# SAFETY DATA SHEET

SIGMAGUARD CSF 585 BASE



#### Date of issue 20 December 2023

Version 16

# 1. Product and company identification

| Product name | : SIGMAGUARD CSF 585 BASE |
|--------------|---------------------------|
| Product code | : 00256987                |
| Product type | : Liquid.                 |
|              |                           |

| <u>Relevant identified uses of the substance or mixture and uses advised against</u> |  |  |
|--|--|--|
| Product use  | : Professional applications, Used by spraying.   |  |
| Use of the substance/<br>mixture   | : Coating.   |  |
| Uses advised against   | : Not applicable.  |  |
| Supplier's details   | : PPG PMC Japan Co., Ltd., 8F, Shintetsu Bldg., 1-1, Daikaidori 1-chome, Kobe 652-0803 Japan; Tel: +81-78-574-2777 |  |
| Emergency telephone<br>number  | : 078 574 2777   |  |

| 2. Hazards identification               |  |  |
|---|--|--|
| GHS Classification                      | : SKIN IRRITATION - Category 2<br>EYE IRRITATION - Category 2A<br>SKIN SENSITIZATION - Category 1<br>CARCINOGENICITY - Category 2<br>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 2<br>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2<br>HAZARDOUS TO THE AQUATIC ENVIRONMENT - ACUTE HAZARD - Category 2<br>HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD -<br>Category 2 |  |
| GHS label elements<br>Hazard pictograms |  |  |
| Signal word                             | : Warning  |  |
| Hazard statements                       | <ul> <li>Causes skin irritation.</li> <li>May cause an allergic skin reaction.</li> <li>Causes serious eye irritation.</li> <li>Suspected of causing cancer.</li> <li>May cause damage to organs. (respiratory organs)</li> <li>May cause damage to organs through prolonged or repeated exposure. (respiratory organs)</li> <li>Toxic to aquatic life with long lasting effects.</li> </ul>                       |  |
| Precautionary statements                |  |  |

| Product code 00256987                               | Date of issue 20 December 2023 Version 16   |  |  |
|---|---|--|--|
| Product name SIGMAGUARD CSF 585 BASE                |   |  |  |
| 2. Hazards identifi                                 | 2. Hazards identification   |  |  |
| Prevention  | : Obtain special instructions before use. Do not handle until all safety precautions<br>have been read and understood. Wear protective gloves, protective clothing and<br>eye or face protection. Avoid release to the environment. Do not breathe vapor.<br>Do not eat, drink or smoke when using this product. Wash thoroughly after handling.<br>Contaminated work clothing should not be allowed out of the workplace.                                    |  |  |
| Response  | : Collect spillage. IF exposed or concerned: Call a POISON CENTER or doctor.<br>Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with<br>plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF<br>IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if<br>present and easy to do. Continue rinsing. If eye irritation persists: Get medical<br>advice or attention. |  |  |
| Storage   | : Store locked up.  |  |  |
| Disposal  | : Dispose of contents and container in accordance with all local, regional, national and international regulations.   |  |  |
| Other hazards which do not result in classification | : None known.   |  |  |

### 3. Composition/information on ingredients

Substance/mixture

: Mixture

#### CAS number/other identifiers

| CAS number: Not applicable.CSCL number: Not available.                 |            |             |                          |
|--|------------|-------------|--------------------------|
| Ingredient name  | %          | CAS number  | CSCL                     |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane                                | 25 - <50   | 1675-54-3   | 4-209; 7-1279;<br>7-1283 |
| 1,6-bis(2,3-epoxypropoxy)hexane  | 12.5 - <15 | 16096-31-4  | 2-396; 7-1280            |
| Talc containing no asbestos or quartz                                  | 3 - <5     | 14807-96-6  | Not available.           |
| titanium dioxide (excluding nanoparticle)                              | 3 - <5     | 13463-67-7  | 1-558; 5-5225            |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | 0.2 - <0.5 | 100545-48-0 | Not available.           |
| 1-Butanol  | 0.2 - <0.5 | 71-36-3     | 2-3049                   |
| crystalline silica, respirable powder (>10 microns)                    | 0.1 - <0.2 | 14808-60-7  | 1-548                    |
| o-Xylene   | 0.1 - <0.2 | 95-47-6     | 3-3; 3-60                |

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.

