SAFETY DATA SHEET



Date of issue 7 June 2020

Version 5.01

Section 1. Product and company identification

| Product name |
|-------------------------------|
| Product code |
| Other means of identification |
| Product type |

- : PHENGUARD SUBSEA 780 BAS RAL 1018
- : 191904.01
- : Not available.
- : Liquid.

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

Identified uses

Coating. Paints. Painting-related materials.

| Uses advised against | Reason |
|----------------------|--------|
| Not applicable. | |

| Supplier's details: | |
|----------------------------|--|
| Supplier | PPG Industrial do Brasil – Tintas e Vernizes Ltda Via Anhanguera KM 106, Bairro Sao Judas Tadeu Sumare / SP, Brasil 55 19 2103-6000 (Recepção e Portaria) |
| Email address: | : HazComLatam@ppg.com |
| Emergency telephone number | : 0800 707 1767 / 0800 707 7022 – Empresa Suatrans Cotec 0800 14 8110 – CEATOX - Centro de Assistência Toxicológica |

Section 2. Hazards identification

| Classification of the | : FLAMMABLE LIQUIDS - Category 3 |
|-----------------------|--|
| substance or mixture | ACUTE TOXICITY (dermal) - Category 5 |
| | ACUTE TOXICITY (inhalation) - Category 4 |
| | SKIN IRRITATION - Category 2 |
| | SERIOUS EYE DAMAGE - Category 1 |
| | SKIN SENSITIZATION - Category 1 |
| | CARCINOGENICITY - Category 1A |
| | SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 |
| | AQUATIC HAZARD (LONG-TERM) - Category 3 |
| Target organs | : Contains material which causes damage to the following organs: liver, spleen, brain, bone marrow. |
| | Contains material which may cause damage to the following organs: kidneys, lungs, the nervous system, upper respiratory tract, immune system, skin, central nervous system (CNS), ears, eye, lens or cornea. |

| English (US) | Brazil |
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| Code 191904.01 Product name PHENGUAR | RD SUBSEA 780 E | Date of issue BAS RAL 1018 | 7 June 2020 | Version | 5.01 |
|---|--|---|--|---|---|
| Section 2. Hazards | s identifi | cation | | | |
| | | e of the mixture consis al), 45.3% (Dermal), 80 | ting of ingredient(s) of ι 0.5% (Inhalation) | unknown acute to | oxicity: |
| | | e of the mixture consis wironment: 68.6% | ting of ingredient(s) of ι | unknown hazards | s to the |
| GHS label elements | | | | | |
| Hazard pictograms | | | | | |
| Signal word | : Danger | • • | • | | |
| Hazard statements | May be ha Causes sk May cause Causes se Harmful if May cause May cause | e cancer. | on. ough prolonged or repe | ated exposure. | |
| Precautionary statements | | | Ū | | |
| Prevention | clothing. V open flam ventilating static discl | Vear eye or face protec es and other ignition so or lighting equipment. | e use. Wear protective tion. Keep away from h purces. No smoking. Us Use non-sparking tools to the environment. Do | neat, hot surface se explosion-proc s. Take action to | s, sparks, of electrical, o prevent |
| Response | wash it be cautiously | fore reuse. IF ON SKI | TER or doctor. Take of N: Wash with plenty of v minutes. Remove conta | water. IF IN EYE | S: Rinse |
| Storage | - | well-ventilated place. K | leep cool. | | |
| Disposal | | f contents and containe ational regulations. | er in accordance with all | l local, regional, r | national |
| Other hazards which do not result in classification | : Prolonged | or repeated contact m | ay dry skin and cause i | rritation. | |

Section 3. Composition/information on ingredients

| Substance/mixture | : Mixture |
|-------------------------------|------------------|
| Other means of identification | : Not available. |

| CAS number/other identifiers | | |
|-------------------------------------|---|-----------------|
| CAS number | : | Not applicable. |

5.01

Section 3. Composition/information on ingredients

| Ingredient name | % | CAS number |
|---|------------|------------|
| barium sulfate | 30 - <60 | 7727-43-7 |
| Phenol, polymer with formaldehyde, glycidyl ether (MW<=700) | 20 - <30 | 28064-14-4 |
| xylene | 10 - <12.5 | 1330-20-7 |
| Mica-group minerals | 5 - <7 | 12001-26-2 |
| crystalline silica, respirable powder (>10 microns) | 3 - <5 | 14808-60-7 |
| 2-methylpropan-1-ol | 3 - <5 | 78-83-1 |
| crystalline silica, respirable powder (<10 microns) | 3 - <5 | 14808-60-7 |
| ethylbenzene | 2 - <3 | 100-41-4 |
| titanium dioxide | 1 - <2 | 13463-67-7 |

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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 and hence require reporting in this section.

