SAFETY DATA SHEET



Date of issue/Date of revision25 October 2024Version 1.01

| Section 1. Identification | | |
|---|---|--|
| Product code | : 000001196135 | |
| Product name | : SIGMASHIELD 880 BASE RAL 7016 | |
| Other means of identification 00468707 | on | |
| Product type | : Liquid. | |
| Relevant identified uses of the substance or mixture and uses advised against | | |
| Product use | Coating. Professional applications, Used by spraying. | |
| Supplier's details | : PPG Industries (Singapore) Pte. Ltd., No. 1 Tuas Basin Close, Singapore 638803. Tel +65 68653737 | |
| Emergency telephone number (with hours of operation) | : CHEMTREC +(65)-31581349 (CCN 17704) | |

Section 2. Hazards identification

| Classification of the substance or mixture | : FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A SKIN SENSITISATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3 |
|--|---|
| GHS label elements, includi | ng precautionary statements |
| Hazard pictograms | |
| Signal word | : Warning |
| Hazard statements | : Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause respiratory irritation. |
| Precautionary statements | |

| Singapore | English (GB) | Page: 1/14 |
|-----------|--------------|------------|
|-----------|--------------|------------|

Section 2. Hazards identification

| Vear protective gloves. Wear eye or face protection. Keep away from heat, hot |
|--|
| urfaces, sparks, open flames and other ignition sources. No smoking. Avoid preathing vapour. Wash thoroughly after handling. |
| F INHALED: Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN: Vash with plenty of water. If skin irritation or rash occurs: Get medical advice or ittention. Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or ittention. |
| Store in a well-ventilated place. Keep container tightly closed. |
| lot applicable. |
| |
| 2 |

Other hazards which do not : Prolonged or repeated contact may dry skin and cause irritation.

result in classification

Section 3. Composition/information on ingredients

Mixture

| Substance/mixture | ŝ |
|-------------------|---|
|-------------------|---|

CAS number/other identifiers

| CAS number | : Not applicable. |
|------------|-------------------|
| EC number | : Mixture. |

| Ingredient name | % | CAS number |
|---|----------|-------------|
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | 20 - <25 | 1675-54-3 |
| Talc , not containing asbestiform fibres | 10 - <20 | 14807-96-6 |
| xylene | 5 - <10 | 1330-20-7 |
| Epoxy Resin (700 <mw<=1100)< td=""><td>3 - <5</td><td>25036-25-3</td></mw<=1100)<> | 3 - <5 | 25036-25-3 |
| Phenol, methylstyrenated | 3 - <5 | 68512-30-1 |
| 2-methylpropan-1-ol | 1 - <3 | 78-83-1 |
| oxirane, mono[(C12-14-alkyloxy)methyl] derivs. | 1 - <3 | 68609-97-2 |
| 12-hydroxyoctadecanoic acid, reaction products with | 1 - <3 | 220926-97-6 |
| 1,3-benzenedimethanamine and hexamethylenediamine | | |

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 fi | rst aid measures |
|-----------------------------|--|
| 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. |
| Singapore English (GB) | Page: 2/14 |

Section 4. First aid measures

Ingestion

: If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

| most important symptoms/c | | |
|-------------------------------|---|---|
| Potential acute health effect | | |
| Eye contact | uses serious eye irritation. | |
| Inhalation | ay cause respiratory irritation. | |
| Skin contact | uses skin irritation. Defatting to the skin. May caus | e an allergic skin reaction. |
| Ingestion | hown significant effects or critical hazards. | |
| Over-exposure signs/symp | | |
| Eye contact | verse symptoms may include the following: in or irritation itering dness | |
| Inhalation | verse symptoms may include the following: spiratory tract irritation ughing | |
| Skin contact | lverse symptoms may include the following: tation dness /ness acking | |
| Ingestion | specific data. | |
| Indication of immediate med | tention and special treatment needed, if necessa | ı ry |
| Notes to physician | case of inhalation of decomposition products in a fir e exposed person may need to be kept under medic | |
| Specific treatments | o specific treatment. | |
| Protection of first-aiders | action shall be taken involving any personal risk or suspected that fumes are still present, the rescuer s ask or self-contained breathing apparatus. It may be oviding aid to give mouth-to-mouth resuscitation. W proughly with water before removing it, or wear glove | hould wear an appropriate e dangerous to the person ash contaminated clothing |

See toxicological information (Section 11)

Section 5. Firefighting measures

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

| Singapore English (GB) | |
|------------------------|--|
|------------------------|--|

