# SAFETY DATA SHEET



Date of issue/Date of revision 9 January 2024

Version 1

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

Product code : 00438664

Product name : SIGMAGUARD 720 HARDENER

Other means of : Not available.

identification

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Product use : Coating.

Professional 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.

15 Rama 9 Road, Kwaeng Huamark, Khet Bangkapi, Bangkok 10240 Thailand

T: 662-319-4190 #224 F: 662-319-4189

Emergency telephone number (with hours of

operation)

: CHEMTREC 001-800-13-203-9987 (CCN 17704)

## Section 2. Hazards identification

Classification of the substance or mixture

: FLAMMABLE LIQUIDS - Category 3
ACUTE TOXICITY (oral) - Category 5
ACUTE TOXICITY (dermal) - Category 5
ACUTE TOXICITY (inhalation) - Category 4
SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

**CARCINOGENICITY - Category 2** 

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

Category 3

Thailand Page: 1/14

Version 1

### Section 2. Hazards identification

Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 59%

Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 59%

Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 59%

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 59%

#### **GHS label elements**

**Hazard pictograms** 









Signal word

**Hazard statements** 

: Danger

: Flammable liquid and vapor.

May be harmful if swallowed or in contact with skin.

Causes skin irritation.

Causes serious eye damage.

Harmful if inhaled.

May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of causing cancer.

#### **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. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash thoroughly after handling.

Response

IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Take off contaminated clothing and wash before reuse. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. Wash with plenty of water. If skin irritation occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

**Storage** 

: Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

**Disposal** 

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Thailand Page: 2/14

**Product name SIGMAGUARD 720 HARDENER** 

#### Section 2. Hazards identification

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

result in classification

# **Section 3. Composition/information on ingredients**

Substance/mixture : Mixture

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

**CAS number** : Not applicable.

| Ingredient name      | %         | CAS number |
|----------------------|-----------|------------|
| xylene               | 10- <20   | 1330-20-7  |
| 1-methoxy-2-propanol | 5- <10    | 107-98-2   |
| 4-methylpentan-2-one | 5- <10    | 108-10-1   |
| 2-methylpropan-1-ol  | 5- <10    | 78-83-1    |
| ethylbenzene         | 1- <3     | 100-41-4   |
| 2-methoxypropanol    | 0.1- <0.3 | 1589-47-5  |

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.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

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

SUB codes represent substances without registered CAS Numbers.

### Section 4. First aid measures

#### **Description of necessary first aid measures**

**Eye contact**: Check for and remove any contact lenses. Immediately flush eyes with running

water for at least 15 minutes, keeping eyelids open. Seek immediate medical

attention.

**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.

Keep person warm and at rest. Do NOT induce vomiting.

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

#### Potential acute health effects

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

Inhalation : Harmful if inhaled. Can cause central nervous system (CNS) depression. May

cause drowsiness or dizziness. May cause respiratory irritation.

**Skin contact**: May be harmful in contact with skin. Causes skin irritation. Defatting to the skin.

Ingestion: May be harmful if swallowed. Can cause central nervous system (CNS) depression.

Thailand Page: 3/14

**Product name SIGMAGUARD 720 HARDENER** 

#### Section 4. First aid measures

Over-exposure signs/symptoms

**Eye contact** : Adverse symptoms may include the following:

pain watering redness

**Inhalation** : Adverse symptoms may include the following:

respiratory tract irritation

coughing

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

**Skin contact**: Adverse symptoms may include the following:

pain or irritation

redness dryness cracking

blistering may occur

Ingestion : Adverse symptoms may include the following:

stomach pains

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**: 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

: Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

Unsuitable extinguishing

media

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. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

Hazardous thermal

decomposition products

: Decomposition products may include the following materials:

s carbon oxides

Thailand Page: 4/14

Product code 00438664 Version 1 Date of issue 9 January 2024

**Product name SIGMAGUARD 720 HARDENER** 

# Section 5. Fire-fighting measures

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### Section 6. Accidental release measures

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

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is 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).

#### Methods and materials for containment 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. 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 noncombustible, 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.

> **Thailand** Page: 5/14

# Section 7. Handling and storage

#### **Precautions for safe** handling

: Put on appropriate personal protective equipment (see Section 8). 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. 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.

