# **SAFETY DATA SHEET**



Date of issue/Date of revision2 November 2023Version 7

# Section 1. Identification of the substance/mixture and of the company/undertaking

| Product code                  | : 00285432             |
|-------------------------------|------------------------|
| Product name                  | : AMERLOCK SEALER CURE |
| Other means of identification | : Not available.       |
| Product type                  | : Liquid.              |

| Relevant identified uses of the substance or mixture and uses advised against |  |  |
|---|--|--|
| Product use   | Coating.<br>dustrial applications, Used by spraying.   |  |
| Uses advised against  | : Product is not intended, labelled or packaged for consumer use.  |  |
| Supplier's details  | : PPG Coatings (Thailand) Co., Ltd.<br>15 Rama 9 Road, Kwaeng Huamark,<br>Khet Bangkapi, Bangkok 10240 Thailand<br>T: 662-319-4190 #224<br>F: 662-319-4189 |  |
| Emergency telephone<br>number (with hours of<br>operation)                    | : CHEMTREC 001-800-13-203-9987 (CCN 17704)   |  |

### Section 2. Hazards identification

| Classification of the | : FLAMMABLE LIQUIDS - Category 4                                    |
|-----------------------|---|
| substance or mixture  | ACUTE TOXICITY (oral) - Category 4                                  |
|                       | ACUTE TOXICITY (dermal) - Category 4                                |
|                       | ACUTE TOXICITY (inhalation) - Category 2                            |
|                       | SKIN CORROSION/IRRITATION - Category 1                              |
|                       | SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1                     |
|                       | SKIN SENSITIZATION - Category 1B                                    |
|                       | CARCINOGENICITY - Category 2  |
|                       | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract |
|                       | irritation) - Category 3  |
|                       | SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2     |
|                       | ASPIRATION HAZARD - Category 2                                      |
|                       | AQUATIC HAZARD (ACUTE) - Category 2                                 |
|                       | AQUATIC HAZARD (LONG-TERM) - Category 2                             |
|                       |   |

Product code 00285432

Product name AMERLOCK SEALER CURE

|                          | as identification  |
|--------------------------|--|
|                          | Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 23.9%  |
|                          | Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 35.8%  |
|                          | Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 69.4%  |
|                          | Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 54.1%   |
| GHS label elements       |  |
| Hazard pictograms        |  |
| Signal word              | : Danger   |
| Hazard statements        | <ul> <li>Combustible liquid.<br/>Harmful if swallowed or in contact with skin.<br/>May be harmful if swallowed and enters airways.<br/>Causes severe skin burns and eye damage.<br/>May cause an allergic skin reaction.<br/>Fatal if inhaled.<br/>May cause respiratory irritation.<br/>Suspected of causing cancer.<br/>May cause damage to organs through prolonged or repeated exposure.<br/>Toxic to aquatic life with long lasting effects.</li> </ul>   |
| Precautionary statements |  |
| Prevention               | : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves, protective clothing and eye or face protection. Wear respiratory protection. Keep away from flames and hot surfaces. No smoking. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe vapor. Do not eat, drink or smoke when using this product. 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.<br>Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call<br>a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON<br>SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.<br>Immediately call a POISON CENTER or doctor. Wash contaminated clothing<br>before reuse. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell.<br>Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or<br>attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove<br>contact lenses, if present and easy to do. Continue rinsing. Immediately call a<br>POISON CENTER or doctor. |
| Storage                  | : Store locked up. Store in a well-ventilated place. Keep container tightly closed.  |

Product code 00285432

Product name AMERLOCK SEALER CURE

### Section 2. Hazards identification

| Disposal  | : Dispose of contents and container in accordance with all local, regional, national and international regulations.   |
|---|---|
| Other hazards which do not result in classification | : Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation. Contains a substance that may emit formaldehyde if stored beyond its shelf life and/or during cure at curing temperatures greater than 60C (140F). |
|   |   |