Section 5. Firefighting measures

| _ | |
|---|--|
| Specific hazards arising from the chemical | : Flammable liquid and vapour. 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. |
| Hazardous thermal decomposition products | : Decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur oxides halogenated compounds 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, protec | e 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. Avoid breathing 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". | |
| Environmental precautions | Avoid dispersal of spilt material and runoff and contact with soil, waterways, drain and sewers. Inform the relevant authorities if the product has caused environmer pollution (sewers, waterways, soil or air). | |
| Methods and material for con | inment and cleaning up | |
| Small spill | Stop leak if without risk. Move containers from spill area. Use spark-proof tools a 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 a 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 a explosion-proof equipment. Approach the release from upwind. Prevent entry int sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with ne combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous ea 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 spill product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. | to on- rth |

J 880 BASE RAL 7016

Section 6. Accidental release measures

Section 7. Handling and storage

| Precautions for safe handling | L | |
|--|---|---|
| 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 ingest. Avoid breathing vapour 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 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. |
| 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. |

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits | |
|--|---|--|
| ✓alc , not containing asbestiform fibres | Workplace Safety and Health Act (Singapore, 2/2006) | |
| xylene | PEL (long term) 8 hours: 2 mg/m ³ . Workplace Safety and Health Act (Singapore, 2/2006) [Xylene] | |
| | PEL (long term) 8 hours: 100 ppm. PEL (long term) 8 hours: 434 mg/m ³ . | |
| | PEL (short term) 15 minutes: 651 mg/m ³ . PEL (short term) 15 minutes: 150 ppm. | |
| 2-methylpropan-1-ol | Workplace Safety and Health Act (Singapore, 2/2006) | |

Section 8. Exposure controls/personal protection

| | | | PEL (long term) 8 hours: 50 ppm. | |
|---|---|--|---|--|
| 12-hydroxyoctadecanoic acid, ro 1,3-benzenedimethanamine and Recommended monitoring : procedures | | | PEL (long term) 8 hours: 152 mg/m ³ . ACGIH TLV (United States) TWA: 10 mg/m ³ . Form: Inhalable particle. TWA: 3 mg/m ³ (inhalable dust). Form: Respirable particle. | |
| | | Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances 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 controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment. | | |
| Environmental exposure controls | re : Emissions from ventilation or work process equipment should be checked to ensur 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. | | environmental protection legislation. In some neering modifications to the process | |
| Individual protection measur | <u>es</u> | | | |
| Hygiene measures | : | eating, smoking and using the lavator Appropriate techniques should be use Contaminated work clothing should no | bughly after handling chemical products, before y and at the end of the working period. ed to remove potentially contaminated clothing. ot be allowed out of the workplace. Wash . Ensure that eyewash stations and safety location. | |
| Eye/face protection | : | Chemical splash goggles. | | |
| Skin protection | | | | |
| Hand protection Chemical-resistant, impervious gloves complying with an approved sible worn at all times when handling chemical products if a risk assess this is necessary. Considering the parameters specified by the glove check during use that the gloves are still retaining their protective proshould be noted that the time to breakthrough for any glove material different for different glove manufacturers. In the case of mixtures, c several substances, the protection time of the gloves cannot be accurately. | | emical products if a risk assessment indicates rameters specified by the glove manufacturer, still retaining their protective properties. It withrough for any glove material may be irers. In the case of mixtures, consisting of | | |
| Gloves | 4 | butyl rubber | | |
| Body protection | : | being performed and the risks involve | | |
| Other skin protection | : | | nal skin protection measures should be formed and the risks involved and should be ing this product. | |

Product name SIGMASHIELD 880 BASE RAL 7016

Section 8. Exposure controls/personal protection

| 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

| <u>Appearance</u> | | | | |
|---------------------------|---|--|--|--|
| Physical state | : | Liquid. | | |
| Colour | : | Grey. | | |
| Odour | : | Aromatic. [Slight] | | |
| рН | 1 | insoluble in water. | | |
| Boiling point | : | >37.78°C (>100°F) | | |
| Flash point | : | Closed cup: 37°C (98.6°F) | | |
| Evaporation rate | : | Not available. | | |
| Flammability (solid, gas) | : | liquid | | |
| Vapour pressure | : | Not available. | | |
| Vapour density | 1 | | | |
| Relative density | : | 1.64 | | |
| Solubility(ies) | | Media Result | | |
| Solubility(les) | | cold water Not soluble | | |
| Auto-ignition temperature | : | Not available. | | |
| Viscosity | : | Øynamic (room temperature): Not available. Kinematic (room temperature): >400 mm²/s (>400 cSt) Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt) | | |
| Viscosity | : | > 100 s (ISO 6mm) | | |