# including any incompatibilities

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 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                       |
|----------------------|---------------------------------------|
| xylene               | Ministry of Labor (Thailand, 8/2017). |
|                      | [xylene (o-, m-, p- isomers)]         |
|                      | TWA: 100 ppm 8 hours.                 |
| 1-methoxy-2-propanol | ACGIH TLV (United States, 1/2023).    |
|                      | STEL: 369 mg/m³ 15 minutes.           |
|                      | STEL: 100 ppm 15 minutes.             |
|                      | TWA: 184 mg/m <sup>3</sup> 8 hours.   |
|                      | TWA: 50 ppm 8 hours.                  |
| 4-methylpentan-2-one | Ministry of Labor (Thailand, 8/2017). |
| • •                  | TWA: 100 ppm 8 hours.                 |
| 2-methylpropan-1-ol  | ACGIH TLV (United States, 1/2023).    |
|                      | TWA: 152 mg/m <sup>3</sup> 8 hours.   |
|                      | TWA: 50 ppm 8 hours.                  |
| ethylbenzene         | Ministry of Labor (Thailand, 8/2017). |
|                      | TWA: 100 ppm 8 hours.                 |

# procedures

**Recommended monitoring**: 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.

**Thailand** Page: 6/14 Product code 00438664

Date of issue 9 January 2024

Version 1

**Product name SIGMAGUARD 720 HARDENER** 

# Section 8. Exposure controls/personal protection

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Environmental exposure** controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

#### **Individual protection measures**

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye protection

Skin protection

: Chemical splash goggles and face shield.

Hand protection

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

**Gloves** 

: For prolonged or repeated handling, use the following type of gloves:

May be used: nitrile rubber

Recommended: polyvinyl alcohol (PVA), butyl rubber, Viton®

**Body protection** 

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

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.

Thailand Page: 7/14

**Product name SIGMAGUARD 720 HARDENER** 

# Section 9. Physical and chemical properties

**Appearance** 

Physical state : Liquid.

Color : Not available.

Odor : Characteristic.

Odor threshold : Not available.

pH : insoluble in water.

Melting point : May start to solidify at the following temperature: -84.7°C (-120.5°F) This is based

on data for the following ingredient: 4-methylpentan-2-one. Weighted average:

-93.75°C (-136.7°F)

**Boiling point** : >37.78°C (>100°F)

Flash point : Closed cup: 24.5°C (76.1°F)

**Evaporation rate**: Highest known value: 1.7 (4-methylpentan-2-one) Weighted average:

0.96compared with butyl acetate

Flammability (solid, gas) :

Lower and upper explosive

(flammable) limits

: Greatest known range: Lower: 1.48% Upper: 13.74% (1-methoxy-2-propanol)

Vapor pressure : Highest known value: 2.1 kPa (15.8 mm Hg) (at 20°C) (4-methylpentan-2-one).

Weighted average: 1.33 kPa (9.98 mm Hg) (at 20°C)

Vapor density: Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.28 (Air = 1)

Relative density : 0.98

Solubility(ies) : Media Result

cold water Not soluble

Partition coefficient: n-

octanol/water

: Not applicable.

**Auto-ignition temperature**: Lowest known value: 270°C (518°F) (1-methoxy-2-propanol).

**Decomposition temperature**: Stable under recommended storage and handling conditions (see Section 7).

Viscosity : Kinematic (40°C): >21 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.

