# **SAFETY DATA SHEET**



# Date of issue/Date of revision23 November 2022Version 1.05

| Section 1. Identification                                  |   |  |
|--|---|--|
| Product code   | : 000001161540  |  |
| Product name   | : SIGMARINE 48 BLACK / SIGMA 8000   |  |
| Other means of identificatio<br>00224095; 00267904         | n   |  |
| Product type   | : Liquid.   |  |
| <u>Relevant identified uses of t</u><br>Product use        | <ul> <li>the substance or mixture and uses advised against</li> <li>Coating.</li> <li>Professional applications, Used by spraying.</li> </ul> |  |
| Supplier's details   | : PPG Industries (Singapore) Pte. Ltd., No. 1 Tuas Basin Close, Singapore 638803.<br>Tel +65 68653737   |  |
| Emergency telephone<br>number (with hours of<br>operation) | : CHEMTREC +(65)-31581349 (CCN 17704)   |  |

# Section 2. Hazards identification

| Classification of the substance or mixture | : FLAMMABLE LIQUIDS - Category 3<br>ACUTE TOXICITY (inhalation) - Category 4<br>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -<br>Category 3<br>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 |
|--|--|
|  | AQUATIC HAZARD (LONG-TERM) - Category 2  |

**GHS label elements, including precautionary statements** 

| Hazard pictograms        |  |
|--------------------------|--|
| Signal word              | : Danger   |
| Hazard statements        | <ul> <li>Flammable liquid and vapor.<br/>Harmful if inhaled.<br/>May cause drowsiness or dizziness.<br/>Causes damage to organs through prolonged or repeated exposure. (central<br/>nervous system (CNS))<br/>Toxic to aquatic life with long lasting effects.</li> </ul> |
| Precautionary statements |  |

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### Section 2. Hazards identification

| Prevention                 | : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.<br>No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use<br>non-sparking tools. Take action to prevent static discharges. Avoid release to the<br>environment. Do not breathe vapor. Do not eat, drink or smoke when using this<br>product. |
|----------------------------|---|
| Response                   | : Collect spillage. Get medical advice or attention if you feel unwell. IF INHALED:<br>Call a POISON CENTER or doctor if you feel unwell.   |
| Storage                    | : Store in a well-ventilated place. Keep container tightly closed. Keep cool.   |
| Disposal                   | : Dispose of contents and container in accordance with all local, regional, national and international regulations.   |
| Other hazarde which do not | Prolonged or repeated contact may dry skip and cause irritation   |

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

result in classification

# Section 3. Composition/information on ingredients

| Substance/mixture | 1 | Mixture |
|-------------------|---|---------|
|-------------------|---|---------|

| <b>CAS number/other identifiers</b> |   |                 |
|-------------------------------------|---|-----------------|
| CAS number                          | ÷ | Not applicable. |
| EC number                           | ; | Mixture.        |

| Ingredient name                             | %          | CAS number |
|---|------------|------------|
| Aphtha (petroleum), hydrodesulfurized heavy | 25 - <50   | 64742-82-1 |
| nonane                                      | 3 - <5     | 111-84-2   |
| 1,2,4-trimethylbenzene                      | 3 - <5     | 95-63-6    |
| Talc , not containing asbestiform fibres    | 1 - <3     | 14807-96-6 |
| xylene                                      | 1 - <3     | 1330-20-7  |
| 2-ethylhexanoic acid, zirconium salt        | 0.3 - <1   | 22464-99-9 |
| neodecanoic acid, cobalt salt               | 0.1 - <0.3 | 27253-31-2 |
| calcium bis(2-ethylhexanoate)               | 0.1 - <0.3 | 136-51-6   |

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

| Ingestion    | : If swallowed, seek medical advice immediately and show this container or label.<br>Keep person warm and at rest. Do NOT induce vomiting.                                      |
|--------------|---|
|              | : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.                            |
| Skin contact | trained personnel.  |
| 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   |
| Eye contact  | <ul> <li>Remove contact lenses, irrigate copiously with clean, fresh water, holding the<br/>eyelids apart for at least 10 minutes and seek immediate medical advice.</li> </ul> |