### 4. First aid measures

| <b>Description of necess</b> | sary first aid measures  |
|------------------------------|--|
| 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>  |
| Inhalation                   | <ul> <li>Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is<br/>irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by<br/>trained personnel.</li> </ul> |
| Skin contact                 | <ul> <li>Remove contaminated clothing and shoes. Wash skin thoroughly with soap and<br/>water or use recognized skin cleanser. Do NOT use solvents or thinners.</li> </ul>   |
| Ingestion                    | <ul> <li>If swallowed, seek medical advice immediately and show this container or label.</li> <li>Keep person warm and at rest. Do NOT induce vomiting.</li> </ul>   |
|                              | Japan Page: 2/13   |

### 4. First aid measures

| Most important symptoms/e  | ffec      | ts, acute and delayed   |
|--|-----------|---|
| Potential acute health effect  | <u>ts</u> |   |
| Eye contact  | :         | Causes serious eye irritation.  |
| Inhalation   | :         | No known significant effects or critical hazards.   |
| Skin contact   | :         | May cause damage to organs following a single exposure in contact with skin.<br>Causes skin irritation. May cause an allergic skin reaction.  |
| Ingestion  | :         | May cause damage to organs following a single exposure if swallowed.  |
| Over-exposure signs/symp   | ton       | <u>15</u>   |
| Eye contact  | :         | Adverse symptoms may include the following:<br>pain or irritation<br>watering<br>redness  |
| Inhalation   | 1         | No specific data.   |
| Skin contact   | :         | Adverse symptoms may include the following:<br>irritation<br>redness  |
| Ingestion  | :         | No specific data.   |
| Indication of immediate medical attention and special treatment needed, if necessary |           |   |
| Notes to physician   | :         | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.   |
| Specific treatments  | 1         | No specific treatment.  |
| Protection of first-aiders   | :         | No action shall be taken involving any personal risk or without suitable training. 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. |

See toxicological information (Section 11)

## 5. Fire-fighting measures

| Extinguishing media                            |   |
|--|---|
| Suitable extinguishing media                   | : Use an extinguishing agent suitable for the surrounding fire.   |
| Unsuitable extinguishing media                 | : None known.   |
| Specific hazards arising from the chemical     | : In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic 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:<br>carbon oxides<br>halogenated compounds<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.   |
| 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.   |
|  | Japan Page: 3/13  |

### 5. Fire-fighting measures

### 6. Accidental release measures

| Personal precautions, pr       | otective 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. 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 respond          | lers : If specialized clothing is required to deal with the spillage, take note of any<br>information in Section 8 on suitable and unsuitable materials. See also the<br>information in "For non-emergency personnel".   |
| ·                              | <b>ons</b> : 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      | or containment and cleaning up   |
| Small spill                    | : Stop leak if without risk. Move containers from spill area. Dilute with water and mop<br>up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry<br>material and place in an appropriate waste disposal container. Dispose of via a<br>licensed waste disposal contractor.   |
| Large spill                    | : Stop leak if without risk. Move containers from spill area. 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  |

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.

## 7. Handling and storage

**Precautions for safe** : 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 handling this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Conditions for safe storage : Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. 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. 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.

Product name SIGMAGUARD CSF 585 BASE

### 8. Exposure controls/personal protection

#### **Control parameters**

#### **Occupational exposure limits**

| Ingredient name   | Exposure limits   |  |
|---|---|--|
| ralc containing no asbestos or quartz   | Japan Society for Occupational Health<br>(Japan, 9/2022). [Class 1 dusts (Activated<br>charcoal, Alumina, Aluminium, Bentonite,<br>Diatomite, Graphite, Kaolinite, Pagodite,<br>Pyrites, Pyrite cinder, Talc)]<br>OEL-M: 0.5 mg/m <sup>3</sup> 8 hours. Form:<br>Respirable dust (Class 1 Dust)<br>OEL-M: 2 mg/m <sup>3</sup> 8 hours. Form: Total dust<br>(Class 1 Dust) |  |
| 1-Butanol   | Japan Society for Occupational Health<br>(Japan, 9/2022). Absorbed through skin.<br>OEL-C: 150 mg/m <sup>3</sup><br>OEL-C: 50 ppm<br>Industrial Safety and Health Act (Japan,<br>6/2020).<br>TWA: 25 ppm 8 hours.   |  |
| crystalline silica, respirable powder (>10 microns)   | Japan Society for Occupational Health<br>(Japan, 9/2022). [Respirable crystalline<br>silica]<br>OEL-C: 0.03 mg/m <sup>3</sup> Form: Respirable dust   |  |
| o-Xylene  | Japan Society for Occupational Health<br>(Japan, 9/2022). [Xylene (all isomers<br>(ortho-, meta-, para-xylene and their<br>mixture)]<br>OEL-M: 217 mg/m <sup>3</sup> 8 hours.<br>OEL-M: 50 ppm 8 hours.<br>Industrial Safety and Health Act (Japan,<br>6/2020). [xylene]<br>TWA: 50 ppm 8 hours.  |  |
| Recommended monitoring : Reference should be made to<br>procedures autional guidance documents<br>substances will also be require | for methods for the determination of hazardous  |  |
| controls local exhaust ventilation or oth   | : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.  |  |
| controls they comply with the requirem  | work process equipment should be checked to ensure<br>ents of environmental protection legislation. In some<br>or engineering modifications to the process equipment<br>nissions to acceptable levels.  |  |