Thailand Page: 8/14

Date of issue 9 January 2024 Version 1

Product code 00438664

**Product name SIGMAGUARD 720 HARDENER** 

# Section 10. Stability and reactivity

**Hazardous decomposition**: Depending on conditions, decomposition products may include the following

products materials: carbon oxides

# **Section 11. Toxicological information**

#### Information on toxicological effects

#### **Acute toxicity**

| Product/ingredient name | Result                | Species | Dose        | Exposure |
|-------------------------|-----------------------|---------|-------------|----------|
| xylene                  | LD50 Dermal           | Rabbit  | 1.7 g/kg    | -        |
|                         | LD50 Oral             | Rat     | 4.3 g/kg    | -        |
| 1-methoxy-2-propanol    | LC50 Inhalation Vapor | Rat     | >7000 ppm   | 6 hours  |
|                         | LD50 Dermal           | Rabbit  | 13 g/kg     | -        |
|                         | LD50 Oral             | Rat     | 5.2 g/kg    | -        |
| 4-methylpentan-2-one    | LC50 Inhalation Vapor | Rat     | 11 mg/l     | 4 hours  |
|                         | LD50 Dermal           | Rabbit  | >5000 mg/kg | -        |
|                         | LD50 Oral             | Rat     | 2.08 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  | -        |
| ethylbenzene            | LC50 Inhalation Vapor | Rat     | 17.8 mg/l   | 4 hours  |
|                         | LD50 Dermal           | Rabbit  | 17.8 g/kg   | -        |
|                         | LD50 Oral             | Rat     | 3.5 g/kg    | -        |
| 2-methoxypropanol       | LC50 Inhalation Vapor | Rat     | 15000 ppm   | 4 hours  |
|                         | LD50 Dermal           | Rabbit  | 5660 mg/kg  | -        |
|                         | LD50 Oral             | Rat     | 5.3 g/kg    | -        |

**Conclusion/Summary** 

: There are no data available on the mixture itself.

#### **Irritation/Corrosion**

| Product/ingredient name | Result                   | Species | Score | Exposure           | Observation |
|-------------------------|--------------------------|---------|-------|--------------------|-------------|
| 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.Respiratory: There are no data available on the mixture itself.

**Sensitization** 

**Conclusion/Summary** 

Skin: There are no data available on the mixture itself.Respiratory: There are no data available on the mixture itself.

**Mutagenicity** 

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

**Carcinogenicity** 

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

Reproductive toxicity

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

Thailand Page: 9/14

**Product name SIGMAGUARD 720 HARDENER** 

# **Section 11. Toxicological information**

**Teratogenicity** 

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

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

| Name                 | Category   | Route of exposure | Target organs                |
|----------------------|------------|-------------------|------------------------------|
| xylene               | Category 3 | -                 | Respiratory tract irritation |
| 1-methoxy-2-propanol | Category 3 | -                 | Narcotic effects             |
| 4-methylpentan-2-one | Category 3 | -                 | Narcotic effects             |
| 2-methylpropan-1-ol  | Category 3 | -                 | Respiratory tract irritation |
|                      | Category 3 |                   | Narcotic effects             |
| 2-methoxypropanol    | Category 3 | -                 | Respiratory tract irritation |

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

| Name         |            | Route of exposure | Target organs  |
|--------------|------------|-------------------|----------------|
| ethylbenzene | Category 2 | -                 | hearing organs |

#### **Aspiration hazard**

| Name                 | Result                         |
|----------------------|--------------------------------|
| xylene               | ASPIRATION HAZARD - Category 1 |
| 4-methylpentan-2-one | ASPIRATION HAZARD - Category 2 |
| 2-methylpropan-1-ol  | ASPIRATION HAZARD - Category 2 |
| ethylbenzene         | ASPIRATION HAZARD - Category 1 |

Information on the likely routes of exposure

: Not available.

#### Potential acute health effects

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

Inhalation : Harmful if inhaled. Can cause central nervous system (CNS) depression. May

cause drowsiness or dizziness. May cause respiratory irritation.

Skin contact
 May be harmful in contact with skin. Causes skin irritation. Defatting to the skin.
 Ingestion
 May be harmful if swallowed. Can cause central nervous system (CNS) depression.

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

**Eye contact**: Adverse symptoms may include the following:

pain watering redness

Thailand Page: 10/14

**Product name SIGMAGUARD 720 HARDENER** 

# **Section 11. Toxicological information**

**Inhalation** : Adverse symptoms may include the following:

respiratory tract irritation

coughing

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

**Skin contact**: Adverse symptoms may include the following:

pain or irritation

redness dryness cracking

blistering may occur

**Ingestion**: Adverse symptoms may include the following:

stomach pains

#### 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.

Long term exposure

**Potential immediate** 

effects

: Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/

or dermatitis.

