# **SAFETY DATA SHEET**



Date of issue 8/28/2024 (month/day/year)

Version 1.02

# Section 1. Chemical product and company identification

A. Product name : SIGMALINE 523 HARDENER OXIDE YELLOW

**Product code** : 000001098883

Other means of identification

00351397; 00351398

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

**Product use** : Professional applications, Used by spraying.

Use of the substance/

mixture

: Hardener.

**Uses advised against**: Product is not intended, labelled or packaged for consumer use.

C. Supplier's or Importer's

information

**Email Address** 

: PPG SSC

(680-090)

19, Yeocheon-ro 217beon-gil, Nam-gu,

Ulsan, Korea

Tel: +82-52-210-8222 Korea.MSDS@PPG.COM

Emergency telephone

number:

: +82-52-210-8331

# Section 2. Hazards identification

A. Hazard classification : CORROSIVE TO METALS - Category 1

ACUTE TOXICITY (inhalation) - Category 4

SKIN CORROSION - Category 1B SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

This product is classified in accordance with the Industrial Safety and Health Act and the Chemical Control Act.

B. GHS label elements, including precautionary statements

Symbol :



Signal word : Danger

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### Section 2. Hazards identification

**Hazard statements** : H290 - May be corrosive to metals.

H314 - Causes severe skin burns and eve damage.

H317 - May cause an allergic skin reaction.

H332 - Harmful if inhaled.

H335 - May cause respiratory irritation.

#### **Precautionary statements**

**Prevention** P280 - Wear protective gloves, protective clothing and eye or face protection.

P234 - Keep only in original packaging.

P261 - Avoid breathing vapor.

Response : P390 - Absorb spillage to prevent material damage.

> P304 + P310 - IF INHALED: Immediately call a POISON CENTER or doctor. P301 + P310, P330, P331 - IF SWALLOWED: Immediately call a POISON

CENTER or doctor. Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353, P310 - IF ON SKIN (or hair): Take off immediately all

contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER

or doctor.

P363 - Wash contaminated clothing before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water.

P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention. P305 + P351 + P338, P310 - 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.

: P403 + P233 - Store in a well-ventilated place. Keep container tightly closed. Storage

**Disposal** : P501 - Dispose of contents and container in accordance with all local, regional,

national and international regulations.

C. Other hazards which do : None known.

not result in classification

# Section 3. Composition/information on ingredients

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

**CAS** number : Not applicable.

| Chemical name                            | Common name                           | Identifiers     | %           |
|--|---------------------------------------|-----------------|-------------|
| Epoxy Amine Resin                        | EPOXY AMINE RESIN                     | CAS: SUB130425  | 20 -<br><30 |
| Talc , not containing asbestiform fibres | Talc, non-asbestos form               | CAS: 14807-96-6 | 20 -<br><30 |
| m-phenylenebis(methylamine)              | 1,3-Benzenedimethanamine              | CAS: 1477-55-0  | 10 -<20     |
| benzyl alcohol                           | BENZYL ALCOHOL                        | CAS: 100-51-6   | 5 - <10     |
| salicylic acid                           | Salicylic acid                        | CAS: 69-72-7    | 1 - <5      |
| 2,4,6-tris(dimethylaminomethyl)phenol    | 2,4,6-tris(dimethylaminomethyl)phenol | CAS: 90-72-2    | 1 - <5      |
| Phenol, methylstyrenated                 | Phenol, methylstyrenated              | CAS: 68512-30-1 | 1 - <5      |
| iron hydroxide oxide yellow              | IRON HYDRÓXIDE OXIDE                  | CAS: 51274-00-1 | 1 - <5      |
| xylene                                   | o-Xylene                              | CAS: 95-47-6    | 0.1 - <1    |

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.

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### Section 3. Composition/information on ingredients

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

### Section 4. First aid measures

A. 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.

B. 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.

C. 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.

: If swallowed, seek medical advice immediately and show this container or label. **D.** Ingestion

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

: In case of inhalation of decomposition products in a fire, symptoms may be delayed. E. Notes to physician

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.

: Use an extinguishing agent suitable for the surrounding fire.

See toxicological information (Section 11)

# Section 5. Fire-fighting measures

A. Extinguishing media

Suitable extinguishing media

**Unsuitable** extinguishing media : None known.

B. Specific hazards arising

from the chemical

**Hazardous thermal** decomposition products : In a fire or if heated, a pressure increase will occur and the container may burst.

: Decomposition products may include the following materials: carbon oxides

nitrogen oxides metal oxide/oxides

C. Special equipment for fire-fighting

: Fire-fighters should wear appropriate protective equipment and self-contained

breathing apparatus (SCBA) with a full face-piece operated in positive pressure

mode.

Fire-fighting procedures 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.