### Section 3. Composition/information on ingredients

Substance/mixture : Mixture

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

| CAS number : Not applicable.  |         |                     |
|---|---------|---------------------|
| Ingredient name   | %       | CAS number          |
| furfuryl alcohol  | 20- <25 | 98-00-0             |
| Poly[oxy(methyl-1,2-ethanediyl)], α-(2-aminomethylethyl)-ω-<br>(2-aminomethylethoxy)- | 10- <20 | 9046-10-0 (n = 2-6) |
| Polyaminoamide  | 10- <20 | 68082-29-1          |
| Formaldehyde, polymer with 1,3-dimethylbenzene  | 10- <20 | 26139-75-3          |
| 1,2-Benzenedicarboxylic acid, di-C9-11-branched alkyl esters, C10-rich                | 10- <20 | 68515-49-1          |
| benzyl alcohol  | 5- <10  | 100-51-6            |
| Formaldehyde, polymer with benzenamine, hydrogenated                                  | 5- <10  | 135108-88-2         |
| Fatty acids, tall-oil, reaction products with diethylenetriamine                      | 1- <3   | 61790-69-0          |
| 2,4,6-tris(dimethylaminomethyl)phenol   | 1- <3   | 90-72-2             |
| 4-nonylphenol, branched   | 1- <3   | 84852-15-3          |
| 3,6-diazaoctanethylenediamin  | 1- <3   | 112-24-3            |
| salicylic acid  | 1- <3   | 69-72-7             |
| 4,4'-methylenebis(cyclohexylamine)  | 1- <3   | 1761-71-3           |

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

#### SUB codes represent substances without registered CAS Numbers.

### Section 4. First aid measures

#### Description of necessary first aid measures

| Eye contact  | <ul> <li>Check for and remove any contact lenses. Immediately flush eyes with running<br/>water for at least 15 minutes, keeping eyelids open. Seek immediate medical<br/>attention.</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 | <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>                               |

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

### Potential acute health effects

**Eye contact** : Causes serious eye damage.

| Section 4. First aid measures  |   |  |
|--------------------------------|---|--|
| Inhalation                     | : Fatal if inhaled. May cause respiratory irritation.   |  |
| Skin contact                   | : Causes severe burns. Harmful in contact with skin. Defatting to the skin. May cause an allergic skin reaction.  |  |
| Ingestion                      | <ul> <li>Harmful if swallowed. Corrosive to the digestive tract. Causes burns. May be<br/>harmful if swallowed and enters airways.</li> </ul>   |  |
| <u>Over-exposure signs/sym</u> | <u>ptoms</u>  |  |
| Eye contact                    | : Adverse symptoms may include the following:<br>pain<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>pain or irritation<br>redness<br>dryness<br>cracking<br>blistering may occur   |  |
| Ingestion                      | : Adverse symptoms may include the following:<br>stomach pains<br>nausea or vomiting  |  |
| Indication of immediate me     | dical attention and special treatment needed, if necessary  |  |
| Notes to physician             | : In case of inhalation of decomposition products in a fire, symptoms may be delayed.<br>The exposed person may need to be kept under medical surveillance for 48 hours.  |  |
| 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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. |  |

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.  |

### Section 5. Fire-fighting measures

|   | -   |
|---|---|
| Specific hazards arising from the chemical        | : Combustible liquid. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is 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>nitrogen oxides<br>Formaldehyde.  |
| 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 | <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, 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. Do not breathe vapor or mist. Provide<br>adequate ventilation. Wear appropriate respirator when ventilation is inadequate.<br>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,<br>drains and sewers. Inform the relevant authorities if the product has caused<br>environmental pollution (sewers, waterways, soil or air). Water polluting material.<br>May be harmful to the environment if released in large quantities. Collect spillage.   |
| Small spill                    | :   | Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal 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 |