| Individual protection me | easures   |
|--------------------------|---|
| Hygiene measures         | : Wash hands, forearms and face thoroughly after handling chemical products, before<br>eating, smoking and using the lavatory and at the end of the working period.<br>Appropriate techniques should be used to remove potentially contaminated clothing.<br>Contaminated work clothing should not be allowed out of the workplace. Wash<br>contaminated clothing before reusing. Ensure that eyewash stations and safety<br>showers are close to the workstation location. |
| Eye protection           | : Chemical splash goggles.  |

#### Skin protection

# 8. Exposure controls/personal protection

| Hand protection        | : Chemical-resistant, impervious gloves complying with an approved standard should<br>be worn at all times when handling chemical products if a risk assessment indicates<br>this is necessary. Considering the parameters specified by the glove manufacturer,<br>check during use that the gloves are still retaining their protective properties. It<br>should be noted that the time to breakthrough for any glove material may be<br>different for different glove manufacturers. In the case of mixtures, consisting of<br>several substances, the protection time of the gloves cannot be accurately<br>estimated. |
|------------------------|---|
| Gloves                 | : butyl rubber  |
| Body protection        | <ul> <li>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.</li> </ul>   |
| Other skin protection  | : 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.   |
| 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.  |

# 9. Physical and chemical properties

| Appearance       |                             |             |  |  |
|------------------|-----------------------------|-------------|--|--|
| Physical state   | : Liquid.                   |             |  |  |
| Color            | : Various                   |             |  |  |
| Odor             | : Characteristic.           |             |  |  |
| Boiling point    | : >37.78°C (>100°F)         |             |  |  |
| Flash point      | : Closed cup: 130°C (266°F) |             |  |  |
| Relative density | : 1.41                      |             |  |  |
| Solubility(ies)  | Media                       | Result      |  |  |
| Solubility(les)  | cold water                  | Not soluble |  |  |
| Viscosity        | : 60 - 100 s (ISO 6mn       | n)          |  |  |

# 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. |

# 10. Stability and reactivity

Hazardous decomposition products

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

# **11. Toxicological information**

#### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name                     | Result                          | Species | Dose                    | Exposure |
|---|---------------------------------|---------|-------------------------|----------|
| ቓis-[4-(2,3-epoxipropoxi)<br>phenyl]propane | LD50 Dermal                     | Rabbit  | 23000 mg/kg             | -        |
|   | LD50 Oral                       | Rat     | 15000 mg/kg             | -        |
| titanium dioxide (excluding nanoparticle)   | LC50 Inhalation Dusts and mists | Rat     | >6.82 mg/l              | 4 hours  |
|   | LD50 Dermal                     | Rabbit  | >5000 mg/kg             | -        |
|   | LD50 Oral                       | Rat     | >5000 mg/kg             | -        |
| Octadecanoic acid,                          | LC50 Inhalation Dusts and mists | Rat     | 5.05 mg/l               | 4 hours  |
| 12-hydroxy-, reaction<br>products with      |                                 |         |                         |          |
| ethylenediamine                             |                                 |         |                         |          |
|   | LD50 Oral                       | Rat     | >2000 mg/kg             | -        |
| 1-Butanol                                   | LC50 Inhalation Vapor           | Rat     | 24000 mg/m <sup>3</sup> | 4 hours  |
|   | LD50 Dermal                     | Rabbit  | 3400 mg/kg              | -        |
|   | LD50 Oral                       | Rat     | 790 mg/kg               | -        |
| o-Xylene                                    | LC50 Inhalation Vapor           | Rat     | 27124 mg/m <sup>3</sup> | 4 hours  |
| -   | LD50 Dermal                     | Rabbit  | 12126 mg/kg             | -        |
|   | LD50 Oral                       | Rat     | 3523 mg/kg              | -        |