Section 10. Stability and reactivity

| Reactivity | : No specific test data related to reactivity available for this product or its ingredients. |
|------------------------------------|--|
| Chemical stability | : The product is stable. |
| Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur. |
| Conditions to avoid | : When exposed to high temperatures may produce hazardous decomposition products. |
| Incompatible materials | : Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids. |

| Singapore | English (GB) | Page: 7/14 |
|-----------|--------------|------------|
|-----------|--------------|------------|

Section 10. Stability and reactivity

Hazardous decomposition products

: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur oxides halogenated compounds metal oxide/oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|--|---------------------------------|---------|-------------|----------|
| bis-[4-(2,3-epoxipropoxi) phenyl]propane | LD50 Dermal | Rabbit | 23000 mg/kg | - |
| | LD50 Oral | Rat | 15000 mg/kg | - |
| xylene | LD50 Dermal | Rabbit | 1.7 g/kg | - |
| | LD50 Oral | Rat | 4.3 g/kg | - |
| Epoxy Resin (700 <mw <=1100)</mw | LD50 Dermal | Rat | >2000 mg/kg | - |
| , | LD50 Oral | Rat | >2000 mg/kg | - |
| Phenol, methylstyrenated | LD50 Dermal | Rabbit | >2000 mg/kg | - |
| | LD50 Oral | Rat | >2000 mg/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 | - |
| oxirane, mono[(C12-14-alkyloxy)methyl] derivs. | LD50 Oral | Rat | 17100 mg/kg | - |
| 12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine | LC50 Inhalation Dusts and mists | Rat | 3.56 mg/l | 4 hours |
| , | LD50 Dermal | Rat | >2000 mg/kg | - |
| | LD50 Oral | Rat | >2000 mg/kg | - |

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

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---|---------------------------------------|---------|-------|--------------|-------------|
| bis-[4-(2,3-epoxipropoxi) phenyl]propane | Eyes - Mild irritant | Rabbit | - | 24 hours | - |
| | Eyes - Redness of the conjunctivae | Rabbit | 0.4 | 24 hours | - |
| | Skin - Oedema | Rabbit | 0.5 | 4 hours | - |
| | Skin - Erythema/Eschar | Rabbit | 0.8 | 4 hours | - |
| | Skin - Mild irritant | Rabbit | - | 4 hours | - |
| xylene | Skin - Moderate irritant | Rabbit | - | 24 hours 500 | - |
| - | | | | mg | |

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

| Singapore | English (GB) | Page: 8/14 |
|-----------|--------------|------------|
| Suboro | g | |

Section 11. Toxicological information

| Product/ingredient name | Route of exposure | Species | Result | | |
|--|-------------------|------------------------------------|----------------------------|--|--|
| bis-[4-(2,3-epoxipropoxi) phenyl]propane oxirane, mono[(C12-14-alkyloxy)methyl] derivs. | skin skin | Mouse Guinea pig | Sensitising Sensitising | | |
| 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 | a available on the mixture itself. | | | |
| Carcinogenicity | | | | | |
| Conclusion/Summary | There are no data | a available on the mixture itself. | | | |
| Reproductive toxicity | | | | | |
| Conclusion/Summary | There are no data | a available on the mixture itself. | | | |
| Teratogenicity | | | | | |
| Conclusion/Summary | There are no data | a available on the mixture itself. | | | |
| Specific target organ toxicity (cingle expecture) | | | | | |

Specific target organ toxicity (single exposure)

| Name | Category | Route of exposure | Target organs |
|--|------------|-------------------|------------------------------|
| Talc , not containing asbestiform fibres | Category 3 | - | Respiratory tract irritation |
| 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)

| Name | | Route of exposure | Target organs |
|---|------------|-------------------|---------------|
| 12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine | Category 2 | inhalation | lungs |

Aspiration hazard

| Name | Result |
|--------|--------------------------------|
| xylene | ASPIRATION HAZARD - Category 1 |

Information on likely routes : Not available. of exposure

Potential acute health effects

Eye contact : Causes serious eye irritation.

| Singapore | English (GB) | Page: 9/14 |
|-----------|--------------|------------|
|-----------|--------------|------------|

Section 11. Toxicological information

| Inhalation | : May cause respiratory irritation. |
|--------------|---|
| Skin contact | : Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction. |
| Ingestion | : No known significant effects or critical hazards. |

Symptoms related to the physical, chemical and toxicological characteristics

| Eye contact : | Adverse symptoms may include the following: pain or irritation watering redness |
|----------------|---|
| Inhalation : | Adverse symptoms may include the following: respiratory tract irritation coughing |
| Skin contact : | Adverse symptoms may include the following: irritation redness dryness cracking |
| Ingestion : | No specific data. |