Thailand Page: 5/15

#### Section 6. Accidental release measures

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<br>handling                                   | : | 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 breathe vapor or mist. Do not swallow. 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. Empty containers retain product residue and can be hazardous. Do not reuse container. |
|--|---|---|
| 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   |  |
|-----------------------------------|--|---|--|
| furfuryl alcohol                  |  | Ministry of Labor (Thailand, 8/2017).<br>TWA: 50 ppm 8 hours. |  |
| Recommended monitoring procedures | : Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.  |   |  |
| Appropriate engineering controls  | : Use only with adequate ventilation. Use process enclosures, local exhaus ventilation or other engineering controls to keep worker exposure to airbor contaminants below any recommended or statutory limits. The engineerin also need to keep gas, vapor or dust concentrations below any lower exploit limits. Use explosion-proof ventilation equipment. |   |  |

### Section 8. Exposure controls/personal protection

| -                               |            |   |
|---------------------------------|------------|---|
| Environmental exposure controls | :          | Emissions from ventilation or work process equipment should be checked to ensure<br>they comply with the requirements of environmental protection legislation. In some<br>cases, fume scrubbers, filters or engineering modifications to the process<br>equipment will be necessary to reduce emissions to acceptable levels.   |
| Individual protection measured  | <u>res</u> |   |
| 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                  | 1          | Chemical splash goggles and face shield.  |
| Skin 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                          | 1          | nitrile neoprene  |
| 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.   |
| Other skin protection           | :          | Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.   |
| Respiratory protection          | :          | Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.  |

### Section 9. Physical and chemical properties

| Appearance     |   |
|----------------|---|
| Physical state | : Liquid.   |
| Color          | : Colorless.  |
| Odor           | : Amine-like. [Strong]  |
| Odor threshold | : Not available.  |
| рН             | : insoluble in water.   |
| Melting point  | <ul> <li>May start to solidify at the following temperature: 12°C (53.6°F) This is based on<br/>data for the following ingredient: 3,6-diazaoctanethylenediamin. Weighted average:<br/>-22.64°C (-8.8°F)</li> </ul> |

### Section 9. Physical and chemical properties

| 1 | >37.78°C (>100°F)   |  |  |
|---|---|--|--|
| : | Closed cup: 80°C (176°F)  |  |  |
| : | Highest known value: 0.04 (furfuryl alcohol) Weighted average: 0.03compared with butyl acetate  |  |  |
| : | liquid  |  |  |
| : | Greatest known range: Lower: 1.8% Upper: 16.3% (furfuryl alcohol)   |  |  |
| : | Highest known value: 0.09 kPa (0.7 mm Hg) (at 20°C) (Poly[oxy(methyl-1,2-ethanediyl)], $\alpha$ -(2-aminomethylethyl)- $\omega$ -(2-aminomethylethoxy)-). Weighted average: 0.03 kPa (0.23 mm Hg) (at 20°C) |  |  |
| : | Highest known value: 15.4 (Air = 1) (1,2-Benzenedicarboxylic acid, di-<br>C9-11-branched alkyl esters, C10-rich). Weighted average: 6.62 (Air = 1)  |  |  |
| : | 1.02  |  |  |
|   | Media Result  |  |  |
| ÷ | old water Not soluble   |  |  |
| : | Not applicable.   |  |  |
| : | Lowest known value: 300°C (572°F) (4,4'-methylenebis(cyclohexylamine)).   |  |  |
| : | Stable under recommended storage and handling conditions (see Section 7).   |  |  |
|   | Kinematic (40°C): <14 mm <sup>2</sup> /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.  |
| 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 nitrogen oxides Formaldehyde. |