### Section 4. First aid measures

#### Most important symptoms/effects, acute and delayed

| Potential acute health effect  | <u>:ts</u> |  |  |  |
|--|------------|--|--|--|
| Eye contact  | :          | No known significant effects or critical hazards.  |  |  |
| Inhalation   | :          | Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.  |  |  |
| Skin contact   | :          | Defatting to the skin. May cause skin dryness and irritation.  |  |  |
| Ingestion  | :          | Can cause central nervous system (CNS) depression.   |  |  |
| Over-exposure signs/symp   | ton        | <u>15</u>  |  |  |
| Eye contact  | :          | No specific data.  |  |  |
| Inhalation   | :          | Adverse symptoms may include the following:<br>nausea or vomiting<br>headache<br>drowsiness/fatigue<br>dizziness/vertigo<br>unconsciousness  |  |  |
| Skin contact   | :          | Adverse symptoms may include the following:<br>irritation<br>dryness<br>cracking   |  |  |
| Ingestion  | :          | No specific data.  |  |  |
| Indication of immediate medical attention and special treatment needed, if necessary |            |  |  |  |
| Notes to physician   | 1          | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.  |  |  |
| Specific treatments  | :          | 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. |  |  |

See toxicological information (Section 11)

# Section 5. Fire-fighting measures

| Extinguishing media                        |   |
|--|---|
| Suitable extinguishing media               | : Use dry chemical, CO <sub>2</sub> , 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.<br>In a fire or if heated, a pressure increase will occur and the container may burst, with<br>the risk of a subsequent explosion. This material is toxic to aquatic life with long<br>lasting effects. Fire water contaminated with this material must be contained and<br>prevented from being discharged to any waterway, sewer or drain. |
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## Section 5. Fire-fighting measures

| Hazardous thermal decomposition products       | : Decomposition products may include the following materials:<br>carbon oxides<br>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 | <ul> <li>Fire-fighters should wear appropriate protective equipment and self-contained<br/>breathing apparatus (SCBA) with a full face-piece operated in positive pressure<br/>mode.</li> </ul>  |

# Section 6. Accidental release measures

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

| For non-emergency<br>personnel | :  | No action shall be taken involving any personal risk or without suitable training.<br>Evacuate surrounding areas. Keep unnecessary and unprotected personnel from<br>entering. Do not touch or walk through spilled material. Shut off all ignition sources.<br>No flares, smoking or flames in hazard area. Avoid breathing vapor or mist.<br>Provide adequate ventilation. Wear appropriate respirator when ventilation is<br>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".  |
|                                |    | 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. Collect spillage.   |
| Methods and materials for co   | nt | ainment 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.<br>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 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

| Protective measures  | : | Put on appropriate personal protective equipment (see Section 8). Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. 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. |
|--|---|---|
|  |   | Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be stored in purpose-built containers or in metal containers with tight-fitting, self-closing lids. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside.  |
| 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,<br>including any<br>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

#### **Control parameters**

#### **Occupational exposure limits**

| Ingredient name                          | Exposure limits   |
|--|---|
| nonane                                   | Workplace Safety and Health Act (Singapore, 2/2006).                                  |
|  | PEL (long term): 1050 mg/m <sup>3</sup> 8 hours.<br>PEL (long term): 200 ppm 8 hours. |
| 1,2,4-trimethylbenzene                   | Workplace Safety and Health Act<br>(Singapore, 2/2006). [Trimethyl benzene]           |
|  | PEL (long term): 123 mg/m <sup>3</sup> 8 hours.<br>PEL (long term): 25 ppm 8 hours.   |
| Talc , not containing asbestiform fibres | Workplace Safety and Health Act   |

