SAFETY DATA SHEET

Europe

Date of issue/Date of revision : 26 July 2024 Version



SECTION 1: Identification of the substance/mixture and of the company/ undertaking **1.1 Product identifier**

| Product name | : PHENGUARD SUBSEA 780 BASE RAL 7038 |
|----------------------------|--------------------------------------|
| Product code | : 000001201372 |
| Other means of identificat | tion |
| 00475728 | |
| | |

| 1.2 Relevant identified use | s of the substance or mixture and uses advised against |
|----------------------------------|---|
| Product use | : Professional applications, Used by spraying. |
| Use of the substance/ mixture | : Coating. |
| Uses advised against | : Product is not intended, labelled or packaged for consumer use. |

1.3 Details of the supplier of the safety data sheet

PPG Coatings Belgium BV/SRL Tweemontstraat 104 B-2100 Deurne Belgium Telephone +32-33606311 Fax +32-33606435

e-mail address of person : Product.Stewardship.EMEA@ppg.com responsible for this SDS

1.4 Emergency telephone number

Supplier

+31 20 4075210

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]

Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT RE 2, H373 Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

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

| Engl | lish | (GB) |
|------|------|------|
| | | |

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SECTION 2: Hazards identification

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

2.2 Label elements Hazard pictograms

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| Signal word | 1 | Danger | |
|---|----|---|--|
| Hazard statements | : | nmable liquid and vapour. uses skin irritation. / cause an allergic skin reaction. uses serious eye damage. / cause damage to organs through prolonged or repeated exposure. mful to aquatic life with long lasting effects. | |
| Prevention | : | Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not breathe vapour. | |
| Response | : | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor. | |
| Storage | : | Not applicable. | |
| Disposal | : | Dispose of contents and container in accordance with all local, regional, national and international regulations. | |
| | | P280, P210, P260, P305 + P351 + P338, P310, P501 | |
| Hazardous ingredients | : | Phenol, polymer with formaldehyde, glycidyl ether (MW<=700) 2-methylpropan-1-ol crystalline silica, respirable powder (<10 microns) Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | |
| Supplemental label elements | : | Contains epoxy constituents. May produce an allergic reaction. | |
| Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles | : | Not applicable. | |
| Special packaging requirem | en | <u>ts</u> | |
| Containers to be fitted with child-resistant fastenings | : | Not applicable. | |
| Tactile warning of danger | : | Not applicable. | |
| 2.3 Other hazards | | | |
| Product meets the criteria for PBT or vPvB | : | This mixture does not contain any substances that are assessed to be a PBT or a vPvB. | |
| Other hazards which do not result in classification | : | Prolonged or repeated contact may dry skin and cause irritation. | |
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| English (GB) | |
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SECTION 3: Composition/information on ingredients

| 3.2 Mixtures | : Mixture | | | | |
|---|---|----------------|--|---|---------|
| Product/ingredient name | Identifiers | % by weight | Classification | Specific Conc. Limits, M-factors and ATEs | Туре |
| Phenol, polymer with formaldehyde, glycidyl ether (MW<=700) | CAS: 28064-14-4 | ≥10 - <25 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411 | - | [1] |
| xylene | REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 | ≥10 - ≤15 | Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 3, H412 | ATE [Dermal] = 1700 mg/kg ATE [Inhalation (vapours)] = 11 mg/l | [1] [2] |
| 2-methylpropan-1-ol | REACH #: 01-2119484609-23 EC: 201-148-0 CAS: 78-83-1 Index: 603-108-00-1 | ≥1.0 - ≤4.6 | Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336 | - | [1] [2] |
| crystalline silica, respirable powder (<10 microns) | EC: 238-878-4 CAS: 14808-60-7 | ≥1.0 - ≤5.0 | STOT RE 1, H372 (inhalation) | - | [1] [2] |
| ethylbenzene | REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4 | ≥1.0 - ≤5.0 | Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412 | ATE [Inhalation (vapours)] = 17.8 mg/l | [1] [2] |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | REACH #: 01-2119979085-27 EC: 309-629-8 CAS: 100545-48-0 | ≤0.30 | Skin Sens. 1B, H317 Aquatic Chronic 3, H412 | - | [1] |
| | | | See Section 16 for the full text of the H statements declared above. | | |

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.

<u>Type</u>

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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

SUB codes represent substances without registered CAS Numbers.

