# **SAFETY DATA SHEET**

Date of issue/Date of revision 23 May 2024

١

Version1

# Section 1. Identification

| Product code   | : 00445408   |
|--|--|
| Product name   | : SIGMASHIELD 880 BASE ALU Y/G   |
| CAS number   | : Not applicable.  |
| EC number  | : Mixture.   |
| Product type   | : Liquid.  |
| Relevant identified uses                                   | of the substance or mixture and uses advised against   |
| Product use  | <ul> <li>Coating.</li> <li>Professional applications, Used by spraying.</li> </ul>   |
| Uses advised against                                       | : Product is not intended, labelled or packaged for consumer use.  |
| Supplier's details   | : PPG Yung Chi Coatings Co. Ltd<br>Lot 219, Amata Street, Long Binh IZ<br>Bien Hoa City, Dong Nai Province<br>Vietnam<br>Tel : +84 61 3936121/22 |
| Emergency telephone<br>number (with hours of<br>operation) | : CHEMTREC +(84)-444581938 (CCN 17704)   |

# Section 2. Hazards identification

| Classification of the | : FLAMMABLE LIQUIDS - Category 3   |
|-----------------------|--|
| substance or mixture  | ACUTE TOXICITY (dermal) - Category 5   |
|                       | SKIN IRRITATION - Category 2   |
|                       | EYE IRRITATION - Category 2A   |
|                       | SKIN SENSITIZATION - Category 1  |
|                       | GERM CELL MUTAGENICITY - Category 2  |
|                       | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract<br>irritation) - Category 3            |
|                       | AQUATIC TOXICITY (CHRONIC) - Category 2  |
|                       | Percentage of the mixture consisting of ingredient(s) of unknown acute dermal                              |
|                       | toxicity: 59.3%  |
|                       | Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 53.6% |
| GHS label elements    |  |
| Hazard pictograms     |  |
|                       |  |
|                       |  |
|                       |  |
|                       | • • • •  |
| Signal word           | : Warning  |
|                       |  |
|                       |  |

Product name SIGMASHIELD 880 BASE ALU Y/G

### Section 2. Hazards identification

| Hazard statements          | :  | Flammable liquid and vapor.<br>May be harmful in contact with skin.<br>Causes skin irritation.<br>May cause an allergic skin reaction.<br>Causes serious eye irritation.<br>May cause respiratory irritation.<br>Suspected of causing genetic defects.<br>Toxic to aquatic life with long lasting effects.   |
|----------------------------|----|--|
| Precautionary statements   |    |  |
| Prevention                 | :  | Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing vapor. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.   |
| Response                   | :  | Collect spillage. IF exposed or concerned: Get medical advice or attention. IF<br>INHALED: Remove person to fresh air and keep comfortable for breathing. Call a<br>POISON CENTER or doctor if you feel unwell. IF ON SKIN (or hair): Take off<br>immediately all contaminated clothing. Rinse skin with water. IF ON SKIN: Call a<br>POISON CENTER or doctor if you feel unwell. Wash with plenty of water. If skin<br>irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse<br>cautiously with water for several minutes. Remove contact lenses, if present and<br>easy to do. Continue rinsing. If eye irritation persists: Get medical advice or<br>attention. |
| Storage                    | 1  | Store locked up. Store in a well-ventilated place. Keep container tightly closed.  |
| Disposal                   | :  | Dispose of contents and container in accordance with all local, regional, national and international regulations.  |
| Routes of entry            | :  | Not available.   |
| Other hazards which do not | ۰. | Prolonged or repeated contact may dry skin and cause irritation.   |
| result in classification   | 1  | i tolonged of repeated contact may dry skill and cause initation.  |