Delayed and immediate effects as well as chronic effects from short and long-term exposure Short term exposure **Potential immediate** : Not available. effects Potential delayed effects : Not available. Long term exposure **Potential immediate** : Not available. effects Potential delayed effects : Not available. **Potential chronic health effects** General : 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 : No known significant effects or critical hazards. **Mutagenicity** : No known significant effects or critical hazards. **Reproductive toxicity** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

| Route | ATE value |
|------------------------------|----------------|
| ✓ermal | 22358.32 mg/kg |
| Inhalation (vapours) | 67.58 mg/l |
| Inhalation (dusts and mists) | 8.47 mg/l |

| Singapore | English (GB) | Page: 10/14 |
|-----------|--------------|-------------|
|-----------|--------------|-------------|

Section 11. Toxicological information

÷

Other information

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.

Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|--|---------------------------------|---|----------|
| bis-[4-(2,3-epoxipropoxi) phenyl]propane | Acute LC50 1.8 mg/l Fresh water | Daphnia - <i>daphnia magna</i> | 48 hours |
| | Chronic NOEC 0.3 mg/l | Daphnia | 21 days |
| 2-methylpropan-1-ol | Acute EC50 1100 mg/l | Daphnia | 48 hours |
| oxirane, mono[(C12-14-alkyloxy)methyl] derivs. | LC50 >100 mg/l | Fish | 96 hours |
| 12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine | Acute EC50 >100 mg/l | Algae - Pseudokirchneriella subcapitata (microalgae) | 72 hours |
| | Acute EC50 >100 mg/l | Daphnia - <i>Daphnia magna</i> (Water flea) | 48 hours |
| | Acute LC50 >100 mg/l | Fish - Oncorhynchus mykiss (rainbow trout) | 96 hours |
| | Chronic NOEC 100 mg/l | Algae - Pseudokirchneriella subcapitata | 72 hours |
| | Chronic NOEC ≥50 mg/l | Daphnia - Daphnia magna (Water flea) | 21 days |

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

Persistence/degradability

| Product/ingredient name | Test | Result | | Dose | Inoculum |
|--|---|-----------------------|--------------|------|------------------------|
| 12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine | OECD 301D Ready Biodegradability - Closed Bottle Test | 9 % - Not readily - 2 | 9 days | - | - |
| Conclusion/Summary | : There are no d | lata available on the | mixture itse | elf. | · |
| Product/ingredient name | Aquatic half-life | | Photolysi | S | Biodegradability |
| bis-[4-(2,3-epoxipropoxi) phenyl]propane xylene | - | | - | | Not readily Readily |

| Singapore | English (GB) | Page: 11/14 |
|-----------|--------------|-------------|
| | | |

Section 12. Ecological information

Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential | |
|--|----------------------------------|----------------------------|----------------------------------|--|
| xylene Phenol, methylstyrenated 2-methylpropan-1-ol oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine | 3.12 3.627 1 3.77 >6 | 7.4 to 18.5 - - - | Low Low Low Low High | |
| and hexamethylenediamine | | | | |

Mobility in soil

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

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 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

| | UN | IMDG | ΙΑΤΑ |
|-------------------------------|--------|--------|--------|
| UN number | UN1263 | UN1263 | UN1263 |
| UN proper shipping name | PAINT | PAINT | PAINT |
| Transport hazard class(es) | 3 | 3 | 3 |
| Packing group | 111 | | |
| 3 3 3 4 | | | |

| Singapore | English (GB) | Page: 12/14 |
|-----------|--------------|-------------|
|-----------|--------------|-------------|

Section 14. Transport information

| | • | | |
|-----------------------------|-----------------|-----------------|-----------------|
| Environmental hazards | No. | No. | No. |
| Marine pollutant substances | Not applicable. | Not applicable. | Not applicable. |

Additional information

| UN | : This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5.1. |
|-------------|--|
| 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. |
| Special pre | cautions for user : Transport within user's premises: always transport in closed containers that are |

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

Singapore - hazardous chemicals under government control

None.

International regulations

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Section 16. Other information

| <u>History</u> | |
|--------------------------------|---|
| Date of issue/Date of revision | : 25 October 2024 |
| Date of previous issue | : 5/13/2024 |
| Version | : 1.01 |
| Prepared by | : EHS |
| Key to abbreviations | ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = International Air Transport Association IBC = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient |

Section 16. Other information

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

V Indicates information that has changed from previously issued version.

Notice to reader

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.