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

SUB codes represent substances without registered CAS Numbers.

Section 4. First aid measures

| Description of necessary firs | at a | id 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 | 1 | Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. |
| Ingestion | ; | If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting. |
| Indication of immediate med | <u>ica</u> | l attention and special treatment needed, if necessary |
| Notes to physician Specific treatments | | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. No specific treatment. |
| 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. |
| Potential acute health effects | 2 | |
| Eye contact | 1 | Causes serious eye damage. |
| Inhalation | 1 | Harmful if inhaled. |
| Skin contact | 1 | May be harmful in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction. |
| Ingestion | 4 | No known significant effects or critical hazards. |

See toxicological information (Section 11)

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| Product nam | е | PHENGUARD SUBSEA 780 BAS RAL 1018 | | | |

Section 5. Fire-fighting measures

| Extinguishing media | |
|--|---|
| Suitable extinguishing media | : Use dry chemical, CO ₂ , water spray (fog) or foam. |
| Unsuitable extinguishing media | : Do not use water jet. |
| Specific hazards arising from the chemical | : Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. |
| Hazardous thermal decomposition products | : Decomposition products may include the following materials: carbon oxides sulfur oxides metal oxide/oxides |
| 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. |
| 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. |

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

contractor.

| 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 spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. |
|--------------------------------|--|
| For emergency responders | : If specialized 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". |
| Environmental precautions | : Avoid dispersal of spilled 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. |
| Methods and materials for co | ontainment 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

Section 6. Accidental release measures Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach 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 (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

| Precautions for safe handling | Put on appropriate personal protective equipment (see Section 8). 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. 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 ingest. Avoid breathing vapor or mist. 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 non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container. |
|--|---|
| 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 oxidizing 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use. |

Section 8. Exposure controls/personal protection

<u>Control parameters</u> <u>Occupational exposure limits</u>

Section 8. Exposure controls/personal protection

| Ingredient name | | Exposure limits | | |
|--|---|--|--|--|
| barium sulfate | | ACGIH TLV (United States, 3/2019). TWA: 5 mg/m ³ 8 hours. Form: Inhalable | | |
| xylene | | fraction Minsitry of Labor and Employement (Brazil, 11/2001). | | |
| | | TWA: 340 mg/m ³ 8 hours. | | |
| | | TWA: 78 ppm 8 hours. | | |
| Mica-group minerals | | ACGIH TLV (United States, 3/2019). TWA: 3 mg/m ³ 8 hours. Form: Respirable | | |
| envetallino cilico, rochirable n | owdor (>10 microps) | fraction ACGIH TLV (United States, 3/2019). | | |
| crystalline silica, respirable p | | TWA: 0.025 mg/m ³ 8 hours. Form: | | |
| | | Respirable fraction | | |
| 2-methylpropan-1-ol | | Minsitry of Labor and Employement | | |
| | | (Brazil, 11/2001). | | |
| | | TWA: 115 mg/m ³ 8 hours. | | |
| | | TWA: 40 ppm 8 hours. | | |
| crystalline silica, respirable p | owder (<10 microns) | ACGIH TLV (United States, 3/2019). | | |
| , , , , , , , , , , , , , , , , , , , | · · · · · · | TWA: 0.025 mg/m ³ 8 hours. Form: | | |
| | | Respirable | | |
| ethylbenzene | | Minsitry of Labor and Employement | | |
| | | (Brazil, 11/2001). | | |
| | | TWA: 340 mg/m ³ 8 hours. | | |
| | | TWA: 78 ppm 8 hours. | | |
| titanium dioxide | | ACGIH TLV (United States, 3/2019). TWA: 10 mg/m ³ 8 hours. | | |
| Recommended monitoring procedures | atmosphere or biological monit of the ventilation or other contro protective equipment. Referen | ents with exposure limits, personal, workplace oring may be required to determine the effectivenes of measures and/or the necessity to use respiratory ce should be made to appropriate monitoring nal guidance documents for methods for the ostances will also be required. | | |
| 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 control also need to keep gas, vapor or dust concentrations below any lower explosive | | | |
| | | | | |
| | | limits. Use explosion-proof ventilation equipment. | | |
| 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. | | | |
| dividual protection measur | <u>es</u> | | | |
| Hygiene measures | before eating, smoking and usi Appropriate techniques should Contaminated work clothing sh | e thoroughly after handling chemical products, ng the lavatory and at the end of the working period be used to remove potentially contaminated clothing ould not be allowed out of the workplace. Wash eusing. Ensure that eyewash stations and safety tation location | | |