result in classification

# Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

#### **CAS number/other identifiers**

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

| Ingredient name  | CAS number | Chemical formula             | %         |
|--|------------|------------------------------|-----------|
| reaction product: bisphenol-A-(epichlorohydrin);<br>epoxy resin  | 25068-38-6 | (C15-H16-O2.<br>C3-H5-Cl-O)x | ≥10 - ≤22 |
| Talc , not containing asbestiform fibres   | 14807-96-6 | H2-03-Si.3/4Mg               | ≥10 - ≤25 |
| Epoxy Resin (700 <mw<=1100)< td=""><td>25036-25-3</td><td>(C21H24O4.<br/>C15H16O2)x</td><td>≤4.8</td></mw<=1100)<> | 25036-25-3 | (C21H24O4.<br>C15H16O2)x     | ≤4.8      |
| Phenol, methylstyrenated   | 68512-30-1 | -                            | ≤4.3      |
| xylene   | 1330-20-7  | C8-H10                       | ≤4.1      |
| Solvent naphtha (petroleum), heavy arom.   | 64742-94-5 | -                            | ≤5        |
| 2-methylpropan-1-ol  | 78-83-1    | C4-H10-O                     | ≤2.1      |
| 2,3-epoxypropyl neodecanoate   | 26761-45-5 | C13-H24-O3                   | <2.5      |

Viet Nam Page: 2/13

Product name SIGMASHIELD 880 BASE ALU Y/G

# Section 3. Composition/information on ingredients

There are no 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.

SUB codes represent substances without registered CAS Numbers.

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

### Section 4. First aid measures

| Description of necess | 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            | : 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 recognized skin cleanser. Do NOT use solvents or thinners.   |
| Ingestion             | : If swallowed, seek medical advice immediately and show this container or label.<br>Keep person warm and at rest. Do NOT induce vomiting.   |

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

| Potential acute health effe |   |      |
|-----------------------------|---|------|
| Eye contact                 | Causes serious eye irritation.  |      |
| Inhalation                  | May cause respiratory irritation.   |      |
| Skin contact                | May be harmful in contact with skin. Causes skin irritation. Defatting to the sl<br>May cause an allergic skin reaction.  | kin. |
| Ingestion                   | No known significant effects or critical hazards.   |      |
| Over-exposure signs/symp    | <u>15</u>   |      |
| Eye contact                 | Adverse symptoms may include the following:<br>pain or irritation<br>watering<br>redness  |      |
| Inhalation                  | Adverse symptoms may include the following:<br>respiratory tract irritation<br>coughing   |      |
| Skin contact                | Adverse symptoms may include the following:<br>irritation<br>redness<br>dryness<br>cracking   |      |
| Ingestion                   | No specific data.   |      |
| Indication of immediate ma  | Lattention and encoded treatment needed, if needed if   |      |
|                             | I 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.   | ge   |
| Specific treatments         | No specific treatment.  |      |
| Protection of first-aiders  | No action shall be taken involving any personal risk or without suitable training<br>is suspected that fumes are still present, the rescuer should wear an appropri-<br>mask or self-contained breathing apparatus. It may be dangerous to the pers<br>providing aid to give mouth-to-mouth resuscitation. Wash contaminated cloth<br>thoroughly with water before removing it, or wear gloves. | ate  |
|                             |   |      |

Version 1

### Section 4. First aid measures

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. |
| 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.  |
| Special protective<br>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   | tiv | e 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".   |
| Environmental precautions      | :   | Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.  |
| Methods and materials for co   | ont | 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.   |

### Section 6. Accidental release measures

Large spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and<br/>explosion-proof equipment. Approach release from upwind. Prevent entry into<br/>sewers, water courses, basements or confined areas. Wash spillages into an<br/>effluent treatment plant or proceed as follows. Contain and collect spillage with non-<br/>combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth<br/>and place in container for disposal according to local regulations (see Section 13).<br/>Dispose of via a licensed waste disposal contractor. Contaminated absorbent<br/>material may pose the same hazard as the spilled product. Note: see Section 1 for<br/>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). Persons with a history of skin sensitization problems should not be employed in any process in which 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 ingest. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container. |
| Advice on general :<br>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