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**

| Route                        | ATE value     |
|------------------------------|---------------|
| Oral                         | 3845.53 mg/kg |
| Dermal                       | 3911.2 mg/kg  |
| Inhalation (vapors)          | 20.11 mg/l    |
| Inhalation (dusts and mists) | 2.65 mg/l     |

#### Other information :

|  | Thailand | Page: 11/14 |
|--|----------|-------------|
|--|----------|-------------|

Date of issue 9 January 2024 Version 1

Product code 00438664

**Product name SIGMAGUARD 720 HARDENER** 

# **Section 11. Toxicological information**

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. Avoid contact with skin and clothing.

# **Section 12. Ecological information**

#### **Toxicity**

| Product/ingredient name | Result                            | Species                      | Exposure |
|-------------------------|-----------------------------------|------------------------------|----------|
| 1-methoxy-2-propanol    | Acute LC50 23300 mg/l             | Daphnia                      | 48 hours |
|                         | Acute LC50 >4500 mg/l Fresh water | Fish                         | 96 hours |
| 4-methylpentan-2-one    | Acute LC50 >179 mg/l              | Fish                         | 96 hours |
| 2-methylpropan-1-ol     | Acute EC50 1100 mg/l              | Daphnia                      | 48 hours |
| ethylbenzene            | Acute EC50 1.8 mg/l Fresh water   | Daphnia                      | 48 hours |
|                         | Chronic NOEC 1 mg/l Fresh water   | Daphnia - Ceriodaphnia dubia | -        |

**Conclusion/Summary** 

: Not available.

#### Persistence/degradability

| Product/ingredient name | Test      | Result                   | Dose | Inoculum |
|-------------------------|-----------|--------------------------|------|----------|
| 4-methylpentan-2-one    | OECD 301F | 83 % - Readily - 28 days | -    | -        |
| ethylbenzene            | -         | 79 % - Readily - 10 days | -    | -        |

Conclusion/Summary : Not available.

| Product/ingredient name                        | Aquatic half-life | Photolysis | Biodegradability              |
|--|-------------------|------------|-------------------------------|
| xylene<br>4-methylpentan-2-one<br>ethylbenzene | -<br>-            | -          | Readily<br>Readily<br>Readily |

#### **Bioaccumulative potential**

| Product/ingredient name | LogPow | BCF         | Potential |
|-------------------------|--------|-------------|-----------|
| xylene                  | 3.12   | 7.4 to 18.5 | Low       |
| 1-methoxy-2-propanol    | <1     | -           | Low       |
| 4-methylpentan-2-one    | 1.9    | -           | Low       |
| 2-methylpropan-1-ol     | 1      | -           | Low       |
| ethylbenzene            | 3.6    | 79.43       | Low       |
| 2-methoxypropanol       | -0.49  | -           | Low       |

#### **Mobility in soil**

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Thailand Page: 12/14

Date of issue 9 January 2024

Product code 00438664

**Product name SIGMAGUARD 720 HARDENER** 

Version 1

# 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

# Section 14. Transport information

|                             | UN              | IMDG            | IATA            |
|-----------------------------|-----------------|-----------------|-----------------|
| UN number                   | UN1263          | UN1263          | UN1263          |
| UN proper shipping name     | PAINT           | PAINT           | PAINT           |
| Transport hazard class(es)  | 3               | 3               | 3               |
| Packing group               | III             | III             | III             |
| Environmental hazards       | No.             | No.             | No.             |
| Marine pollutant substances | Not applicable. | Not applicable. | Not applicable. |

#### Additional information

UN : None identified. **IMDG** : None identified. IATA : None identified.

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

**Thailand** Page: 13/14

**Product name SIGMAGUARD 720 HARDENER** 

# Section 15. Regulatory information

**Harmful Chemicals List** 

Safety, health and environmental regulations specific for the product : Listed

: 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

**History** 

Date of issue/Date of

revision

: 9 January 2024

Date of previous issue : No previous validation

Version : 1
Prepared by : EHS

**Key to abbreviations** : ADN = European Provisions concerning the International Carriage of Dangerous

Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of

Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

RID = The Regulations concerning the International Carriage of Dangerous Goods

by Rail

UN = United Nations

Indicates information that has changed from previously issued version.

#### **Notice to reader**

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

Thailand Page: 14/14