



# SAFETY DATA SHEET

5220 EPOXY Shield ® Sealer

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

### 1.1 Product identifier

**Product name** : 5220 EPOXY Shield ® Sealer  
**Product description** : Primer  
**Product type** : Liquid.

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

| Identified uses                                       |        |
|-------------------------------------------------------|--------|
| Industrial uses<br>Consumer uses<br>Professional uses |        |
| Uses advised against                                  | Reason |
| None identified.                                      | -      |

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

Rust-Oleum Europe - Martin Mathys NV, Kolenbergstraat 23, B-3545 Zelem, Belgium  
 Telephone no.: +32 (0) 13 460 200  
 Fax no.: +32 (0) 13 460 201

**e-mail address of person responsible for this SDS** : rpmeurohas@ro-m.com

### 1.4 Emergency telephone number

#### Supplier

**Telephone number** : +44 (0) 207 858 1228  
**Hours of operation** : 24 / 7

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

**Signal word** : No signal word.  
**Hazard statements** : No known significant effects or critical hazards.

#### Precautionary statements

## SECTION 2: Hazards identification

|                                                                                                                                           |                                                                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General</b>                                                                                                                            | : P102 - Keep out of reach of children.<br>P103 - Read label before use.<br>P101 - If medical advice is needed, have product container or label at hand.                                                                                                     |
| <b>Prevention</b>                                                                                                                         | : Not applicable.                                                                                                                                                                                                                                            |
| <b>Response</b>                                                                                                                           | : Not applicable.                                                                                                                                                                                                                                            |
| <b>Storage</b>                                                                                                                            | : Not applicable.                                                                                                                                                                                                                                            |
| <b>Disposal</b>                                                                                                                           | : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.                                                                                                                                   |
| <b>Supplemental label elements</b>                                                                                                        | : Contains a biocidal substance. Contains Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) and 2,4,7,9-tetramethyldec-5-yne-4,7-diol. May produce an allergic reaction. |
| <b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b> | : Not applicable.                                                                                                                                                                                                                                            |
| <b><u>Special packaging requirements</u></b>                                                                                              |                                                                                                                                                                                                                                                              |
| <b>Containers to be fitted with child-resistant fastenings</b>                                                                            | : Not applicable.                                                                                                                                                                                                                                            |
| <b>Tactile warning of danger</b>                                                                                                          | : Not applicable.                                                                                                                                                                                                                                            |

### 2.3 Other hazards

**Other hazards which do not result in classification** : None known.

## SECTION 3: Composition/information on ingredients

**3.2 Mixtures** : Mixture

| Product/ingredient name | Identifiers                                                                           | %   | <u>Classification</u><br>Regulation (EC) No. 1272/2008 [CLP]                                                                                                                                   | Type    |
|-------------------------|---------------------------------------------------------------------------------------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 2-butoxyethanol         | REACH #:<br>01-2119475108-36<br>EC: 203-905-0<br>CAS: 111-76-2<br>Index: 603-014-00-0 | ≤10 | Acute Tox. 4, H302<br>Acute Tox. 4, H312<br>Acute Tox. 4, H332<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br><br><b>See Section 16 for the full text of the H statements declared above.</b> | [1] [2] |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

#### Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- General** : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
- Eye contact** : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

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

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains 2,4,7,9-tetramethyldec-5-yne-4,7-diol, Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.

### Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

See toxicological information (Section 11)

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media** : Recommended: alcohol-resistant foam, CO<sub>2</sub>, powders, water spray.
- Unsuitable extinguishing media** : Do not use water jet.

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

## SECTION 5: Firefighting measures

**Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide

### 5.3 Advice for firefighters

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

**Additional information** : No unusual hazard if involved in a fire.

## SECTION 6: Accidental release measures

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

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.

**For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### 6.2 Environmental precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

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

**Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

### 6.4 Reference to other sections

: See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

The information in this section contains generic advice and guidance.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

: Due to the organic solvents content of the mixture:

Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.

Keep away from heat, sparks and flame. No sparking tools should be used.

Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Put on appropriate personal protective equipment (see Section 8).

Never use pressure to empty. Container is not a pressure vessel.

Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws.

#### Information on fire and explosion protection

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

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

Store in accordance with local regulations.

#### Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

#### Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight.

Keep container tightly closed.

Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

### 7.3 Specific end use(s)

**Recommendations** : Not available.

**Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 8.1 Control parameters

#### Occupational exposure limits

| Product/ingredient name | Exposure limit values                                                                                                            |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| 2-butoxyethanol         | <b>EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.</b><br>STEL: 50 ppm 15 minutes.<br>TWA: 25 ppm 8 hours. |

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance

## SECTION 8: Exposure controls/personal protection

documents for methods for the determination of hazardous substances will also be required.

### DNELs/DMELs

| Product/ingredient name | Type | Exposure              | Value                 | Population | Effects  |
|-------------------------|------|-----------------------|-----------------------|------------|----------|
| 2-butoxyethanol         | DNEL | Short term Inhalation | 426 mg/m <sup>3</sup> | Workers    | Systemic |
|                         | DNEL | Long term Dermal      | 38 mg/kg bw/day       | Workers    | Systemic |
|                         | DNEL | Long term Inhalation  | 49 mg/m <sup>3</sup>  | Workers    | Systemic |
|                         | DNEL | Short term Inhalation | 135 mg/m <sup>3</sup> | Consumers  | Systemic |
|                         | DNEL | Short term Inhalation | 50 mg/m <sup>3</sup>  | Consumers  | Local    |
|                         | DNEL | Long term Dermal      | 75 mg/kg bw/day       | Consumers  | Systemic |
|                         | DNEL | Long term Inhalation  | 20 mg/m <sup>3</sup>  | Consumers  | Systemic |
|                         | DNEL | Long term Oral        | 3,2 mg/kg bw/day      | Consumers  | Systemic |
|                         | DNEL | Short term Dermal     | 44,5 mg/kg bw/day     | Workers    | Systemic |
|                         | DNEL | Short term Oral       | 13,4 mg/kg bw/day     | Workers    | Systemic |
|                         | DNEL | Short term Inhalation | 123 mg/m <sup>3</sup> | Workers    | Local    |
|                         | DNEL | Long term Oral        | 3,2 mg/kg bw/day      | Workers    | Systemic |

### PNECs

| Product/ingredient name | Compartment Detail     | Value      | Method Detail |
|-------------------------|------------------------|------------|---------------|
| 2-butoxyethanol         | Fresh water            | 8,8 mg/l   | -             |
|                         | Marine                 | 0,88 mg/l  | -             |
|                         | Sewage Treatment Plant | 463 mg/l   | -             |
|                         | Fresh water sediment   | 34,6 mg/kg | -             |
|                         | Marine water sediment  | 3,46 mg/kg | -             |
|                         | Secondary Poisoning    | 2,8 mg/kg  | -             |

### 8.2 Exposure controls

**Appropriate engineering controls** : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction.

#### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: Recommended: safety glasses with side-shields (EN 166)

#### Skin protection

##### Hand protection

## SECTION 8: Exposure controls/personal protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

**Gloves** : For prolonged or repeated handling, use the following type of gloves:

Recommended: > 8 hours (breakthrough time): nitrile rubber (0.5mm) gloves.

The recommendation for the type or types of glove to use when handling this product is based on information from the following source:

EN 374-3 : 2003

The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: Wear overalls or long sleeved shirt. (EN 467)

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: organic vapour (Type A) and particulate filter (EN 140) .

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

- Physical state** : Liquid. [Emulsion.]
- Colour** : Not available.
- Odour** : Ammoniacal. [Slight]
- Odour threshold** : Not available.
- pH** : Not available.
- Melting point/freezing point** : 0°C
- Initial boiling point and boiling range** : >100°C
- Flash point** : [Product does not sustain combustion.]
- Evaporation rate** : <1 (butyl acetate = 1)
- Flammability (solid, gas)** : Non-flammable in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and shocks and mechanical impacts. Nonflammable, but will burn on prolonged exposure to flame or high temperature.

## SECTION 9: Physical and chemical properties

|                                                     |                                                                                                                                            |
|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Upper/lower flammability or explosive limits</b> | : Not applicable.                                                                                                                          |
| <b>Vapour pressure</b>                              | : 2.3 kPa [room temperature]                                                                                                               |
| <b>Vapour density</b>                               | : >1 [Air = 1]                                                                                                                             |
| <b>Relative density</b>                             | : 1,02                                                                                                                                     |
| <b>Solubility(ies)</b>                              | : Soluble in the following materials: cold water and hot water.<br>Very slightly soluble in the following materials: methanol and acetone. |
| <b>Partition coefficient: n-octanol/ water</b>      | : Not available.                                                                                                                           |
| <b>Auto-ignition temperature</b>                    | : Not available.                                                                                                                           |
| <b>Decomposition temperature</b>                    | : Not available.                                                                                                                           |
| <b>Viscosity</b>                                    | : Not available.                                                                                                                           |
| <b>Explosive properties</b>                         | : Not applicable.                                                                                                                          |
| <b>Oxidising properties</b>                         | : Not available.                                                                                                                           |

### 9.2 Other information

No additional information.