#### Irritation/Corrosion

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

#### **Sensitization**

| Product/ingredient name   | Route of exposure | Species    | Result      |  |
|---|-------------------|------------|-------------|--|
| bis-[4-(2,3-epoxipropoxi)<br>phenyl]propane                                     | skin              | Mouse      | Sensitizing |  |
| Octadecanoic acid,<br>12-hydroxy-, reaction<br>products with<br>ethylenediamine | skin              | Guinea pig | Sensitizing |  |

#### **Mutagenicity**

Not available.

#### **Carcinogenicity**

Not available.

#### Reproductive toxicity

Not available.

#### **Teratogenicity**

### **11. Toxicological information**

#### Not available.

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

| Name                                  | Category   | Route of exposure | Target organs                   |
|---------------------------------------|------------|-------------------|---------------------------------|
| Talc containing no asbestos or quartz | Category 1 | -                 | respiratory organs              |
| 1-Butanol                             | Category 3 | -                 | Respiratory tract irritation    |
|                                       | Category 3 |                   | Narcotic effects                |
| o-Xylene                              | Category 1 | -                 | central nervous<br>system (CNS) |
|                                       | Category 3 |                   | Respiratory tract irritation    |
|                                       | Category 3 |                   | Narcotic effects                |

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

| Name  | Category                               | Route of exposure | Target organs  |
|---|--|-------------------|--|
| Talc containing no asbestos or quartz<br>titanium dioxide (excluding nanoparticle)<br>1-Butanol | Category 1<br>Category 1<br>Category 1 | -<br>-<br>-       | respiratory organs<br>respiratory organs<br>central nervous<br>system (CNS),<br>hearing organs |

#### **Aspiration hazard**

| Name     | Result                         |
|----------|--------------------------------|
| o-Xylene | ASPIRATION HAZARD - Category 1 |

| Information on the likely routes of exposure | : Not available.   |
|--|--|
| Potential acute health eff                   | ects   |
| Eye contact                                  | : Causes serious eye irritation.   |
| Inhalation                                   | : No known significant effects or critical hazards.  |
| Skin contact                                 | : May cause damage to organs following a single exposure in contact with skin.<br>Causes skin irritation. May cause an allergic skin reaction. |
| Ingestion                                    | : May cause damage to organs following a single exposure if swallowed.   |
|  | ohysical, chemical and toxicological characteristics   |
| Eye contact                                  | : Adverse symptoms may include the following:<br>pain or irritation<br>watering<br>redness   |
| Inhalation                                   | : No specific data.  |
| Skin contact                                 | : Adverse symptoms may include the following:<br>irritation<br>redness   |
| Ingestion                                    | : No specific data.  |
|  | ects and also chronic effects from short and long term exposure  |
| <u>Short term exposure</u>                   |  |
| Potential immediate<br>effects               | : Not available.   |
|  |  |

### Product name SIGMAGUARD CSF 585 BASE

| 11. Toxicological information  |     |  |  |  |
|--------------------------------|-----|--|--|--|
| Potential delayed effects      | 1   | Not available.   |  |  |
| <u>Long term exposure</u>      |     |  |  |  |
| Potential immediate<br>effects | :   | Not available.   |  |  |
| Potential delayed effects      | :   | Not available.   |  |  |
| Potential chronic health eff   | ect | <u>s</u>   |  |  |
| General                        | -   | May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. |  |  |
| Carcinogenicity                | :   | Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.   |  |  |
| Mutagenicity                   | :   | No known significant effects or critical hazards.  |  |  |
| Reproductive toxicity          | :   | No known significant effects or critical hazards.  |  |  |

#### Numerical measures of toxicity

#### Acute toxicity estimates

| Product/ingredient name  | Oral (mg/<br>kg) | Dermal<br>(mg/kg) | Inhalation<br>(gases)<br>(ppm) | Inhalation<br>(vapors)<br>(mg/l) | Inhalation<br>(dusts<br>and mists)<br>(mg/l) |
|--|------------------|-------------------|--------------------------------|----------------------------------|--|
| bis-[4-(2,3-epoxipropoxi)phenyl]propane<br>Octadecanoic acid, 12-hydroxy-, reaction products<br>with ethylenediamine | 15000<br>2500    | 23000<br>N/A      | N/A<br>N/A                     | N/A<br>N/A                       | N/A<br>5.05                                  |
| 1-Butanol<br>o-Xylene  | N/A<br>3523      | 3400<br>12126     | N/A<br>N/A                     | 24<br>11                         | N/A<br>N/A                                   |

#### Other information

Sanding and grinding dusts may be harmful if inhaled.