### Section 11. Toxicological information

#### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name   | Result                          | Species | Dose                    | Exposure |
|---|---------------------------------|---------|-------------------------|----------|
| furfuryl alcohol  | LC50 Inhalation Vapor           | Rat     | 934 mg/m <sup>3</sup>   | 4 hours  |
| -   | LC50 Inhalation Vapor           | Rat     | 233 ppm                 | 4 hours  |
|   | LD50 Dermal                     | Rabbit  | 400 mg/kg               | -        |
|   | LD50 Dermal                     | Rat     | 3825 mg/kg              | -        |
|   | LD50 Oral                       | Rat     | 0.132 g/kg              | -        |
| Poly[oxy(methyl-1,2-ethanediyl)], α-<br>(2-aminomethylethyl)-ω-<br>(2-aminomethylethoxy)- | LD50 Dermal                     | Rat     | 2980 mg/kg              | -        |
|   | LD50 Oral                       | Rat     | 2885 mg/kg              | -        |
| 1,2-Benzenedicarboxylic acid, di-<br>C9-11-branched alkyl esters,<br>C10-rich             | LD50 Dermal                     | Rabbit  | 16000 mg/kg             | -        |
|   | LD50 Oral                       | Rat     | >60000 mg/              | -        |
|   |                                 |         | kg                      |          |
| benzyl alcohol  | LC50 Inhalation Dusts and mists | Rat     | >4178 mg/m <sup>3</sup> | 4 hours  |
|   | LD50 Dermal                     | Rabbit  | 2000 mg/kg              | -        |
|   | LD50 Oral                       | Rat     | 1.23 g/kg               | -        |
| Formaldehyde, polymer with<br>benzenamine, hydrogenated                                   | LD50 Oral                       | Rat     | 300 mg/kg               | -        |
| 2,4,6-tris(dimethylaminomethyl) phenol  | LD50 Dermal                     | Rabbit  | 1.28 g/kg               | -        |
|   | LD50 Dermal                     | Rat     | 1280 mg/kg              | -        |
|   | LD50 Oral                       | Rat     | 1200 mg/kg              | -        |
| 4-nonylphenol, branched   | LD50 Dermal                     | Rabbit  | 2.14 g/kg               | -        |
|   | LD50 Oral                       | Rat     | 1300 mg/kg              | -        |
| 3,6-diazaoctanethylenediamin  | LD50 Dermal                     | Rabbit  | 1465 mg/kg              | -        |
| -   | LD50 Oral                       | Rat     | 1716 mg/kg              | -        |
| salicylic acid  | LD50 Oral                       | Rat     | 0.891 g/kg              | -        |
| 4,4'-methylenebis(cyclohexylamine)  | LD50 Dermal                     | Rabbit  | 2.11 g/kg               | -        |
|   | LD50 Oral                       | Rat     | 0.625 g/kg              | -        |

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

#### Irritation/Corrosion

| Product/ingredient name                       | Result   | Species        | Score      | Exposure | Observation |
|---|--|----------------|------------|----------|-------------|
| 2,4,6-tris<br>(dimethylaminomethyl)<br>phenol | Skin - Visible necrosis                            | Rabbit         | -          | 4 hours  | 7 days      |
| 4-nonylphenol, branched                       | Skin - Erythema/Eschar                             | Rabbit         | 4          | -        | -           |
| Conclusion/Summary                            |  |                |            | ·        |             |
| Skin :  | There are no data available                        | e on the mixtu | re itself. |          |             |
| Eyes :  | There are no data available on the mixture itself. |                |            |          |             |
| Respiratory :<br>Sensitization                | There are no data available                        | e on the mixtu | re itself. |          |             |

Product code 00285432

Product name AMERLOCK SEALER CURE

### Section 11. Toxicological information

|  | 0  |                                  |             |  |
|--|--|----------------------------------|-------------|--|
| Product/ingredient name                          | Route of exposure  | Species                          | Result      |  |
| 3,6-diazaoctanethylenediamin                     | skin   | Guinea pig                       | Sensitizing |  |
| Conclusion/Summary                               |  |                                  |             |  |
| Skin :   | There are no data  | available on the mixture itself. |             |  |
| Respiratory :                                    | There are no data  | available on the mixture itself. |             |  |
| <u>Mutagenicity</u>                              |  |                                  |             |  |
| Conclusion/Summary :                             | There are no data  | available on the mixture itself. |             |  |
| <b>Carcinogenicity</b>                           |  |                                  |             |  |
| Conclusion/Summary :                             | There are no data  | available on the mixture itself. |             |  |
| Reproductive toxicity                            |  |                                  |             |  |
| Conclusion/Summary :                             | There are no data  | available on the mixture itself. |             |  |
| <u>Teratogenicity</u>                            |  |                                  |             |  |
| Conclusion/Summary :                             | <b>Conclusion/Summary</b> : There are no data available on the mixture itself. |                                  |             |  |
| Specific target organ toxicity (single exposure) |  |                                  |             |  |
|  |  |                                  |             |  |

| Name   | Category   | Route of exposure | Target organs                |
|--|------------|-------------------|------------------------------|
| furfuryl alcohol                               | Category 3 | -                 | Respiratory tract irritation |
| Formaldehyde, polymer with 1,3-dimethylbenzene | Category 3 |                   | Respiratory tract irritation |