## SECTION 10: Stability and reactivity

|                                                |                                                                                                                                                                                         |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>10.1 Reactivity</b>                         | : No specific test data related to reactivity available for this product or its ingredients.                                                                                            |
| <b>10.2 Chemical stability</b>                 | : Stable under recommended storage and handling conditions (see Section 7).                                                                                                             |
| <b>10.3 Possibility of hazardous reactions</b> | : Under normal conditions of storage and use, hazardous reactions will not occur.                                                                                                       |
| <b>10.4 Conditions to avoid</b>                | : When exposed to high temperatures may produce hazardous decomposition products.                                                                                                       |
| <b>10.5 Incompatible materials</b>             | : Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.                                                        |
| <b>10.6 Hazardous decomposition products</b>   | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. If involved in a fire, toxic gases including CO, CO2 and smoke can be generated. |

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

#### Acute toxicity estimates

Not available.

#### Irritation/Corrosion

| Product/ingredient name | Result                   | Species | Score | Exposure                | Observation |
|-------------------------|--------------------------|---------|-------|-------------------------|-------------|
| 2-butoxyethanol         | Eyes - Moderate irritant | Rabbit  | -     | 24 hours 100 milligrams | -           |
|                         | Eyes - Severe irritant   | Rabbit  | -     | 100 milligrams          | -           |
|                         | Skin - Mild irritant     | Rabbit  | -     | 500 milligrams          | -           |

## SECTION 11: Toxicological information

### Conclusion/Summary

- Skin** : Based on available data, the classification criteria are not met.
- Eyes** : Based on available data, the classification criteria are not met.
- Respiratory** : Based on available data, the classification criteria are not met.

### Sensitisation

#### Conclusion/Summary

- Skin** : Based on available data, the classification criteria are not met.
- Respiratory** : Based on available data, the classification criteria are not met.

### Mutagenicity

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Carcinogenicity

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Reproductive toxicity

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Teratogenicity

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

#### Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

**General** : No known significant effects or critical hazards.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

- Other information** : Not available.

**SECTION 12: Ecological information****12.1 Toxicity**

There are no data available on the mixture itself.  
Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is not classified as hazardous to the environment.

| Product/ingredient name | Result                                         | Species                                            | Exposure |
|-------------------------|------------------------------------------------|----------------------------------------------------|----------|
| 2-butoxyethanol         | Acute EC50 1700 to 1940 mg/l                   | Daphnia spec. - Daphnia magna                      | 24 hours |
|                         | Acute EC50 >1000 mg/l Fresh water              | Daphnia spec. - Daphnia magna                      | 48 hours |
|                         | Acute LC50 1000 mg/l Marine water              | Crustaceans -<br>Chaetogammarus marinus -<br>Young | 48 hours |
|                         | Acute LC50 1000 to 800000 µg/l<br>Marine water | Crustaceans - Crangon crangon                      | 48 hours |
|                         | Acute LC50 1490000 µg/l Fresh water            | Fish - Lepomis macrochirus                         | 96 hours |
|                         | Acute LC50 1250000 µg/l Marine water           | Fish - Menidia beryllina                           | 96 hours |

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

**12.2 Persistence and degradability**

| Product/ingredient name | Test      | Result                      | Dose | Inoculum |
|-------------------------|-----------|-----------------------------|------|----------|
| 2-butoxyethanol         | OECD 301E | >70 % - Readily - 28 days   | -    | -        |
|                         | -         | 32,27 % - Inherent - 5 days | -    | -        |

**Conclusion/Summary** : This product has not been tested for biodegradation. Based on available data, the classification criteria are not met.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|------------|------------------|
| 2-butoxyethanol         | -                 | -          | Readily          |

**12.3 Bioaccumulative potential**

| Product/ingredient name | LogP <sub>ow</sub> | BCF | Potential |
|-------------------------|--------------------|-----|-----------|
| 2-butoxyethanol         | 0,81               | -   | low       |

**12.4 Mobility in soil**

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Mobility** : Nonvolatile liquid.