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SECTION 4: First aid measures

4.1 Description of first aid measures

| Eye contact | Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention. | |
|----------------------------|---|--|
| 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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. | |

4.2 Most important symptoms and effects, both acute and delayed

| Potential acute health eff | <u>fects</u> |
|--------------------------------|---|
| Eye contact | : Causes serious eye damage. |
| Inhalation | : No known significant effects or critical hazards. |
| Skin contact | : Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction. |
| Ingestion | : No known significant effects or critical hazards. |
| <u>Over-exposure signs/syr</u> | mptoms |
| Eye contact | : Adverse symptoms may include the following: pain watering redness |
| Inhalation | : No specific data. |
| Skin contact | : Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur |
| Ingestion | : Adverse symptoms may include the following: stomach pains |
| 4.3 Indication of any imme | ediate 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. |

SECTION 5: Firefighting measures

| 5.1 Extinguishing media | |
|--------------------------------|--|
| Suitable extinguishing media | : Use dry chemical, CO ₂ , water spray (fog) or foam. |
| Unsuitable extinguishing media | : Do not use water jet. |

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| SECTION 5: Firefighting measures | | | | |
| 5.2 Special hazards arising fr | om the substance | or mixture | | |
| Hazards from the substance or mixture | a fire or if heated risk of a subseq effects. Fire wa | d and vapour. Runoff to sewer may cre d, a pressure increase will occur and the uent explosion. This material is harmfu ter contaminated with this material mus narged to any waterway, sewer or drain. | e container may burst, with the I to aquatic life with long lasting t be contained and prevented | |
| Hazardous combustion products | carbon oxides sulfur oxides | | | |
| 5.3 Advice for firefighters | | | | |
| Special precautions for fire-fighters | there is a fire. N training. Move c | the scene by removing all persons fron No action shall be taken involving any pe containers from fire area if this can be d re-exposed containers cool. | ersonal risk or without suitable | |
| Special protective equipment for fire-fighters | apparatus (SCB for fire-fighters (| ould wear appropriate protective equipm A) with a full face-piece operated in pos including helmets, protective boots and 9 will provide a basic level of protection | itive pressure mode. Clothing gloves) conforming to European | |

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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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). Water polluting material. May be harmful to the environment if released in large quantities. |
| 6.3 Methods and material for | containment and cleaning up |
| Small spill | : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. 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. Contaminated absorbent material may pose the same hazard as the spilt product. |

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| SECTION 6: Accidental release me | easures | |

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

7.1 Precautions for safe handling

| Protective measures | : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container. |
|--|--|
| Advice on general occupational hygiene | : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. |
| 7.2 Conditions for safe storage, including any incompatibilities | : Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use. |

7.3 Specific end use(s)

See Section 1.2 for Identified uses.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. 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

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SECTION 8: Exposure controls/personal protection

| Product/ingredient name | Exposure limit values |
|---|---|
| xylene | EU OEL (Europe, 1/2022). [xylene, mixed isomers] Absorbed |
| | through skin. |
| | STEL: 442 mg/m ³ 15 minutes. |
| | STEL: 100 ppm 15 minutes. |
| | TWA: 221 mg/m³ 8 hours. |
| | TWA: 50 ppm 8 hours. |
| 2-methylpropan-1-ol | ACGIH TLV (United States, 7/2023). |
| | TWA: 152 mg/m ³ 8 hours. |
| | TWA: 50 ppm 8 hours. |
| crystalline silica, respirable powder (<10 microns) | ACGIH TLV (United States, 7/2023). [Silica, crystalline] |
| | TWA: 0.025 mg/m ³ 8 hours. Form: Respirable |
| ethylbenzene | EU OEL (Europe, 1/2022). Absorbed through skin. |
| | STEL: 884 mg/m ³ 15 minutes. |
| | STEL: 200 ppm 15 minutes. |
| | TWA: 442 mg/m ³ 8 hours. |
| | TWA: 100 ppm 8 hours. |

Recommended monitoring procedures : 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 documents for methods for the determination of hazardous substances will also be required.