2

# 12. Ecological information

#### **Toxicity**

| Product/ingredient name   | Result                           | Species                                    | Exposure |  |
|---|----------------------------------|--|----------|--|
| ቓis-[4-(2,3-epoxipropoxi)<br>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  |  |
| titanium dioxide (excluding nanoparticle)                                       | Acute LC50 >100 mg/l Fresh water | Daphnia - <i>Daphnia magna</i>             | 48 hours |  |
| Octadecanoic acid,<br>12-hydroxy-, reaction<br>products with<br>ethylenediamine | Acute EC50 >100 mg/l             | Algae - Pseudokirchneriella<br>subcapitata | 72 hours |  |
|   | Acute EC50 >10 mg/l              | Daphnia - <i>Daphnia magna</i>             | 48 hours |  |
|   | Acute LC50 >10 mg/l              | Fish - Oncorhynchus mykiss                 | 96 hours |  |
| 1-Butanol   | Acute LC50 1376 mg/l             | Fish                                       | 96 hours |  |

#### Persistence/degradability

#### Product name SIGMAGUARD CSF 585 BASE

### 12. Ecological information

| Product/ingredient name  | Test   | Result |                        | Dose | Inoculum                           |
|--|--|--------|------------------------|------|------------------------------------|
| Octadecanoic acid,<br>12-hydroxy-, reaction<br>products with<br>ethylenediamine<br>o-Xylene  | 301D Ready<br>Biodegradability -<br>Closed Bottle<br>Test<br>OECD 301F |        | lays<br>dily - 28 days | -    | -                                  |
| Product/ingredient name  | Aquatic half-life  |        | Photolysis             |      | Biodegradability                   |
| <ul> <li>pís-[4-(2,3-epoxipropoxi)</li> <li>phenyl]propane</li> <li>Octadecanoic acid,</li> <li>12-hydroxy-, reaction</li> <li>products with</li> <li>ethylenediamine</li> <li>o-Xylene</li> </ul> | -  |        | -                      |      | Not readily<br>Inherent<br>Readily |

#### **Bioaccumulative potential**

| Product/ingredient name      | LogPow | BCF   | Potential |
|------------------------------|--------|-------|-----------|
| ,6-bis(2,3-epoxypropoxy)     | 0.822  | -     | Low       |
| hexane<br>Octadecanoic acid, | >5.86  |       | High      |
| 12-hydroxy-, reaction        | - 3.00 |       | i ligit   |
| products with                |        |       |           |
| ethylenediamine              |        |       |           |
| 1-Butanol                    | 1      | -     | Low       |
| o-Xylene                     | 3.12   | 14.13 | Low       |

#### **Mobility in soil**

Other adverse effects

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

: No known significant effects or critical hazards.

### 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 emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

# 14. Transport information

|                                | UN  | IMDG  | ΙΑΤΑ  |
|--------------------------------|---|---|---|
| UN number                      | UN3082  | UN3082  | UN3082  |
| UN proper<br>shipping name     | ENVIRONMENTALLY<br>HAZARDOUS SUBSTANCE,<br>LIQUID, N.O.S. | ENVIRONMENTALLY<br>HAZARDOUS SUBSTANCE,<br>LIQUID, N.O.S. | ENVIRONMENTALLY<br>HAZARDOUS SUBSTANCE,<br>LIQUID, N.O.S. |
|                                | (bis-[4-(2,3-epoxipropoxi)<br>phenyl]propane)             | (bis-[4-(2,3-epoxipropoxi)<br>phenyl]propane)             | (bis-[4-(2,3-epoxipropoxi)<br>phenyl]propane)             |
| Transport hazard<br>class(es)  | 9   | 9   | 9   |
| Packing group                  |   |   | III   |
| Environmental<br>hazards       | Yes.  | Yes.  | Yes.  |
| Marine pollutant<br>substances | Not applicable.   | (bis-[4-(2,3-epoxipropoxi)<br>phenyl]propane)             | Not applicable.   |

#### **Additional information**

| UN   | : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. |
|------|---|
| IMDG | This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.   |
| IATA | : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.      |

# 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

### 15. Regulatory information

#### Fire Service Law

| Category                | Substance name/Type | Danger<br>category | Signal word    | Designated quantity |
|-------------------------|---------------------|--------------------|----------------|---------------------|
| Specified<br>flammables | Combustible liquid  | Not<br>applicable  | Not applicable | 2 m³                |

Pollutant Release and Transfer Registers (PRTR)

None of the components are listed.