**12.5 Results of PBT and vPvB assessment**

**PBT** : Not applicable.

**vPvB** : Not applicable.

**12.6 Other adverse effects** : No known significant effects or critical hazards.

**SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance.

**13.1 Waste treatment methods****Product**

**SECTION 13: Disposal considerations**

- Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.
- Hazardous waste** : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.
- Disposal considerations** : Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

**European waste catalogue (EWC)**

The European Waste Catalogue classification of this product, when disposed of as waste, is:

| Waste code | Waste designation                                              |
|------------|----------------------------------------------------------------|
| 08 01 12   | waste paint and varnish other than those mentioned in 08 01 11 |

**Packaging**

- Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
- Disposal considerations** : Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in accordance with local or national legal provisions.
- Special precautions** : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

**SECTION 14: Transport information**

|                                        | ADR/RID        | ADN            | IMDG           | IATA           |
|----------------------------------------|----------------|----------------|----------------|----------------|
| <b>14.1 UN number</b>                  | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| <b>14.2 UN proper shipping name</b>    | -              | -              | -              | -              |
| <b>14.3 Transport hazard class(es)</b> | -              | -              | -              | -              |
| <b>14.4 Packing group</b>              | -              | -              | -              | -              |
| <b>14.5 Environmental hazards</b>      | No.            | No.            | No.            | No.            |
| <b>Additional information</b>          | -              | -              | -              | -              |

- 14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## SECTION 14: Transport information

## SECTION 15: Regulatory information

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

#### EU Regulation (EC) No. 1907/2006 (REACH)

##### Annex XIV - List of substances subject to authorisation

###### Annex XIV

None of the components are listed.

###### Substances of very high concern

None of the components are listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

#### Other EU regulations

**VOC** : The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the product label and/or technical data sheet for further information.

**VOC for Ready-for-Use Mixture** : IIA/i. One-pack performance coatings. EU limit value for this product : 140g/l (2010.) This product contains a maximum of 77 g/l VOC.

**Europe inventory** : All components are listed or exempted.

#### Ozone depleting substances (1005/2009/EU)

Not listed.

#### Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

#### Seveso Directive

This product is not controlled under the Seveso Directive.

The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

**References** : EH40/2005 Workplace exposure limits  
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2015/830

#### International regulations

##### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

##### Montreal Protocol (Annexes A, B, C, E)

Not listed.

##### Stockholm Convention on Persistent Organic Pollutants

Not listed.

##### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

##### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

**CN code** : 3209 10 00

**UFI Code** : QX20-C00H-U006-AVW1

## SECTION 15: Regulatory information

### International lists

#### National inventory

|                          |                                                                                                    |
|--------------------------|----------------------------------------------------------------------------------------------------|
| <b>Australia</b>         | : Not determined.                                                                                  |
| <b>Canada</b>            | : Not determined.                                                                                  |
| <b>China</b>             | : Not determined.                                                                                  |
| <b>Japan</b>             | : <b>Japan inventory (ENCS):</b> Not determined.<br><b>Japan inventory (ISHL):</b> Not determined. |
| <b>Malaysia</b>          | : Not determined.                                                                                  |
| <b>New Zealand</b>       | : Not determined.                                                                                  |
| <b>Philippines</b>       | : Not determined.                                                                                  |
| <b>Republic of Korea</b> | : Not determined.                                                                                  |
| <b>Taiwan</b>            | : Not determined.                                                                                  |
| <b>Turkey</b>            | : Not determined.                                                                                  |
| <b>United States</b>     | : Not determined.                                                                                  |

**15.2 Chemical safety assessment** : No Chemical Safety Assessment has been carried out.

## SECTION 16: Other information

Indicates information that has changed from previously issued version.