DNELs

| Product/ingredient name | Туре | Exposure | Value | Population | Effects |
|-------------------------|------|-----------------------|-------------------------|--------------------|----------|
| x ylene | DNEL | Long term Oral | 5 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 65.3 mg/m ³ | General population | |
| | DNEL | Long term Inhalation | 65.3 mg/m ³ | General population | Systemic |
| | DNEL | Long term Dermal | 125 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 212 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 221 mg/m ³ | Workers | Local |
| | DNEL | Long term Inhalation | 221 mg/m ³ | Workers | Systemic |
| | DNEL | Short term Inhalation | 260 mg/m ³ | General population | Local |
| | DNEL | Short term Inhalation | 260 mg/m ³ | General population | Systemic |
| | DNEL | Short term Inhalation | 442 mg/m ³ | Workers | Local |
| | DNEL | Short term Inhalation | 442 mg/m ³ | Workers | Systemic |
| 2-methylpropan-1-ol | DNEL | Long term Inhalation | 55 mg/m ³ | General population | Local |
| | DNEL | Long term Inhalation | 310 mg/m ³ | Workers | Local |
| ethylbenzene | DMEL | Long term Inhalation | 442 mg/m ³ | Workers | Local |
| - | DMEL | Short term Inhalation | 884 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Oral | 1.6 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 15 mg/m ³ | General population | Systemic |
| | DNEL | Long term Inhalation | 77 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Dermal | 180 mg/kg bw/day | Workers | Systemic |
| | DNEL | Short term Inhalation | 293 mg/m ³ | Workers | Local |
| Octadecanoic acid, | DNEL | Long term Inhalation | 0.055 mg/m ³ | General population | Local |
| 12-hydroxy-, reaction | | | | | |
| products with | | | | | |
| ethylenediamine | | | | | |
| | DNEL | Long term Inhalation | 0.308 mg/m³ | Workers | Local |

| English (GB) | Europe |
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SECTION 8: Exposure controls/personal protection

| Product/ingredient name | Туре | Compartment Detail | Value | Method Detail |
|-------------------------|------|------------------------|-----------------|--------------------------|
| xylene | - | Fresh water | 0.327 mg/l | - |
| - | - | Marine water | 0.327 mg/l | - |
| | - | Sewage Treatment Plant | 6.58 mg/l | - |
| | - | Fresh water sediment | 12.46 mg/kg dwt | - |
| | - | Marine water sediment | 12.46 mg/kg dwt | - |
| | - | Soil | 2.31 mg/kg | - |
| 2-methylpropan-1-ol | - | Fresh water | 0.4 mg/l | Assessment Factors |
| | - | Marine water | 0.04 mg/l | Assessment Factors |
| | - | Sewage Treatment Plant | 10 mg/l | Assessment Factors |
| | - | Fresh water sediment | 1.56 mg/kg dwt | Equilibrium Partitioning |
| | - | Marine water sediment | 0.156 mg/kg dwt | - |
| | - | Soil | 0.076 mg/kg dwt | Equilibrium Partitioning |
| ethylbenzene | - | Fresh water | 0.1 mg/l | Assessment Factors |
| - | - | Marine water | 0.01 mg/l | Assessment Factors |
| | - | Sewage Treatment Plant | 9.6 mg/l | Assessment Factors |
| | - | Fresh water sediment | 13.7 mg/kg dwt | Equilibrium Partitioning |
| | - | Marine water sediment | 1.37 mg/kg dwt | Equilibrium Partitioning |
| | - | Soil | 2.68 mg/kg dwt | Equilibrium Partitioning |
| | - | Secondary Poisoning | 20 mg/kg | - |

| 8.2 Exposure controls | | |
|-------------------------------------|---|---------|
| Appropriate engineering controls | Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep ga vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment. | N |
| Individual protection measu | <u>s</u> | |
| 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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. | |
| Eye/face protection | Chemical splash goggles and face shield. Use eye protection according to EN 166. | |
| Skin protection | | |
| Hand protection | Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. 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. | k ht |
| Gloves | butyl rubber | |

| Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) |) |
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SECTION 8: Exposure controls/personal protection

| 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. When there is a risk of ignition from static electricity, wear anti- static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods. |
|---------------------------------|--|
| 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 | : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Wear a respirator conforming to EN140. Filter type: organic vapour (Type A) and particulate filter P3 |
| 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