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### Section 6. Accidental release measures

A. Personal precautions, protective equipment and emergency procedures

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- : 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. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- B. 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).

#### C. Methods and materials for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. 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. Absorb spillage to prevent material damage. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Absorb spillage to prevent material damage. 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.

# Section 7. Handling and storage

- A. Precautions for safe 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. 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. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Absorb spillage to prevent material damage.
- B. Conditions for safe storage, including any incompatibilities
- Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store in a corrosion resistant container with a resistant inner liner. Store locked up. Keep away from metals. 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.

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# Section 8. Exposure controls/personal protection

### A. Occupational exposure limits

| Ingredient name                          | Exposure limits                           |
|--|---|
| Talc , not containing asbestiform fibres | Ministry of Employment and Labor          |
|  | (Republic of Korea, 1/2020).              |
|  | TWA: 2 mg/m³ 8 hours. Form: fibers        |
| m-phenylenebis(methylamine)              | Ministry of Employment and Labor          |
|  | (Republic of Korea, 1/2020). Absorbed     |
|  | through skin.                             |
|  | CEIL: 0.1 mg/m³                           |
| iron hydroxide oxide yellow              | Ministry of Employment and Labor          |
|  | (Republic of Korea, 1/2020). [Iron oxide] |
|  | TWA: 5 mg/m³, (as Fe) 8 hours. Form:      |
|  | Fume                                      |
|  | TWA: 5 mg/m³, (as Fe) 8 hours.            |
| xylene                                   | Ministry of Employment and Labor          |
|  | (Republic of Korea, 1/2020). [Xylene]     |
|  | STEL: 150 ppm 15 minutes.                 |
|  | TWA: 100 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.
- B. Appropriate engineering controls

**Environmental** 

exposure 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.
  - : 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.

#### C. Personal protective equipment

**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.

**Eye protection Hand protection** 

- Chemical splash goggles and face shield.
- 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** 

: nitrile neoprene

**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.

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### Section 8. Exposure controls/personal protection

**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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

# Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

A. Appearance

Physical state : Liquid.
Color : Yellow.

B. Odor : Aromatic. [Slight]
C. Odor threshold : Not available.
D. pH : Not applicable.
E. Melting/freezing point : Not available.
F. Boiling point/boiling : >37.78°C (>100°F)

range

G. Flash point : Closed cup: 96°C (204.8°F)

H. Evaporation rate : Not available.I. Flammability (solid, gas) : Not available.

J. Lower and upper explosive (flammable)

explosive (flamma

: Greatest known range: Lower: 1.3% Upper: 13% (benzyl alcohol)

K. Vapor pressure

|   | Vapor Pressure at 20°C |        | Vapor pressure at 50°C |          |     |        |
|---|------------------------|--------|------------------------|----------|-----|--------|
| Ingredient name                               | mm Hg                  | kPa    | Method                 | mm<br>Hg | kPa | Method |
| 2,4,6-tris<br>(dimethylaminomethyl)<br>phenol | 0.056                  | 0.0075 | EU A.4                 |          |     |        |

L. Solubility(ies)

 Media
 Result

 cold water
 Not soluble

Solubility in water : Not available.

Vapor density : Not available.

Relative density : 1.44

N. Partition coefficient: n-

0.

: Not applicable.

O. octanol/water

Auto-ignition

.

temperature

| Ingredient name                     | °C      | °F    | Method  |
|-------------------------------------|---------|-------|---------|
| 2,4,6-tris(dimethylaminomethyl)pher | nol 382 | 719.6 | EU A.15 |

Q. Decomposition temperature

: Not available.

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### Section 9. Physical and chemical properties

Viscosity : Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt)

Flow time (ISO 2431) : Not available.

Molecular weight : Not applicable.

# Section 10. Stability and reactivity

**A.** Chemical stability : The product is stable.

Possibility of hazardous reactions

s : Under normal conditions of storage and use, hazardous reactions will not occur.

B. Conditions to avoid : When exposed to high temperatures may produce hazardous decomposition

products.

**C.** Incompatible materials : Keep away from the following materials to prevent strong exothermic reactions:

oxidizing agents, strong alkalis, strong acids.

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

materials: carbon oxides nitrogen oxides metal oxide/oxides

## **Section 11. Toxicological information**

A. Information on the likely : Not available.

Potential acute health effects

routes of exposure

decomposition products

Inhalation : Harmful if inhaled. May cause respiratory irritation.