# Section 8. Exposure controls/personal protection

|   | _         |   |   |
|---|-----------|---|---|
| xylene  |           |   | (Singapore, 2/2006).<br>PEL (long term): 2 mg/m <sup>3</sup> 8 hours.<br>Workplace Safety and Health Act<br>(Singapore, 2/2006). [Xylene]<br>PEL (short term): 651 mg/m <sup>3</sup> 15 minutes.<br>PEL (short term): 150 ppm 15 minutes.   |
| 2-ethylhexanoic acid, zirconiu                | ım        | salt  | PEL (long term): 434 mg/m <sup>3</sup> 8 hours.<br>PEL (long term): 100 ppm 8 hours.<br>Workplace Safety and Health Act<br>(Singapore, 2/2006). [Zirconium and  |
| neodecanoic acid, cobalt salt                 |           |   | compounds]<br>PEL (short term): 10 mg/m³, (Zr) 15<br>minutes.<br>PEL (long term): 5 mg/m³, (Zr) 8 hours.<br>Workplace Safety and Health Act<br>(Singapore, 2/2006). [Cobalt, elemental<br>and inorganic compounds]<br>PEL (long term): 0.02 mg/m³, (Co) 8 hours.  |
| Recommended monitoring procedures             | :         |   | riate monitoring standards. Reference to nods for the determination of hazardous  |
| contaminants below any recommer               |           |   | Is to keep worker exposure to airborne<br>ed or statutory limits. The engineering controls<br>concentrations below any lower explosive  |
| controls they comply with the requirements of |           |   | ocess equipment should be checked to ensure<br>environmental protection legislation. In some<br>neering modifications to the process<br>e emissions to acceptable levels.   |
| Individual protection measur                  | <u>es</u> |   |   |
| Hygiene measures                              | :         | eating, smoking and using the lavatory<br>Appropriate techniques should be use  | bughly after handling chemical products, before<br>y and at the end of the working period.<br>d to remove potentially contaminated clothing.<br>eusing. Ensure that eyewash stations and<br>tation location.  |
| Eye/face protection                           | :         | Safety glasses with side shields.   |   |
| Skin protection                               |           |   |   |
| Hand protection                               | :         | be worn at all times when handling ch<br>this is necessary. Considering the par<br>check during use that the gloves are s<br>should be noted that the time to break | complying with an approved standard should<br>emical products if a risk assessment indicates<br>rameters specified by the glove manufacturer,<br>still retaining their protective properties. It<br>through for any glove material may be<br>rers. In the case of mixtures, consisting of<br>e of the gloves cannot be accurately |

# Section 8. Exposure controls/personal protection

| Classes                | . For prelaward or reported boundling, use the following type of players:  |
|------------------------|--|
| Gloves                 | : For prolonged or repeated handling, use the following type of gloves:  |
|                        | Recommended: natural rubber (latex), polyvinyl alcohol (PVA), Viton®<br>May be used: nitrile rubber  |
| Body protection        | : Personal protective equipment for the body should be selected based on the task<br>being performed and the risks involved and should be approved by a specialist<br>before handling this product. When there is a risk of ignition from static electricity,<br>wear anti-static protective clothing. For the greatest protection from static<br>discharges, clothing should include anti-static overalls, boots and gloves.          |
| Other skin protection  | <ul> <li>Appropriate footwear and any additional skin protection measures should be<br/>selected based on the task being performed and the risks involved and should be<br/>approved by a specialist before handling this product.</li> </ul>  |
| 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.  |  |  |
| Color                     | 1 | Black.   |  |  |
| Odor                      | : | Aromatic. [Slight]   |  |  |
| рН                        | : | insoluble in water.  |  |  |
| Boiling point             | : | >37.78°C (>100°F)  |  |  |
| Flash point               | : | Closed cup: 44°C (111.2°F)   |  |  |
| Evaporation rate          | : | Highest known value: 0.77 (xylene) Weighted average: 0.5compared with butyl acetate                                |  |  |
| Flammability (solid, gas) | : | liquid   |  |  |
| Vapor pressure            | : | Highest known value: 0.9 kPa (6.7 mm Hg) (at 20°C) (xylene).  Weighted average:<br>0.49 kPa (3.68 mm Hg) (at 20°C) |  |  |
| Vapor density             | : | Highest known value: 4.4 (Air = 1) (nonane). Weighted average: 4.18 (Air = 1)                                      |  |  |
| Relative density          | : | 0.95   |  |  |
| Colubility/ico)           |   | Media Result   |  |  |
| Solubility(ies)           | Ċ | old water Not soluble  |  |  |
| Auto-ignition temperature | : | Lowest known value: 205°C (401°F) (nonane).  |  |  |
| Viscosity                 | : | Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt)  |  |  |
| Viscosity                 | : | > 100 s (ISO 6mm)  |  |  |

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# 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: oxidizing agents, strong alkalis, strong acids. |
| Hazardous decomposition products   | : Depending on conditions, decomposition products may include the following materials: carbon oxides metal oxide/oxides          |