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

| Appearance | | | | | | | |
|---|-----|---|-----------------|---------------|--------------------------|--|--|
| Physical state | : 1 | Liquid. | | | | | |
| Colour | : (| Grey. | | | | | |
| Odour | : . | Aromatic. [Slight] | | | | | |
| Odour threshold | : 1 | Not available. | | | | | |
| Melting point/freezing point | (| | , | | | | |
| Initial boiling point and boiling range | : : | >37.78°C | | | | | |
| Flammability | : 1 | Not available. | | | | | |
| Upper/lower flammability or explosive limits | : | Greatest known range: Lower: 1.7% Upper: 10.9% (2-methylpropan-1-ol) | | | | | |
| Flash point | : (| Closed cup: 23°C | | | | | |
| Auto-ignition temperature | : | | | | | | |
| | Γ | Ingredient name | °C | °F | Method | | |
| | | 2-methylpropan-1-ol | 415 | 779 | | | |
| Decomposition temperature | : : | Stable under recommend | led storage and | handling cond | ditions (see Section 7). | | |
| ЪН | : 1 | Not applicable. | | | | | |
| Viscosity | : 1 | Kinematic (room temperature): >400 mm²/s Kinematic (40°C): >21 mm²/s | | | | | |
| viscosity | | Kinematic (40°C): >21 mi | m²/s | | | | |
| | | Kinematic (40°C): >21 mi | m²/s | | | | |
| | | Kinematic (40°C): >21 mi | m²/s | | | | |
| Viscosity Solubility(ies) Media cold water | | · · · | m²/s | | | | |

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SECTION 9: Physical and chemical properties

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Partition coefficient: n-octanol/ : Not applicable. water

Vapour pressure

| | | | Vapour Pressure at 20°C | | Vap | our press | sure at 50°C | |
|----------------------------|---|---|-------------------------|----------|-------------------|-----------|--------------|-------------|
| | | Ingredient name | mm Hg | kPa | Method | mm Hg | kPa | Method |
| | | 2-methylpropan-1-ol | <12.00102 | <1.6 | DIN EN 13016-2 | | | |
| Evaporation rate | : | Highest known valu butyl acetate | e: 0.84 (et | hylbenz | ene) Weighte | d averag | e: 0.75co | mpared with |
| Relative density | : | : 1.78 | | | | | | |
| Vapour density | : | Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.47 (Air = 1) | | | | | | |
| Explosive properties | : | The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible. | | | | | | |
| Oxidising properties | : | Product does not pr | esent an c | xidizing | j hazard. | | | |
| Particle characteristics | | | | | | | | |
| Median particle size | : | Not applicable. | | | | | | |
| 9.2 Other information | | | | | | | | |
| No additional information. | | | | | | | | |

SECTION 10: Stability and reactivity

| 10.1 Reactivity | : No specific test data related to reactivity available for this product or its ingredients. |
|--|---|
| 10.2 Chemical stability | : The product is stable. |
| 10.3 Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur. |
| 10.4 Conditions to avoid | : When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8. |
| 10.5 Incompatible materials | : Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids. |
| 10.6 Hazardous decomposition products | : Depending on conditions, decomposition products may include the following materials: carbon oxides sulfur oxides metal oxide/oxides |

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008 Acute toxicity Code : 000001201372

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SECTION 11: Toxicological information

| | D I | | | _ |
|--|---------------------------|---------|-------------|----------|
| Product/ingredient name | Result | Species | Dose | Exposure |
| xylene | LD50 Dermal | Rabbit | 1.7 g/kg | - |
| | LD50 Oral | Rat | 4.3 g/kg | - |
| 2-methylpropan-1-ol | LC50 Inhalation Vapour | Rat | 24.6 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | 2460 mg/kg | - |
| | LD50 Oral | Rat | 2830 mg/kg | - |
| ethylbenzene | LC50 Inhalation Vapour | Rat | 17.8 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | 17.8 g/kg | - |
| | LD50 Oral | Rat | 3.5 g/kg | - |
| Octadecanoic acid, 12-hydroxy-, reaction | LC50 Inhalation Dusts and | Rat | 5.05 mg/l | 4 hours |
| products with ethylenediamine | mists | | Ū, | |
| | LD50 Oral | Rat | >2000 mg/kg | - |

Conclusion/Summary : There are no data available on the mixture itself.

Acute toxicity estimates

| Route | ATE value | |
|----------------------|-------------|--|
| Dermal | 14952 mg/kg | |
| Inhalation (vapours) | 87.17 mg/l | |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|--------------------------|---------|-------|-----------------|-------------|
| xylene | Skin - Moderate irritant | Rabbit | - | 24 hours 500 mg | - |
| | | | | • | |

Conclusion/Summary

Skin

: There are no data available on the mixture itself.

Eyes

: There are no data available on the mixture itself.

- Respiratory
- : There are no data available on the mixture itself.

