mg/l       | 96 h      | Cyprinus carpio                                    | REACh<br>Registration<br>Dossier               | EU Method C.1                                 |  |  |
|            | Acute algae toxicity                         | ErC50          | 350 mg/l      | 96 h      | Raphidocelis<br>subcapitata                        | REACh<br>Registration<br>Dossier               | OECD Guideline<br>201                         |  |  |
|            | Acute crustacea toxicity                     | EC50           | 324 mg/l      | 48 h      | Simocephalus vetulus                               | REACh<br>Registration<br>Dossier               | USEPA. 1975.<br>Methods for Acute<br>Toxicity |  |  |
|            | Algae toxicity                               | NOEC           | 130 mg/l      | 4 d       | Daphnia magna (Big<br>water flea)                  |  | OECD 211                                      |  |  |
|            | Crustacea toxicity                           | NOEC           | 100 mg/l      | 21 d      | Daphnia magna                                      | REACh<br>Registration<br>Dossier               | OECD Guideline<br>211                         |  |  |
|            | Acute bacteria toxicity                      | (EC50<br>mg/l) | > 100         | 3 h       | activated sludge of a predominantly domestic sewag | REACh<br>Registration<br>Dossier               | OECD Guideline<br>209                         |  |  |

# 12.2. Persistence and degradability



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#### No data available

| CAS No    | Chemical name  |       |    |                            |
|-----------|--|-------|----|----------------------------|
|           | Method   | Value | d  | Source                     |
|           | Evaluation   | -     | -  |                            |
| 2530-83-8 | [3-(2,3-epoxypropoxy)propyl]trimethoxysilane           |       |    |                            |
|           | DOC; Die Away Test - 79/831/EWG Teil C.4-A             | 37%   | 28 | Pre-supplier/manufactur er |
|           | Not readily biodegradable (according to OECD criteria) |       | _  | _                          |

#### 12.3. Bioaccumulative potential

No data available

#### Partition coefficient n-octanol/water

| CAS No     | Chemical name                                     | Log Pow |
|------------|---|---------|
| 27813-02-1 | Methacrylic acid, monoester with propane-1,2-diol | 0,97    |
| 79-10-7    | acrylic acid; prop-2-enoic acid                   | 0,46    |
| 2530-83-8  | [3-(2,3-epoxypropoxy)propyl]trimethoxysilane      | 0.5     |

#### **BCF**

| CAS No  | Chemical name                   | BCF   | Species | Source               |
|---------|---------------------------------|-------|---------|----------------------|
| 79-10-7 | acrylic acid; prop-2-enoic acid | 3,162 |         | Unpublished calculat |

## 12.4. Mobility in soil

No further relevant information available.

# 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

# 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

## 12.7. Other adverse effects

No data available

#### **Further information**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

# **SECTION 13: Disposal considerations**

# 13.1. Waste treatment methods

# **Disposal recommendations**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

#### List of Wastes Code - residues/unused products

080410 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF

COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products);

waste adhesives and sealants other than those mentioned in 08 04 09

## List of Wastes Code - used product

080410 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF

COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products);

waste adhesives and sealants other than those mentioned in 08 04 09

#### List of Wastes Code - contaminated packaging



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080410 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF

COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products);

waste adhesives and sealants other than those mentioned in 08 04 09

#### Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

#### **SECTION 14: Transport information**

Land transport (ADR/RID)

14.1. UN number or ID number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number or ID number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number or ID number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

# 14.6. Special precautions for user

No information available.

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

not applicable

# **SECTION 15: Regulatory information**

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

# **EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40, Entry 75

2010/75/EU (VOC): 32.523 % (357.748 g/l)

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile

work protection guideline' (94/33/EC).

Water hazard class (D): 2 - obviously hazardous to water

# 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.





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#### **SECTION 16: Other information**

#### Abbreviations and acronyms

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

LIN: United Nations

CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate LC50: Lethal concentration, 50%

LD50: Lethal dose, 50% LL50: Lethal loading, 50% EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic vPvB: very persistent, very bioaccumulative

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Regulations concerning the international carriage of dangerous goods by rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

IMDG: International Maritime Code for Dangerous Goods

EmS: Emergency Schedules MFAG: Medical First Aid Guide

IATA: International Air Transport Association ICAO: International Civil Aviation Organization

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container VOC: Volatile Organic Compounds SVHC: Substance of Very High Concern

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety

assessment, chapter R.20 (Table of terms and abbreviations).

Org. Perox: Organic peroxide Flam. Liq: Flammable liquid Acute Tox: Acute toxicity Skin Corr: Skin corrosion Skin Irrit: Skin irritation Eye Dam: Eye damage Eye Irrit: Eye irritation Skin Sens: Skin sensitisation

STOT SE: Specific target organ toxicity - single exposure STOT RE: Specific target organ toxicity - repeated exposure

Aquatic Acute: Acute aquatic hazard Aquatic Chronic: Chronic aquatic hazard



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# Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

| Classification          | Classification procedure |
|-------------------------|--------------------------|
| Skin Irrit. 2; H315     | Calculation method       |
| Eye Dam. 1; H318        | Calculation method       |
| Skin Sens. 1; H317      | Calculation method       |
| STOT SE 3; H335         | Calculation method       |
| Aquatic Chronic 3; H412 | Calculation method       |

# Relevant H and EUH statements (number and full text)

|      | or otatomonto (nambor ana toxt)                                    |
|------|--|
| H226 | Flammable liquid and vapour.                                       |
| 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.  |
| H332 | Harmful if inhaled.  |
| H335 | May cause respiratory irritation.                                  |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H400 | Very toxic to aquatic life.  |
| H411 | Toxic to aquatic life with long lasting effects.                   |

Harmful to aquatic life with long lasting effects.

## **Further Information**

H412

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations. The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

# Identified uses

| No | Short title            | LCS   | SU                    | PC | PROC   | ERC              | AC   | TF  | Specification |
|----|------------------------|-------|-----------------------|----|--------|------------------|--|-----|---------------|
| 1  | Adhesives and sealants | PW, C | 6a, 6b, 12,<br>18, 19 | 1  | 11, 19 | 4, 8a, 8c,<br>8d | 4e, 4g, 5c,<br>6g, 7c, 7g,<br>8, 10, 11,<br>13 | 110 | K+D           |

SU: Sectors of use

AC: Article categories

PROC: Process categories

LCS: Life cycle stages
PC: Product categories
ERC: Environmental release categories

TF: Technical functions

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)