| English (US) | Brazil | 6/14 |
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Section 8. Exposure controls/personal protection

| Eye protection Skin protection | : Chemical splash goggles and face shield. |
|-----------------------------------|---|
| 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. |
| Gloves | : butyl rubber |
| 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. |
| 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. |

Section 9. Physical and chemical properties

| Appearance | |
|--|---|
| Physical state | : Liquid. |
| Color | : Yellow. |
| Odor | : Aromatic. |
| рН | : Not available. |
| Melting point | : Not available. |
| Boiling point | : >37.78°C (>100°F) |
| Flash point | : Closed cup: 23.7°C (74.7°F) |
| Evaporation rate | : Not available. |
| Flammability (solid, gas) | : Not available. |
| Lower and upper explosive (flammable) limits | : Not available. |
| Vapor pressure | : Not available. |
| Vapor density | : Not available. |
| Relative density | : 1.75 |
| Solubility | : Insoluble in the following materials: cold water. |
| Partition coefficient: n- octanol/water | : Not available. |
| Auto-ignition temperature | : 430°C (806°F) |
| Decomposition temperature | : Not available. |

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|--|--|-----------------------------|-----------------------------|
| Section 9. Physic | al and chemical proper | rties | |
| Viscosity | : Kinematic (room temperature): >4 Kinematic (40°C (104°F)): >0.21 | | |
| Viscosity | : 60 - 100 s (ISO 6mm) | | |
| Section 10. Stabi | lity and reactivity | | |
| Reactivity | : No specific test data related to re- | activity available for this | product or its ingredients. |
| Chemical stability | : The product is stable. | | |
| Possibility of hazardous reactions | : Under normal conditions of stora | ge and use, hazardous r | eactions will not occur. |
| Conditions to avoid | : When exposed to high temperatu products. | res may produce hazar | dous decomposition |
| Incompatible materials | : Keep away from the following ma oxidizing agents, strong alkalis, st | | exothermic reactions: |
| Hazardous decomposition products | : Decomposition products may incl carbon dioxide, smoke, oxides of | 5 | als: carbon monoxide, |

Information on toxicological effects

| Acute toxicity |
|----------------|
|----------------|

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|---------------------------------|---------|-------------|----------|
| barium sulfate | LD50 Dermal | Rat | >2000 mg/kg | - |
| | LD50 Oral | Rat | >5000 mg/kg | - |
| xylene | LD50 Dermal | Rabbit | 1.7 g/kg | - |
| - | LD50 Oral | Rat | 4.3 g/kg | - |
| 2-methylpropan-1-ol | LC50 Inhalation Vapor | Rat | 24.6 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | 2460 mg/kg | - |
| | LD50 Oral | Rat | 2830 mg/kg | - |
| ethylbenzene | LC50 Inhalation Vapor | Rat | 17.8 mg/l | 4 hours |
| - | LD50 Dermal | Rabbit | 17.8 g/kg | - |
| | LD50 Oral | Rat | 3.5 g/kg | - |
| titanium dioxide | LC50 Inhalation Dusts and mists | Rat | >6.82 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | >5000 mg/kg | - |
| | LD50 Oral | Rat | >5000 mg/kg | - |

Conclusion/Summary

: There are no data available on the mixture itself.