Sensitisation

| Product/ingredient name | Route of exposure | Species | Result |
|--|-------------------|------------|-------------|
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | skin | Guinea pig | Sensitising |
| Conclusion/Summary | | | <u>.</u> |

| Conclusion/Summary | |
|----------------------------|--|
| Skin | : There are no data available on the mixture itself. |
| Respiratory | : There are no data available on the mixture itself. |
| Mutagenicity | |
| Conclusion/Summary | : There are no data available on the mixture itself. |
| Carcinogenicity | |
| Conclusion/Summary | : There are no data available on the mixture itself. |
| Reproductive toxicity | |
| Conclusion/Summary | : There are no data available on the mixture itself. |
| Teratogenicity | |
| Conclusion/Summary | : There are no data available on the mixture itself. |
| Specific target organ toxi | <u>city (single exposure)</u> |
| | |

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| SECTION 11: Toxicological information |
|---------------------------------------|
|---------------------------------------|

| Product/ingr | edient name | Category | Route of exposure | Target organs |
|---|--|--|----------------------|--|
| xylene 2-methylpropan-1-ol | | Category 3 Category 3 Category 3 | - - | Respiratory tract irritation Respiratory tract irritation Narcotic effects |
| crystalline silica, respirable po ethylbenzene | owder (<10 microns) | Category 1 Category 2 | inhalation - | - hearing organs |
| Information on likely routes of exposure | : Not available. | | | |
| Potential acute health effect | s | | | |
| Inhalation | : No known significant | effects or critical ha | zards. | |
| Ingestion | : No known significant | effects or critical ha | zards. | |
| Skin contact | : Causes skin irritatior | | | n allergic skin reaction. |
| Eye contact | : Causes serious eye | • | , | 5 |
| Symptoms related to the ph | • | - | teristics | |
| Inhalation | : No specific data. | | | |
| Ingestion | : Adverse symptoms r stomach pains | may include the follow | wing: | |
| Skin contact | : Adverse symptoms r pain or irritation redness dryness cracking blistering may occur | nay include the follow | wing: | |
| Eye contact | : Adverse symptoms r pain watering redness | nay include the follo | wing: | |
| Delayed and immediate effe | cts as well as chronic of | effects from short a | and long-term ex | posure |
| 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 effe | | | | |
| Not available. | | | | |
| Conclusion/Summary | : Not available. | | | |
| General | repeated contact car | n defat the skin and I | ead to irritation, c | ed exposure. Prolonged or racking and/or dermatitis. n subsequently exposed to |
| Carcinogenicity | : No known significant | effects or critical ha | zards. | |
| Mutagenicity | : No known significant | effects or critical ha | zards. | |
| Reproductive toxicity | : No known significant | effects or critical ha | zards. | |
| English (GB) | | Europe | | 12/17 |

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SECTION 11: Toxicological information

Other information : Not available.

Prolonged or repeated contact may dry skin and cause irritation. Sanding and grinding dusts may be harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapour/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure |
|--|---------------------------------|---|----------|
| ✓methylpropan-1-ol | Acute EC50 1100 mg/l | Daphnia | 48 hours |
| ethylbenzene | Acute EC50 1.8 mg/l Fresh water | Daphnia | 48 hours |
| | Chronic NOEC 1 mg/l Fresh | Daphnia - | - |
| | water | Ceriodaphnia dubia | |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | Acute EC50 >100 mg/l | Algae - Pseudokirchneriella subcapitata | 72 hours |
| | Acute EC50 >10 mg/l | Daphnia - Daphnia magna | 48 hours |
| | Acute LC50 >10 mg/l | Fish - Oncorhynchus mykiss | 96 hours |

Conclusion/Summary : There are no data available on the mixture itself.

12.2 Persistence and degradability

| Product/ingredient name | Test | Result | Dose | Inoculum |
|---|--|--|------|----------|
| ethylbenzene Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | - 301D Ready Biodegradability - Closed Bottle Test | 79 % - Readily - 10 days 22 % - 28 days | - | - |

Conclusion/Summary : There are no data available on the mixture itself.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|---|-------------------|------------|--------------------------------|
| xylene ethylbenzene Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | - - - | - - | Readily Readily Inherent |

12.3 Bioaccumulative potential

Code<th::</th>:::<

SECTION 12: Ecological information

| Product/ingredient name | LogPow | BCF | Potential |
|--|---------------------------|--------------------------------|---------------------------|
| Vene 2-methylpropan-1-ol ethylbenzene Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | 3.12 1 3.6 >5.86 | 7.4 to 18.5 - 79.43 - | Low Low Low High |

12.4 Mobility in soil

| Soil/water partition | : | Not available. |
|----------------------|---|----------------|
| coefficient (Koc) | | |
| Mobility | : | Not available. |

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

Not available.