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

| Name   |            | Route of<br>exposure | Target organs |
|--|------------|----------------------|---------------|
| furfuryl alcohol   | Category 2 | -                    | -             |
| Formaldehyde, polymer with benzenamine, hydrogenated             | Category 2 | oral                 | kidneys       |
| Fatty acids, tall-oil, reaction products with diethylenetriamine | Category 2 | oral                 | -             |
| 4,4'-methylenebis(cyclohexylamine)                               | Category 2 | oral                 | -             |

#### **Aspiration hazard**

| Name | Result   |  |
|------|--|--|
|      | ASPIRATION HAZARD - Category 2<br>ASPIRATION HAZARD - Category 2 |  |

| Information on the likely<br>routes of exposure | : Not available.             |
|---|------------------------------|
| Potential acute health effects                  |                              |
| Eye contact                                     | : Causes serious eye damage. |

| -          |   |
|------------|---|
| Inhalation | : Fatal if inhaled. May cause respiratory irritation. |

### Section 11. Toxicological information

| Skin contact | : Causes severe burns. Harmful in contact with skin. Defatting to the skin. May cause an allergic skin reaction.        |
|--------------|---|
| Ingestion    | : Harmful if swallowed. Corrosive to the digestive tract. Causes burns. May be harmful if swallowed and enters airways. |

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

| Eye contact  | : Adverse symptoms may include the following:<br>pain<br>watering<br>redness  |
|--------------|---|
| Inhalation   | : Adverse symptoms may include the following: respiratory tract irritation coughing   |
| Skin contact | : Adverse symptoms may include the following:<br>pain or irritation<br>redness<br>dryness<br>cracking<br>blistering may occur |
| Ingestion    | : Adverse symptoms may include the following:<br>stomach pains<br>nausea or vomiting  |

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

### Section 11. Toxicological information

#### Acute toxicity estimates

| Route                        | ATE value     |
|------------------------------|---------------|
| Øral                         | 797.15 mg/kg  |
| Dermal                       | 1946.23 mg/kg |
| Inhalation (vapors)          | 1.33 mg/l     |
| Inhalation (dusts and mists) | 0.63 mg/l     |

#### Other information

Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation. 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. Contains a substance that may emit formaldehyde if stored beyond its shelf life and/or during cure at curing temperatures greater than 60C (140F). Avoid contact with skin and clothing. Can form nitrosamines in the presence of certain organic materials and if heated.

### Section 12. Ecological information

#### **Toxicity**

| Product/ingredient name   | Result                              | Species  | Exposure |
|---|-------------------------------------|--|----------|
| Poly[oxy(methyl-<br>1,2-ethanediyl)], α-<br>(2-aminomethylethyl)-ω-<br>(2-aminomethylethoxy)- | EC50 15 mg/l                        | Algae  | 72 hours |
| Formaldehyde, polymer with benzenamine, hydrogenated  | Acute EC50 43.94 mg/l               | Algae  | 72 hours |
|   | Acute EC50 15.4 mg/l                | Daphnia  | 48 hours |
|   | Acute LC50 63 mg/l                  | Fish   | 96 hours |
| 2,4,6-tris<br>(dimethylaminomethyl)phenol   | Acute LC50 175 mg/l                 | Fish   | 96 hours |
| 4-nonylphenol, branched   | Acute EC50 0.044 mg/l               | Crustaceans - Moina macrocopa                    | 48 hours |
|   | Acute LC50 0.221 mg/l               | Fish   | 96 hours |
| salicylic acid  | Acute EC50 1147.57 mg/l Fresh water | Daphnia - <i>Daphnia longispina</i> -<br>Neonate | 48 hours |
|   | Chronic NOEC 5.6 mg/l Fresh water   | Daphnia - <i>Daphnia magna</i> -<br>Neonate      | 21 days  |

**Conclusion/Summary** 

: There are no data available on the mixture itself.