# Section 11. Toxicological information

#### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name                         | Result                | Species      | Dose                    | Exposure |
|---|-----------------------|--------------|-------------------------|----------|
| Naphtha (petroleum),<br>hydrodesulfurized heavy | LD50 Oral             | Rat          | >5000 mg/kg             | -        |
| nonane  | LC50 Inhalation Gas.  | Rat          | 3200 ppm                | 4 hours  |
|   | LC50 Inhalation Vapor | Rat          | 16790 mg/m <sup>3</sup> | 4 hours  |
| 1,2,4-trimethylbenzene                          | LC50 Inhalation Vapor | Rat          | 18000 mg/m <sup>3</sup> | 4 hours  |
|   | LD50 Oral             | Rat          | 5 g/kg                  | -        |
| xylene  | LD50 Dermal           | Rabbit       | 1.7 g/kg                | -        |
| -   | LD50 Oral             | Rat          | 4.3 g/kg                | -        |
| 2-ethylhexanoic acid,<br>zirconium salt         | LD50 Dermal           | Rabbit       | >5 g/kg                 | -        |
|   | LD50 Oral             | Rat          | >5 g/kg                 | -        |
| neodecanoic acid, cobalt sal                    | LD50 Oral             | Rat - Female | 1098 mg/kg              | -        |

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

#### Irritation/Corrosion

| Product/ingredient name | Result                   | Species | Score | Exposure           | Observation |
|-------------------------|--------------------------|---------|-------|--------------------|-------------|
| <b>x</b> ylene          | Skin - Moderate irritant | Rabbit  |       | 24 hours 500<br>mg | -           |

#### Conclusion/Summary Skin

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

#### Sensitization

# Section 11. Toxicological information

| Product/ingredient name                               | Route of exposure   | Species                          | Result      |  |  |
|---|---------------------|----------------------------------|-------------|--|--|
| neodecanoic acid, cobalt sal                          | skin                | Mouse                            | Sensitizing |  |  |
| Conclusion/Summary<br>Skin :                          | There are no data a | available on the mixture itself. | <u>.</u>    |  |  |
| Respiratory :<br><u>Mutagenicity</u>                  | There are no data a | available on the mixture itself. |             |  |  |
| Conclusion/Summary :<br>Carcinogenicity               | There are no data   | available on the mixture itself. |             |  |  |
| Conclusion/Summary :<br><u>Reproductive toxicity</u>  | There are no data   | available on the mixture itself. |             |  |  |
| Teratogenicity  | There are no data   | available on the mixture itself. |             |  |  |
| Conclusion/Summary :<br>Specific target organ toxicit |                     | available on the mixture itself. |             |  |  |

#### Specific target organ toxicity (single exposure)

| Name   | Category   | Route of exposure | Target organs                |
|--|------------|-------------------|------------------------------|
| Maphtha (petroleum), hydrodesulfurized heavy | Category 3 | -                 | Narcotic effects             |
| nonane                                       | Category 3 | -                 | Narcotic effects             |
| 1,2,4-trimethylbenzene                       | Category 3 | -                 | Respiratory tract irritation |
| Talc , not containing asbestiform fibres     | Category 3 | -                 | Respiratory tract irritation |
| xylene                                       | Category 3 | -                 | Respiratory tract irritation |

#### Specific target organ toxicity (repeated exposure)

| Name   | Category   | Route of exposure | Target organs                   |
|--|------------|-------------------|---------------------------------|
| Naphtha (petroleum), hydrodesulfurized heavy | Category 1 | -                 | central nervous<br>system (CNS) |
| neodecanoic acid, cobalt salt                | Category 1 | oral              | gastrointestinal tract          |

#### **Aspiration hazard**

| Name   | Result   |
|--------|--|
| nonane | ASPIRATION HAZARD - Category 1<br>ASPIRATION HAZARD - Category 1<br>ASPIRATION HAZARD - Category 1 |

# Information on the likely : Not available. routes of exposure

#### Potential acute health effects

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|-----------|--------------|------------|
|-----------|--------------|------------|

# Section 11. Toxicological information

| Eye contact  | : No known significant effects or critical hazards.   |
|--------------|---|
| Inhalation   | : Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. |
| Skin contact | : Defatting to the skin. May cause skin dryness and irritation.   |
| Ingestion    | : Can cause central nervous system (CNS) depression.  |