Т

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

| Product | |
|---------------------|---|
| 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 | : The classification of the product may meet the criteria for a hazardous waste. |

European waste catalogue (EWC)

| Waste code | Waste designation |
|---------------------|---|
| 08 01 11* | waste paint and varnish containing organic solvents or other hazardous substances |
| ackaging | |
| Methods of disposal | : The generation of waste should be avoided or minimised wherever possible. Waste |

| Type of packaging | European waste catalogue (EWC) |
|-------------------|---|
| Type of packaging | European waste catalogue (EWC) |
| | recycling is not feasible. |
| | packaging should be recycled. Incineration or landfill should only be considered when |

| Container | 15 01 06 | mixed packaging | |
|-----------|----------|-----------------|--|
| | | | |

| English (GB) | Europe | 14/17 |
|--------------|--------|-------|
| | | |

| Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) | |
|---|--|
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SECTION 13: Disposal considerations

Special precautions
 This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

| | ADR/RID | ADN | IMDG | IATA |
|------------------------------------|-----------------|-----------------|-----------------|-----------------|
| 14.1 UN number or ID number | UN1263 | UN1263 | UN1263 | UN1263 |
| 14.2 UN proper shipping name | PAINT | PAINT | PAINT | PAINT |
| 14.3 Transport hazard class(es) | 3 | 3 | 3 | 3 |
| 14.4 Packing group | III | III | III | III |
| 14.5 Environmental hazards | No. | Yes. | No. | No. |
| Marine pollutant substances | Not applicable. | Not applicable. | Not applicable. | Not applicable. |

Additional information

| Auditional info | |
|---|--|
| ADR/RID | This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.2.3.1.5.1. |
| Tunnel code | : (D/E) |
| ADN | : The product is only regulated as an environmentally hazardous substance when transported in tank vessels. This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.2.3.1.5.1. |
| IMDG | : This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5. |
| ΙΑΤΑ | : None identified. |
| 14.6 Special pre 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. |
| 14.7 Maritime tr bulk according instruments | • • • • |

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SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>EU Regulation (EC) No. 1907/2006 (REACH)</u>

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 : Not applicable. on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Explosive precursors : Not applicable.

Ozone depleting substances (1005/2009/EU)

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

| Category | |
|----------|--|
| P5c | |

15.2 Chemical safety

: No Chemical Safety Assessment has been carried out.

assessment

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] DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement PNEC = Predicted No Effect Concentration RRN = REACH Registration Number PBT = Persistent, Bioaccumulative and Toxic vPvB = Very Persistent and Very Bioaccumulative ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway IMDG = International Maritime Dangerous Goods

IATA = International Air Transport Association

Full text of abbreviated H statements

| Conforms to Regulation (EC) No. 1907/2006 (REACH), An | nex II, as amended by Commission Regulation (EU) |
|---|--|
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| SECTION 16: Other information | |
| H225 | Highly flammable liquid and vapour. |
| H226 | Flammable liquid and vapour. |
| H304 | May be fatal if swallowed and enters airways. |
| H312 | Harmful in contact with skin. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| H373 | May cause damage to organs through prolonged or repeated |
| | exposure. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |
| Full text of classifications [CLP/GHS] | |
| Acute Tox. 4 | ACUTE TOXICITY - Category 4 |
| Aquatic Chronic 2 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 |
| Aquatic Chronic 3 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 |
| Asp. Tox. 1 | ASPIRATION HAZARD - Category 1 |
| Eye Dam. 1 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 |
| Eye Irrit. 2 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 |
| Flam. Liq. 2 | FLAMMABLE LIQUIDS - Category 2 |
| Flam. Liq. 3 | FLAMMABLE LIQUIDS - Category 3 |
| Skin Irrit. 2 | SKIN CORROSION/IRRITATION - Category 2 |
| Skin Sens. 1 | SKIN SENSITISATION - Category 1 |
| Skin Sens. 1B | SKIN SENSITISATION - Category 1B |
| STOT RE 1 | SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - |
| | Category 1 |
| STOT RE 2 | SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - |
| | Category 2 |
| STOT SE 3 | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - |
| | Category 3 |

| <u>History</u> | |
|---------------------------------|--------------------|
| Date of issue/ Date of revision | : 26 July 2024 |
| Date of previous issue | : 15 February 2024 |
| Prepared by | : EHS |
| Version | : 1.01 |

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