**Ingestion** : No known significant effects or critical hazards.

**Skin contact**: Causes severe burns. May cause an allergic skin reaction.

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

Over-exposure signs/symptoms

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

respiratory tract irritation

coughing

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

stomach pains

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

pain or irritation

redness

blistering may occur

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

pain watering redness

B. Health hazards **Acute toxicity** 

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# Section 11. Toxicological information

| Product/ingredient name               | Result                    | Species     | Dose                    | Exposure |
|---------------------------------------|---------------------------|-------------|-------------------------|----------|
| m-phenylenebis(methylamine)           | LC50 Inhalation Gas.      | Rat         | 700 ppm                 | 1 hours  |
|                                       | LD50 Dermal               | Rat - Male, | >3100 mg/kg             | _        |
|                                       |                           | Female      |                         |          |
|                                       | LD50 Oral                 | Rat         | 930 mg/kg               | -        |
| benzyl alcohol                        | LC50 Inhalation Dusts and | Rat         | >4178 mg/m <sup>3</sup> | 4 hours  |
|                                       | mists                     |             |                         |          |
|                                       | LD50 Dermal               | Rabbit      | 2000 mg/kg              | -        |
|                                       | LD50 Oral                 | Rat         | 1.23 g/kg               | -        |
| salicylic acid                        | LD50 Oral                 | Rat         | 0.891 g/kg              | -        |
| 2,4,6-tris(dimethylaminomethyl)phenol | LD50 Dermal               | Rat         | 1280 mg/kg              | -        |
|                                       | LD50 Oral                 | Rat         | 1200 mg/kg              | -        |
| Phenol, methylstyrenated              | LD50 Dermal               | Rabbit      | >2000 mg/kg             | -        |
|                                       | LD50 Oral                 | Rat         | >2000 mg/kg             | -        |
| iron hydroxide oxide yellow           | LC50 Inhalation Dusts and | Rat         | >5.05 mg/l              | 4 hours  |
|                                       | mists                     |             |                         |          |
|                                       | LD50 Oral                 | Rat         | >10 g/kg                | -        |
| xylene                                | LC50 Inhalation Vapor     | Rat         | 27124 mg/m <sup>3</sup> | 4 hours  |
|                                       | LD50 Dermal               | Rabbit      | 12126 mg/kg             | -        |
|                                       | LD50 Oral                 | Rat         | 3523 mg/kg              | -        |

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

#### **Irritation/Corrosion**

| Product/ingredient name     | Result                 | Species | Score | Exposure | Observation |
|-----------------------------|------------------------|---------|-------|----------|-------------|
| m-phenylenebis(methylamine) | Skin - Severe irritant | Rat     | -     | 4 hours  | 4 hours     |

### **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**

| Product/ingredient name         | Route of exposure | Species | Result      |
|---------------------------------|-------------------|---------|-------------|
| m-phenylenebis<br>(methylamine) | skin              | Mouse   | Sensitizing |

### **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.

### **Teratogenicity**

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### **Section 11. Toxicological information**

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

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

| Name                                     | Classification | Route of exposure | Target organs                |
|--|----------------|-------------------|------------------------------|
| Talc , not containing asbestiform fibres | Category 3     | -                 | Respiratory tract irritation |
| xylene                                   | Category 3     | -                 | Respiratory tract irritation |
|  | Category 3     |                   | Narcotic effects             |

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

| Name   | Classification | Route of exposure | Target organs |
|--------|----------------|-------------------|---------------|
| xylene | Category 2     | -                 | -             |

#### **Aspiration hazard**

| Name | Result   |
|------|--|
|      | ASPIRATION HAZARD - Category 2<br>ASPIRATION HAZARD - Category 1 |

#### Potential chronic health effects

General: Once sensitized, a severe allergic reaction may occur when subsequently exposed to

very low levels.

Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Reproductive toxicity : No known significant effects or critical hazards.

#### **Additional information**

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. Exposure to amine vapor has been reported to cause transient corneal edema described as blue haze, halo effect, foggy or blurred vision for several hours. This condition is typically temporary and does not cause permanent visual effects. When the proper eye protection specified in Section 8 is worn, exposure is significantly reduced and the condition has not been observed.

| Chemical name                            | Identifiers     | GHS Classification   |
|--|-----------------|--|
| Epoxy Amine Resin                        | CAS: SUB130425  | EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1B  |
| Talc , not containing asbestiform fibres | CAS: 14807-96-6 | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3   |
| m-phenylenebis(methylamine)              | CAS: 1477-55-0  | CORROSIVE TO METALS - Category 1 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION - Category 1B SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1B |

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| <b>Product name</b> | <b>SIGMALINE 523 HARDENER OXIDE</b> | YELLOW        |                            |              |