Version 1

Product name SIGMASHIELD 880 BASE ALU Y/G

# Section 8. Exposure controls/personal protection

| Ingredient name                     |   | Exposure limits  |
|-------------------------------------|---|--|
| Talc , not containing asbestif      | orm fibres  | Ministry of Health (Viet Nam, 6/2019).<br>TWA: 3 mg/m <sup>3</sup> 8 hours. Form: inhalable<br>dust<br>TWA: 1 mg/m <sup>3</sup> 8 hours. Form: respirable<br>dust<br>TWA: 2 mg/m <sup>3</sup> 8 hours. Form: total dust<br>concentration   |
| xylene                              |   | Ministry of Health (Viet Nam, 6/2019).<br>[xylene]<br>STEL: 300 mg/m <sup>3</sup> 15 minutes.  |
| 2-methylpropan-1-ol                 |   | TWA: 100 mg/m <sup>3</sup> 8 hours.<br><b>Ministry of Health (Viet Nam, 6/2019).</b><br><b>[butanols]</b><br>STEL: 250 mg/m <sup>3</sup> 15 minutes.<br>TWA: 150 mg/m <sup>3</sup> 8 hours.  |
| Recommended monitoring procedures   |   | o appropriate monitoring standards. Reference to<br>s for methods for the determination of hazardous<br>red.   |
| Appropriate engineering<br>controls | ventilation or other engineerin<br>contaminants below any reco  | lation. Use process enclosures, local exhaust<br>ng controls to keep worker exposure to airborne<br>ommended or statutory limits. The engineering controls<br>or dust concentrations below any lower explosive<br>rentilation equipment.   |
| Environmental exposure<br>controls  | they comply with the requiren<br>cases, fume scrubbers, filters   | work process equipment should be checked to ensure<br>nents of environmental protection legislation. In some<br>s or engineering modifications to the process<br>to reduce emissions to acceptable levels.   |
| Individual protection measur        |   |  |
| Hygiene measures                    | : Wash hands, forearms and fa<br>eating, smoking and using th<br>Appropriate techniques shou<br>Contaminated work clothing s  | ace thoroughly after handling chemical products, before<br>e lavatory and at the end of the working period.<br>Id be used to remove potentially contaminated clothing.<br>should not be allowed out of the workplace. Wash<br>e reusing. Ensure that eyewash stations and safety<br>kstation location.   |
| Eye/face protection                 | : Chemical splash goggles.  |  |
| Skin protection                     |   |  |
| Hand protection                     | be worn at all times when har<br>this is necessary. Considerin<br>check during use that the glo<br>should be noted that the time<br>different for different glove m | us gloves complying with an approved standard should<br>ndling chemical products if a risk assessment indicates<br>ng the parameters specified by the glove manufacturer,<br>oves are still retaining their protective properties. It<br>to breakthrough for any glove material may be<br>anufacturers. In the case of mixtures, consisting of<br>ection time of the gloves cannot be accurately |
|                                     | estimated.  | 5  |

Page: 7/13

Viet Nam

Product name SIGMASHIELD 880 BASE ALU Y/G

### Section 8. Exposure controls/personal protection

| -                      |  |
|------------------------|--|
| 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                               | 1 | Liquid.  |
| Color  | 1 | Not available.   |
| Odor   | 1 | Characteristic.  |
| Odor threshold                               | 1 | Not available.   |
| рН   | 1 | Not applicable.  |
| Melting point                                | 1 | Not available.   |
| Boiling point                                | 1 | >37.78°C (>100°F)  |
| Flash point                                  | 1 | Closed cup: 41°C (105.8°F)   |
| Evaporation rate                             | 1 | Not available.   |
| Flammability (solid, gas)                    | 1 | Not available.   |
| Lower and upper explosive (flammable) limits | : | Greatest known range: Lower: 1.7% Upper: 10.9% (2-methylpropan-1-ol) |
| Vapor pressure                               | 1 | Not available.   |
| Vapor density                                | 1 | Not available.   |
| Relative density                             | 1 | 1.46   |
| Solubility(ies)                              |   | Media Result   |
| Colubility(ICS)                              |   | cold water Not soluble   |
| Partition coefficient: n-<br>octanol/water   | : | Not applicable.  |
| Auto-ignition temperature                    | 1 | Not available.   |
| Decomposition temperature                    | 1 | Not available.   |
| Viscosity                                    | : | Kinematic (40°C): >21 mm²/s  |
|  |   |  |