#### **Industrial Safety and Health Act**

#### Ordinance on the Prevention of the Hazard due to Specified Chemical Substances

None of the components are listed.

#### Substance(s) requiring labelling

### 15. Regulatory information

| Ingredient name    | %   |        | Reference<br>number |
|--------------------|-----|--------|---------------------|
| Titanium(IV) oxide | ≤10 | Listed | 191                 |
| Crystalline silica | ≤10 | Listed | 165-2               |

#### **Chemicals requiring notification**

| Ingredient name    | %   |        | Reference<br>number |
|--------------------|-----|--------|---------------------|
| Titanium(IV) oxide | ≤10 | Listed | 191                 |
| Butanol            | ≤10 | Listed | 477                 |
| Crystalline silica | ≤10 | Listed | 165-2               |
| Xylene             | ≤10 | Listed | 136                 |

#### Carcinogens based on Article 577-2 of the Ordinance on ISH

None of the components are listed.

#### Mutagen

None of the components are listed.

| Corrosive liquid  | : Not listed      |
|---|-------------------|
| Occupational Safety and<br>Health Law   | : Not applicable. |
| Regulations on the<br>Prevention of Tetraalkyl<br>Lead Poisoning              | : Not listed      |
| Harmful Substances<br>Subject to Obtaining<br>Permission for<br>Manufacturing | : Not listed      |
| Harmful Substances,<br>Prohibited for<br>Manufacturing                        | : Not listed      |
| Lead regulation   | : Not listed      |
| Organic solvents poisoning prevention   | : Not applicable. |

#### **Poisonous and Deleterious Substances**

None of the components are listed.

#### Chemical Substances Control Law (CSCL)

| %          | Status                                     | Reference<br>number   |
|------------|--|---|
| ≥40 - ≤50  | Priority assessment                        | 87  |
| ≤10        | Priority assessment                        | 124   |
| ≤10        | Priority assessment                        | 125   |
| ≤10<br>≤10 | Priority assessment<br>Priority assessment | 25<br>22  |
|            | ≥40 - ≤50<br>≤10<br>≤10                    | ≥40 - ≤50       Priority assessment         ≤10       Priority assessment         ≤10       Priority assessment         ≤10       Priority assessment         ≤10       Priority assessment |

High Pressure Gas Control : Not available. Law

#### **Explosives Control Law**

None of the components are listed.

### 15. Regulatory information

Law concerning prevention : Not available. of pollution of the ocean

#### Maritime Safety Law

#### Notification Regulating Transportation of Dangerous Materials by Sea

None of the components are listed.

#### Container class

None of the components are listed.

| JSOH Carcinogen                                  | : Group 1                              |
|--|--|
| List of Specially Controlled<br>Industrial Waste | : Not listed                           |
| Japan inventory                                  | : 🕅 components are listed or exempted. |
| Road law   | : Not available.                       |
|  |  |

### 16. Other information

| <u>History</u>                 |  |
|--------------------------------|--|
| Date of issue/Date of revision | : 20 December 2023   |
| Date of previous issue         | : 10/7/2022  |
| Version                        | : 16   |
| Prepared by                    | : EHS  |
| Key to abbreviations           | <ul> <li>ADN = European Provisions concerning the International Carriage of Dangerous<br/>Goods by Inland Waterway</li> <li>ADR = The European Agreement concerning the International Carriage of<br/>Dangerous Goods by Road</li> <li>ATE = Acute Toxicity Estimate</li> <li>BCF = Bioconcentration Factor</li> <li>GHS = Globally Harmonized System of Classification and Labelling of Chemicals<br/>IATA = International Air Transport Association</li> <li>IMDG = International Maritime Dangerous Goods</li> <li>LogPow = logarithm of the octanol/water partition coefficient</li> <li>MARPOL = International Convention for the Prevention of Pollution From Ships,<br/>1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)</li> <li>RID = The Regulations concerning the International Carriage of Dangerous Goods<br/>by Rail</li> <li>UN = United Nations</li> </ul> |

**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.