Irritation/Corrosion

| Product/ingredient name | Result | Result Species Score Exposure | | | | |
|---------------------------|--|-------------------------------|---------------|--------------------|---|--|
| xylene | Skin - Moderate irritant | Rabbit | - | 24 hours 500 mg | - | |
| Conclusion/Summary | | | | <u>.</u> | | |
| Skin | : There are no data avai | lable on the mi | xture itself. | | | |
| Eyes | : There are no data available on the mixture itself. | | | | | |
| Respiratory | : There are no data available on the mixture itself. | | | | | |
| Sensitization | | | | | | |

Brazil

English (US)

Not available.

| Conclusion/Summary | | | |
|---------------------------|-----------|------------|----------------------------------|
| Skin | : There a | re no data | available on the mixture itself. |
| Respiratory | : There a | re no data | available on the mixture itself. |
| Mutagenicity | | | |
| Not available. | | | |
| Conclusion/Summary | : There a | re no data | available on the mixture itself. |
| Carcinogenicity | | | |
| Not available. | | | |
| Conclusion/Summary | : There a | re no data | available on the mixture itself. |
| Classification | | | |
| Product/ingredient name | OSHA | IARC | NTP |
| xylene | - | 3 | - |

| r roudeningreatent name | OOTIA | | |
|--|-------|----|---------------------------------|
| xylene | - | 3 | - |
| crystalline silica, respirable powder (>10 microns) | - | 1 | Known to be a human carcinogen. |
| crystalline silica, respirable powder (<10 microns) | - | 1 | Known to be a human carcinogen. |
| ethylbenzene | - | 2B | - |
| titanium dioxide | - | 2B | - |

Carcinogen Classification code:

IARC: 1, 2A, 2B, 3, 4 NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen OSHA: + Not listed/not regulated: -

Reproductive toxicity

Not available.

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

Teratogenicity

Not available.

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

Specific target organ toxicity (single exposure)

| Name | ••• | Route of exposure | Target organs |
|---------------------|------------|-------------------|---------------------------------|
| xylene | Category 3 | - | Respiratory tract irritation |
| 2-methylpropan-1-ol | Category 3 | - | Respiratory tract irritation |
| | Category 3 | | Narcotic effects |

Specific target organ toxicity (repeated exposure)

| - | 11 - 1 | | |
|----------|--------|----|--|
| End | lish (| US | |
| | | | |

| Name | Category | Route of exposure | Target organs |
|---|------------|-------------------|----------------|
| crystalline silica, respirable powder (<10 microns) | Category 1 | inhalation | - |
| ethylbenzene | Category 2 | - | hearing organs |

 Target organs
 : Contains material which causes damage to the following organs: liver, spleen, brain, bone marrow.

 Contains material which may cause damage to the following organs: kidneys, lungs, the nervous system, upper respiratory tract, immune system, skin, central nervous system (CNS), ears, eye, lens or cornea.

Aspiration hazard

| Name | Result |
|---------------------|--|
| 2-methylpropan-1-ol | ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 2 ASPIRATION HAZARD - Category 1 |

| Information on the likely routes of exposure | : | Not available. |
|---|-------------|---|
| Potential acute health effect | <u>s</u> | |
| Eye contact | 1 | Causes serious eye damage. |
| Inhalation | 1 | Harmful if inhaled. |
| Skin contact | 1 | May be harmful in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction. |
| Ingestion | 1 | No known significant effects or critical hazards. |
| Symptoms related to the phy | <u>/sic</u> | cal, chemical and toxicological characteristics |
| 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 |

Delayed and immediate effects and also chronic effects from short and long term exposure

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| Section 11. | Foxicological informat | ion | | | |
| Conclusion/Sumr | nary : There are no data availa silica which can cause le duration and level of exp applications. For many coating formulation. In meaningful potential for product is applied with a spray applications may and require the use of a engineering controls (se concentrations in exces adverse health effects s and adverse effects on and signs include heada and, in extreme cases, l above effects by absorp exposure to organic solv | ing cancer or s posure to dust PPG products, his case, the T human expose brush or rolled propriate pers e Section 8). If s of the stated uch as mucous he kidneys, liv che, dizziness poss of conscio tion through th | silicosis. The risk o from sanding surfac , TiO2 is utilized as TiO2 particles are bu- ure to unbound part r. Sanding the coat bending on the dura sonal protective equ Exposure to compo occupational expos s membrane and re- rer and central nerve s, fatigue, muscular usness. Solvents rue skin. There is so | f cancer depend ces or mist from a raw material in ound in a matrix icles of TiO2 wh ing surface or m tion and level of uipment and/or nent solvent vap sure limit may re spiratory system ous system. Syn weakness, drow nay cause some me evidence that | ds on the spray n a liquid with no hen the hist from exposure cor sult in n irritation mptoms vsiness of the at repeate |