# 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.            |

Product name SIGMASHIELD 880 BASE ALU Y/G

# Section 10. Stability and reactivity

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

### Section 11. Toxicological information

#### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name   | Result                          | Species | Dose        | Exposure |
|---|---------------------------------|---------|-------------|----------|
| reaction product: bisphenol-<br>A-(epichlorohydrin); epoxy<br>resin | LD50 Dermal                     | Rabbit  | >2 g/kg     | -        |
|   | LD50 Oral                       | Rat     | >2 g/kg     | -        |
| Epoxy Resin (700 <mw<br>&lt;=1100)</mw<br>                          | 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 | -        |
| xylene  | LD50 Dermal                     | Rabbit  | 1.7 g/kg    | -        |
|   | LD50 Oral                       | Rat     | 4.3 g/kg    | -        |
| Solvent naphtha (petroleum), heavy arom.                            | LC50 Inhalation Dusts and mists | Rat     | >5.2 mg/l   | 4 hours  |
|   | LD50 Oral                       | Rat     | >5 g/kg     | -        |
| 2-methylpropan-1-ol   | LC50 Inhalation Vapor           | Rat     | 24.6 mg/l   | 4 hours  |
|   | LD50 Dermal                     | Rabbit  | 2460 mg/kg  | -        |
|   | LD50 Oral                       | Rat     | 2830 mg/kg  | -        |
| 2,3-epoxypropyl<br>neodecanoate                                     | LD50 Dermal                     | Rat     | 3800 mg/kg  | -        |
|   | LD50 Oral                       | Rat     | 9.6 g/kg    | -        |

Conclusion/Summary

: There are no data available on the mixture itself.

#### Irritation/Corrosion

| Product/ingredient name                                    | Result                   | Species | Score | Exposure           | Observation |
|--|--------------------------|---------|-------|--------------------|-------------|
| reaction product: bisphenol-<br>A-(epichlorohydrin); epoxy | Eyes - Mild irritant     | Rabbit  | -     | 100 mg             | -           |
| resin  |                          | Dabbit  |       |                    |             |
|  | Eyes - Moderate irritant | Rabbit  | -     | -                  | -           |
|  | Skin - Moderate irritant | Rabbit  | -     | -                  | -           |
|  | Skin - Moderate irritant | Rabbit  | -     | 24 hours 500<br>Ul | -           |
|  | Skin - Severe irritant   | Rabbit  | -     | 24 hours 2<br>mg   | -           |
| xylene   | Skin - Moderate irritant | Rabbit  | -     | 24 hours 500<br>mg | -           |

Conclusion/Summary Skin

: There are no data available on the mixture itself.

Eyes

: There are no data available on the mixture itself.

### Section 11. Toxicological information

### Respiratory

| 0 |   | -  | . : | 43 | _  | -4  |    | n  |
|---|---|----|-----|----|----|-----|----|----|
| _ | P | 19 | 51  | ТІ | 7: | а т | 10 | חו |
| - |   |    |     | •  |    |     |    |    |

| Thoro  | aro | no da | ta ava | ailahla | on | tho | mixture   | itealf |
|--------|-----|-------|--------|---------|----|-----|-----------|--------|
| 111010 | are | no ua | la ave | illabic |    | uic | IIIIALUIE | noch.  |
|        |     |       |        |         |    |     |           |        |