#### Abbreviations and acronyms

|   |                                                                                          |
|---|------------------------------------------------------------------------------------------|
| : | ATE = Acute Toxicity Estimate                                                            |
| : | CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] |
| : | DMEL = Derived Minimal Effect Level                                                      |
| : | DNEL = Derived No Effect Level                                                           |
| : | EUH statement = CLP-specific Hazard statement                                            |
| : | PBT = Persistent, Bioaccumulative and Toxic                                              |
| : | PNEC = Predicted No Effect Concentration                                                 |
| : | RRN = REACH Registration Number                                                          |
| : | vPvB = Very Persistent and Very Bioaccumulative                                          |

#### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

| Classification  | Justification |
|-----------------|---------------|
| Not classified. |               |

#### Full text of H-phrases referred to in sections 2 and 3

|                                               |                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                    |                                    |                    |                                      |                    |                                          |                    |                                                |                     |                                        |
|-----------------------------------------------|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------------------------|--------------------|--------------------------------------|--------------------|------------------------------------------|--------------------|------------------------------------------------|---------------------|----------------------------------------|
| <b>Full text of abbreviated H statements</b>  | :                                              | <table border="1"> <tr> <td>H302</td> <td>Harmful if swallowed.</td> </tr> <tr> <td>H312</td> <td>Harmful in contact with skin.</td> </tr> <tr> <td>H315</td> <td>Causes skin irritation.</td> </tr> <tr> <td>H319</td> <td>Causes serious eye irritation.</td> </tr> <tr> <td>H332</td> <td>Harmful if inhaled.</td> </tr> </table>                                                                                                                                                | H302               | Harmful if swallowed.              | H312               | Harmful in contact with skin.        | H315               | Causes skin irritation.                  | H319               | Causes serious eye irritation.                 | H332                | Harmful if inhaled.                    |
| H302                                          | Harmful if swallowed.                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                    |                                    |                    |                                      |                    |                                          |                    |                                                |                     |                                        |
| H312                                          | Harmful in contact with skin.                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                    |                                    |                    |                                      |                    |                                          |                    |                                                |                     |                                        |
| H315                                          | Causes skin irritation.                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                    |                                    |                    |                                      |                    |                                          |                    |                                                |                     |                                        |
| H319                                          | Causes serious eye irritation.                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                    |                                    |                    |                                      |                    |                                          |                    |                                                |                     |                                        |
| H332                                          | Harmful if inhaled.                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                    |                                    |                    |                                      |                    |                                          |                    |                                                |                     |                                        |
| <b>Full text of classifications [CLP/GHS]</b> | :                                              | <table border="1"> <tr> <td>Acute Tox. 4, H302</td> <td>ACUTE TOXICITY (oral) - Category 4</td> </tr> <tr> <td>Acute Tox. 4, H312</td> <td>ACUTE TOXICITY (dermal) - Category 4</td> </tr> <tr> <td>Acute Tox. 4, H332</td> <td>ACUTE TOXICITY (inhalation) - Category 4</td> </tr> <tr> <td>Eye Irrit. 2, H319</td> <td>SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2</td> </tr> <tr> <td>Skin Irrit. 2, H315</td> <td>SKIN CORROSION/IRRITATION - Category 2</td> </tr> </table> | Acute Tox. 4, H302 | ACUTE TOXICITY (oral) - Category 4 | Acute Tox. 4, H312 | ACUTE TOXICITY (dermal) - Category 4 | Acute Tox. 4, H332 | ACUTE TOXICITY (inhalation) - Category 4 | Eye Irrit. 2, H319 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 | Skin Irrit. 2, H315 | SKIN CORROSION/IRRITATION - Category 2 |
| Acute Tox. 4, H302                            | ACUTE TOXICITY (oral) - Category 4             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                    |                                    |                    |                                      |                    |                                          |                    |                                                |                     |                                        |
| Acute Tox. 4, H312                            | ACUTE TOXICITY (dermal) - Category 4           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                    |                                    |                    |                                      |                    |                                          |                    |                                                |                     |                                        |
| Acute Tox. 4, H332                            | ACUTE TOXICITY (inhalation) - Category 4       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                    |                                    |                    |                                      |                    |                                          |                    |                                                |                     |                                        |
| Eye Irrit. 2, H319                            | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                    |                                    |                    |                                      |                    |                                          |                    |                                                |                     |                                        |
| Skin Irrit. 2, H315                           | SKIN CORROSION/IRRITATION - Category 2         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                    |                                    |                    |                                      |                    |                                          |                    |                                                |                     |                                        |

**Date of printing** : 11/01/2018

**Date of issue/ Date of revision** : 10/01/2018

**Date of previous issue** : 10/01/2018

**Version** : 3

#### Notice to reader

## SECTION 16: Other information

The information in this Safety Data Sheet is based on the present state of knowledge and current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.