cause greater hearing loss than expected from exposure to noise alone. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from shortterm and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

| Short term exposure | |
|--------------------------------|--|
| Potential immediate effects | : There are no data available on the mixture itself. |
| Potential delayed effects | : There are no data available on the mixture itself. |
| Long term exposure | |
| Potential immediate effects | : There are no data available on the mixture itself. |
| Potential delayed effects | : There are no data available on the mixture itself. |
| Potential chronic health eff | <u>ects</u> |
| Not available | |

Not available.

| General | : May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. |
|-----------------------|---|
| Carcinogenicity | : May cause cancer. Risk of cancer depends on duration and level of exposure. |
| 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. |

Numerical measures of toxicity

Acute toxicity estimates

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| Product nam | е | PHENGUARD SUBSEA 780 BAS RAL 1018 | | | |

| Product/ingredient name | Oral (mg/ kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|-----------------------------------|------------------|-------------------|--------------------------------|----------------------------------|--|
| PHENGUARD SUBSEA 780 BAS RAL 1018 | 12164.3 | 2454.5 | N/A | 16.7 | 2.1 |
| barium sulfate | N/A | 2500 | N/A | N/A | N/A |
| xylene | 4300 | 1700 | N/A | 11 | 1.5 |
| 2-methylpropan-1-ol | 2830 | 2460 | N/A | 24.6 | N/A |
| ethylbenzene | 3500 | 17800 | N/A | 17.8 | 1.5 |

Other information

: Not available.

Section 12. Ecological information

Ecotoxicity

| Product/ingredient name | Result | Species | Exposure |
|-------------------------|---|-------------------------|----------|
| 2-methylpropan-1-ol | Acute EC50 1100 mg/l | Daphnia | 48 hours |
| ethylbenzene | Acute LC50 150 to 200 mg/l Fresh water | Fish | 96 hours |
| titanium dioxide | Acute LC50 >100 mg/l Fresh water | Daphnia - Daphnia magna | 48 hours |

Persistence/degradability

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|------------|------------------|
| xylene | - | - | Readily |
| ethylbenzene | - | - | Readily |

Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|-------------------------|--------|-------------|-----------|
| xylene | 3.16 | 7.4 to 18.5 | low |
| 2-methylpropan-1-ol | 0.76 | - | low |
| ethylbenzene | 3.15 | 79.43 | low |

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized 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 nonrecyclable 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material

| English (US) Brazil | 12/14 |
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|-------------|-----------------------|-----------------------------------|-------------|---------|------|
| Product nar | ne | PHENGUARD SUBSEA 780 BAS RAL 1018 | | | |

Section 13. Disposal considerations

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. Vapor 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

| | Brazil (ANTT) | IMDG | IATA |
|--------------------------------|-----------------|-----------------|-----------------|
| UN number | UN1263 | UN1263 | UN1263 |
| UN proper shipping name | PAINT | PAINT | PAINT |
| Transport hazard class(es) | 3 | 3 | 3 |
| Packing group | | | |
| Environmental hazards | No. | No. | No. |
| Marine pollutant substances | Not applicable. | Not applicable. | Not applicable. |

Additional information

| Brazil | : None identified. |
|--------------------|--|
| Risk number | : 30 |
| 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. |

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.

Transport in bulk according : Not applicable. to IMO instruments

Section 15. Regulatory information

Safety, health and environmental regulations specific for the product

: No known specific national and/or regional regulations applicable to this product (including its ingredients).

| English | (US) | |
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Section 16. Other information

| <u>History</u> | |
|------------------------|---|
| Date of previous issue | : 6/7/2020 |
| Version | : 5.01 |
| Prepared by | : EHS |
| Key to abbreviations | ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail UN = United Nations |
| References | : ABNT NBR 14725-4: 2014 ANTT - National Land Transportation Agency |

Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.