| Product/ingredient name   | Route of exposure         | Species                     | Result            |                                 |
|---|---------------------------|-----------------------------|-------------------|---------------------------------|
| reaction product: bisphenol-<br>A-(epichlorohydrin); epoxy<br>resin | skin                      | Mouse                       | Sensitizing       |                                 |
| Skin  | : There are no d          | ata available on the mixtur | e itself.         |                                 |
| Respiratory   | : There are no d          | ata available on the mixtur | e itself.         |                                 |
| Mutagenicity  |                           |                             |                   |                                 |
| Conclusion/Summary  | : There are no d          | ata available on the mixtur | e itself.         |                                 |
| Carcinogenicity   |                           |                             |                   |                                 |
| Conclusion/Summary  | : There are no d          | ata available on the mixtur | e itself.         |                                 |
| Reproductive toxicity   |                           |                             |                   |                                 |
| Conclusion/Summary  | : There are no d          | ata available on the mixtur | e itself.         |                                 |
| Teratogenicity  |                           |                             |                   |                                 |
| Conclusion/Summary  | : There are no d          | ata available on the mixtur | e itself.         |                                 |
| Specific target organ toxici  | <u>ty (single exposur</u> | <u>e)</u>                   |                   |                                 |
| Name  |                           | Category                    | Route of exposure | Target organs                   |
| Talc , not containing asbestif                                      | orm fibres                | Category 3                  | -                 | Respiratory tract irritation    |
| xylene  |                           | Category 3                  | -                 | Respiratory tract<br>irritation |
| Solvent naphtha (petroleum)   | , heavy arom.             | Category 3                  | -                 | Narcotic effects                |
| 2 mothularoaan 1 al   |                           | Category 3                  | -                 | Respiratory tract               |
| 2-methylpropan-1-ol   |                           |                             |                   | irritation                      |

Specific target organ toxicity (repeated exposure)

#### Not available.

#### **Aspiration hazard**

| Name                                     | Result   |
|--|--|
| Solvent naphtha (petroleum), heavy arom. | ASPIRATION HAZARD - Category 1<br>ASPIRATION HAZARD - Category 1<br>ASPIRATION HAZARD - Category 2 |

| Information on the likely routes of exposure | : | Not available.  |
|--|---|---|
| Potential acute health effects               |   |   |
| Eye contact                                  | : | Causes serious eye irritation.  |
| Inhalation                                   | : | May cause respiratory irritation.   |
| Skin contact                                 | : | May be harmful in contact with skin. Causes skin irritation. Defatting to the skin.<br>May cause an allergic skin reaction. |
| Ingestion                                    | : | No known significant effects or critical hazards.   |

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

### Section 11. Toxicological information

|                                | -  |  |
|--------------------------------|--|--|
| Eye contact                    |  | •  |
| Inhalation                     |  | rse symptoms may include the following:<br>ratory tract irritation<br>hing |
| Skin contact                   | : Adve<br>irritat<br>redne<br>dryne<br>crack | 255<br>255   |
| Ingestion                      | : No s                                       | pecific data.  |
| Delayed and immediate effect   | s and a                                      | Iso chronic effects from short and long term exposure                      |
| <u>Short term exposure</u>     |  |  |
| Potential immediate<br>effects | : Ther                                       | e are no data available on the mixture itself.                             |
| Potential delayed effects      | : Ther                                       | e are no data available on the mixture itself.                             |
| <u>Long term exposure</u>      |  |  |
| Potential immediate<br>effects | : Ther                                       | e are no data available on the mixture itself.                             |
| Potential delayed effects      | : Ther                                       | e are no data available on the mixture itself.                             |
| Potential chronic health eff   | <u>cts</u>                                   |  |

| Potential chronic health e | ffects  |
|----------------------------|---|
| General                    | <ul> <li>Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/<br/>or dermatitis. Once sensitized, a severe allergic reaction may occur when<br/>subsequently exposed to very low levels.</li> </ul> |
| Carcinogenicity            | : No known significant effects or critical hazards.   |
| Mutagenicity               | : Suspected of causing genetic defects.   |
| Reproductive toxicity      | : No known significant effects or critical hazards.   |

#### Numerical measures of toxicity

#### Acute toxicity estimates

| Route                        | ATE value     |
|------------------------------|---------------|
| Oral                         | 5389.19 mg/kg |
| Dermal                       | 2637.88 mg/kg |
| Inhalation (vapors)          | 152.08 mg/l   |
| Inhalation (dusts and mists) | 20.74 mg/l    |