#### Persistence/degradability

Not available.

| Product/ingredient name                                 | Test | Result                      | Dose | Inoculum |
|---|------|-----------------------------|------|----------|
| ✓ormaldehyde, polymer with<br>benzenamine, hydrogenated | -    | 0 % - Not readily - 28 days | -    | -        |

**Conclusion/Summary** 

: There are no data available on the mixture itself.

| Thailand | Page: 12/15 |  |
|----------|-------------|--|
|----------|-------------|--|

### Section 12. Ecological information

| Product/ingredient name   | Aquatic half-life | Photolysis | Biodegradability       |
|---|-------------------|------------|------------------------|
| Poly[oxy(methyl-<br>1,2-ethanediyl)], α-<br>(2-aminomethylethyl)-ω-<br>(2-aminomethylethoxy)- | -                 | -          | Not readily            |
| benzyl alcohol<br>Formaldehyde, polymer with<br>benzenamine, hydrogenated                     | -                 |            | Readily<br>Not readily |

#### **Bioaccumulative potential**

| Product/ingredient name                               | LogPow        | BCF        | Potential |
|---|---------------|------------|-----------|
| furfuryl alcohol                                      | 0.3           | -          | Low       |
| 1,2-Benzenedicarboxylic acid, di-C9-11-branched alkyl | 8.8           | -          | High      |
| esters, C10-rich                                      |               |            |           |
| benzyl alcohol  | 0.87          | -          | Low       |
| Formaldehyde, polymer with benzenamine, hydrogenated  | 2.68          | 209 to 219 | Low       |
| 2,4,6-tris(dimethylaminomethyl)phenol                 | 0.219         | -          | Low       |
| 4-nonylphenol, branched                               | 5.4           | 251.19     | Low       |
| 3,6-diazaoctanethylenediamin                          | -1.66 to -1.4 | -          | Low       |
| salicylic acid  | 2.21 to 2.26  | -          | Low       |
| 4,4'-methylenebis(cyclohexylamine)                    | 2.03          | -          | Low       |

#### Mobility in soil

| Soil/water p | artition |
|--------------|----------|
| 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 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                      | UN3066   | UN3066   | UN3066   |
| UN proper<br>shipping name     | PAINT  | PAINT  | PAINT  |
| Transport hazard class(es)     | 8  | 8  | 8  |
| Packing group                  | II   | II   | II   |
| 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.  | (Fatty acids, tall-oil, reaction<br>products with<br>diethylenetriamine,<br>4-nonylphenol, branched) | 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.        |
| IATA | : 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

| Harmful Chemicals List  | : Listed   |  |
|---|--|--|
| Safety, health and<br>environmental regulations<br>specific for the product | : No known specific national and/or regional regulations applicable to this product (including its ingredients). |  |
| International regulations   |  |  |
| Montreal Protocol   |  |  |
| Not listed.   |  |  |
| Stockholm Convention on Persistent Organic Pollutants                       |  |  |

Not listed.

### Section 16. Other information

| <u>History</u>                 |   |
|--------------------------------|---|
| Date of issue/Date of revision | : 2 November 2023   |
| Date of previous issue         | : 5/30/2022   |
| Version                        | : 7   |
| Prepared by                    | : EHS   |
| Key to abbreviations           | <ul> <li>ADN = European Provisions concerning the International Carriage of Dangerous<br/>Goods by Inland Waterway<br/>ADR = The European Agreement concerning the International Carriage of<br/>Dangerous Goods by Road<br/>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/>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/>RID = The Regulations concerning the International Carriage of Dangerous Goods<br/>by Rail<br/>UN = United Nations</li> </ul> |

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.