#### Symptoms related to the physical, chemical and toxicological characteristics

| Eye contact  | : No specific data.   |
|--------------|---|
| Inhalation   | : Adverse symptoms may include the following:<br>nausea or vomiting<br>headache<br>drowsiness/fatigue<br>dizziness/vertigo<br>unconsciousness |
| Skin contact | : Adverse symptoms may include the following:<br>irritation<br>dryness<br>cracking  |
| Ingestion    | : No specific data.   |

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

| Short term exposure          |  |
|------------------------------|--|
| Potential immediate effects  | : Not available.   |
| Potential delayed effects    | : Not available.   |
| <u>Long term exposure</u>    |  |
| Potential immediate effects  | : Not available.   |
| Potential delayed effects    | : Not available.   |
| Potential chronic health eff | <u>ects</u>  |
| General                      | : Causes damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. |
| 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     |
|------------------------------|---------------|
| Dermal                       | 6746.63 mg/kg |
| Inhalation (gases)           | 18722.61 ppm  |
| Inhalation (vapors)          | 46.1 mg/l     |
| Inhalation (dusts and mists) | 8.79 mg/l     |

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## 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 vapor/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

| - |            |             |
|---|------------|-------------|
|   | <b>AVI</b> | <b>T</b> \/ |
|   | UA         | LV          |
| _ |            |             |

| Product/ingredient name  | Result               | Species | Exposure |
|--|----------------------|---------|----------|
| 2-ethylhexanoic acid,<br>zirconium salt  | Acute LC50 >100 mg/l | Fish    | 96 hours |
| <b>Conclusion/Summary</b> : There are no data available on the mixture itself. |                      |         |          |

#### Persistence/degradability

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

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|------------|------------------|
| <b>x</b> ylene          | -                 | -          | Readily          |

#### **Bioaccumulative potential**

| Product/ingredient name          | LogPow       | BCF         | Potential   |
|----------------------------------|--------------|-------------|-------------|
| nonane<br>1,2,4-trimethylbenzene | 5.65<br>3.63 | -<br>120.23 | high<br>Iow |
| xylene                           |              | 7.4 to 18.5 | 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 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

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# Section 13. Disposal considerations

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

|                                | -  |  |  |
|--------------------------------|--|--|--|
|                                | UN   | IMDG   | ΙΑΤΑ   |
| UN number                      | UN1263   | UN1263   | UN1263   |
| UN proper<br>shipping name     | PAINT  | PAINT  | PAINT  |
| Transport hazard<br>class(es)  | 3  | 3  | 3  |
| Packing group                  | III  | III  | III  |
| Environmental<br>hazards       | Yes. The environmentally<br>hazardous substance mark is<br>not required. | Yes.   | Yes. The environmentally<br>hazardous substance mark is<br>not required. |
| Marine pollutant<br>substances | Not applicable.  | (Naphtha (petroleum),<br>hydrodesulfurized heavy,<br>nonane) | Not applicable.  |

#### Additional information

| UN   | : None identified.   |
|------|--|
| IMDG | : The marine pollutant mark is not required when transported in sizes of $\leq$ 5 L or $\leq$ 5 kg.        |
| ΙΑΤΑ | : The environmentally hazardous substance mark may appear if required by other transportation regulations. |

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.

Singapore English (US)

# Section 15. Regulatory information

Stockholm Convention on Persistent Organic Pollutants Not listed.

# Section 16. Other information

| <u>History</u>                 |   |
|--------------------------------|---|
| Date of issue/Date of revision | : 23 November 2022  |
| Date of previous issue         | : 7/16/2021   |
| Version                        | : 1.05  |
| Prepared by                    | : EHS   |
| Key to abbreviations           | : ATE = Acute Toxicity Estimate<br>BCF = Bioconcentration Factor<br>GHS = Globally Harmonized System of Classification and Labelling of Chemicals<br>IATA = International Air Transport Association<br>IBC = Internediate Bulk Container<br>IMDG = International Maritime Dangerous Goods<br>LogPow = logarithm of the octanol/water partition coefficient<br>MARPOL = International Convention for the Prevention of Pollution From Ships,<br>1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)<br>UN = United Nations |

✓ 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.