#### 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

| T | ox | ic | ity | L |
|---|----|----|-----|---|
|   |    |    | _   |   |

| Product/ingredient name   | Result                                     | Species   | Exposure             |
|---|--|---|----------------------|
| reaction product: bisphenol-<br>A-(epichlorohydrin); epoxy<br>resin | Chronic NOEC 0.3 mg/l                      | Daphnia   | 21 days              |
| Solvent naphtha (petroleum), heavy arom.                            | NOEL 0.48 mg/l Fresh water                 | Daphnia   | 21 days              |
| 2-methylpropan-1-ol   | Acute EC50 1100 mg/l                       | Daphnia   | 48 hours             |
| 2,3-epoxypropyl<br>neodecanoate                                     | Acute EC50 3.5 mg/l                        | Algae   | 96 hours             |
|   | Acute EC50 4.8 mg/l<br>Acute LC50 9.6 mg/l | Daphnia - <i>Daphnia magna</i><br>Fish - <i>Oncorhynchus mykiss</i> | 48 hours<br>96 hours |

#### Persistence and degradability

| Product/ingredient name  | Test              | Result      |            | Dose |                               | Inoculum    |
|--|-------------------|-------------|------------|------|-------------------------------|-------------|
| reaction product: bisphenol-<br>A-(epichlorohydrin); epoxy<br>resin  | OECD 301F         | 5 % - 28 da | ays        | -    |                               | -           |
| Product/ingredient name  | Aquatic half-life |             | Photolysis |      | Biodeg                        | gradability |
| reaction product: bisphenol-<br>A-(epichlorohydrin); epoxy<br>resin<br>xylene<br>2,3-epoxypropyl<br>neodecanoate | -                 |             | -          |      | Not rea<br>Readily<br>Not rea | ý           |

#### **Bioaccumulative potential**

| Product/ingredient name   | LogPow       | BCF         | Potential |
|---|--------------|-------------|-----------|
| reaction product: bisphenol-<br>A-(epichlorohydrin); epoxy<br>resin | 2.64 to 3.78 | 31          | Low       |
| Phenol, methylstyrenated  | 3.627        | -           | Low       |
| xylene  | 3.12         | 7.4 to 18.5 | Low       |
| Solvent naphtha (petroleum), heavy arom.                            | 2.8 to 6.5   | -           | High      |
| 2-methylpropan-1-ol   | 1            | -           | Low       |
| 2,3-epoxypropyl<br>neodecanoate                                     | 4.4          | -           | High      |

#### Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

**Other adverse effects** 

: No known significant effects or critical hazards.

### Section 13. Disposal considerations

: The generation of waste should be avoided or minimized wherever possible. **Disposal methods** 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. 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  |  |
| 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.  | (reaction product: bisphenol-A-<br>(epichlorohydrin); epoxy resin) | Not applicable.  |

| Additional ir | Iformation   |
|---------------|--|
| 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 prec  | autions for user : <b>Transport within user's premises:</b> always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. |

Transport in bulk according : Not applicable. to IMO instruments

### Section 15. Regulatory information

#### Safety, health and environmental regulations specific for the product

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

#### Circular no. 05/1999/TT-BYT

| Ingredient name        | Category   | Notes |
|------------------------|------------|-------|
| benzene                | Category 1 |       |
| toluene                | Category 2 |       |
| xylene                 | Category 2 |       |
| 1,4-dioxane            | Category 2 |       |
| chloromethane          | Category 2 |       |
| Formaldehyde, solution | Category 2 |       |
| ethylene oxide         | Category 2 |       |

#### Toxic classification (TCVN : 3

3164-79)

#### International regulations

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

### Section 16. Other information

#### **History**

| Date of issue/Date of revision | : 23 May 2024   |
|--------------------------------|---|
| Date of previous issue         | : No previous validation  |
| Version                        | : 1   |
| Prepared by                    | : EHS   |
| Key to abbreviations           | <ul> <li>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 = International Air Transport Association<br/>IBC = 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</li> </ul> |
| References                     | : Not available.  |

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.