# Section 11. Toxicological information

| 1                                     | 1               |  |
|---------------------------------------|-----------------|--|
|                                       |                 | AQUATIC HAZARD (LONG-TERM) - Category 3    |
| benzyl alcohol                        | CAS: 100-51-6   | ACUTE TOXICITY (oral) - Category 4         |
|                                       |                 | ACUTE TOXICITY (dermal) - Category 4       |
|                                       |                 | ACUTE TOXICITY (inhalation) - Category 4   |
|                                       |                 | EYE IRRITATION - Category 2A               |
|                                       |                 | ASPIRATION HAZARD - Category 2             |
| salicylic acid                        | CAS: 69-72-7    | ACUTE TOXICITY (oral) - Category 4         |
|                                       |                 | SERIOUS EYE DAMAGE - Category 1            |
|                                       |                 | TOXIC TO REPRODUCTION - Category 2         |
| 2,4,6-tris(dimethylaminomethyl)phenol | CAS: 90-72-2    | CORROSIVE TO METALS - Category 1           |
|                                       |                 | ACUTE TOXICITY (oral) - Category 4         |
|                                       |                 | ACUTE TOXICITY (dermal) - Category 4       |
|                                       |                 | SKIN CORROSION - Category 1C               |
|                                       |                 | SERIOUS EYE DAMAGE - Category 1            |
| Phenol, methylstyrenated              | CAS: 68512-30-1 | SKIN IRRITATION - Category 2               |
|                                       |                 | SKIN SENSITIZATION - Category 1B           |
|                                       |                 | AQUATIC HAZARD (LONG-TERM) - Category 3    |
| iron hydroxide oxide yellow           | CAS: 51274-00-1 | Not classified.                            |
| xylene                                | CAS: 95-47-6    | FLAMMABLE LIQUIDS - Category 3             |
|                                       |                 | ACUTE TOXICITY (inhalation) - Category 4   |
|                                       |                 | SKIN IRRITATION - Category 2               |
|                                       |                 | EYE IRRITATION - Category 2A               |
|                                       |                 | TOXIC TO REPRODUCTION - Category 2         |
|                                       |                 | SPECIFIC TARGET ORGAN TOXICITY (SINGLE     |
|                                       |                 | EXPOSURE) (Respiratory tract irritation) - |
|                                       |                 | Category 3                                 |
|                                       |                 | SPECIFIC TARGET ORGAN TOXICITY (SINGLE     |
|                                       |                 | EXPOSURE) (Narcotic effects) - Category 3  |
|                                       |                 | SPECIFIC TARGET ORGAN TOXICITY             |
|                                       |                 | (REPEATED EXPOSURE) - Category 2           |
|                                       |                 | ASPIRATION HAZARD - Category 1             |
|                                       |                 |  |

# Section 12. Ecological information

## A. Ecotoxicity

| Product/ingredient name                       | Result  | Species                                       | Exposure             |
|---|---|---|----------------------|
| salicylic acid                                | Acute EC50 1147.57 mg/l Fresh water             | Daphnia - <i>Daphnia longispina</i> - Neonate | 48 hours             |
|   | Chronic NOEC 5.6 mg/l Fresh water               | Daphnia - <i>Daphnia magna</i> - Neonate      | 21 days              |
| 2,4,6-tris<br>(dimethylaminomethyl)<br>phenol | Acute LC50 >100 mg/l                            | Daphnia                                       | 48 hours             |
| iron hydroxide oxide yellow                   | Acute LC50 >100 mg/l<br>Acute LC50 >100000 mg/l | Fish<br>Fish                                  | 96 hours<br>96 hours |

### B. Persistence and degradability

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# **Section 12. Ecological information**

| Product/ingredient name             | Test                             | Result                      | Dose | Inoculum |
|-------------------------------------|----------------------------------|-----------------------------|------|----------|
| 2,4,6-tris<br>(dimethylaminomethyl) | OECD 301D<br>Ready               | 4 % - Not readily - 28 days | -    | -        |
| phenol                              | Biodegradability - Closed Bottle |                             |      |          |
| xylene                              | Test<br>OECD 301F                | 94 % - Readily - 28 days    | -    | -        |

| Product/ingredient name      | Aquatic half-life | Photolysis | Biodegradability |
|------------------------------|-------------------|------------|------------------|
| benzyl alcohol               | -                 | -          | Readily          |
| 2,4,6-tris                   | -                 | -          | Not readily      |
| (dimethylaminomethyl) phenol |                   |            |                  |
| xylene                       | -                 | -          | Readily          |

#### C. Bioaccumulative potential

| Product/ingredient name         | LogPow       | BCF   | Potential |
|---------------------------------|--------------|-------|-----------|
| m-phenylenebis<br>(methylamine) | 0.18         | 2.69  | Low       |
| benzyl alcohol                  | 0.87         | -     | Low       |
| salicylic acid                  | 2.21 to 2.26 | -     | Low       |
| 2,4,6-tris                      | 0.219        | -     | Low       |
| (dimethylaminomethyl)           |              |       |           |
| phenol                          |              |       |           |
| Phenol, methylstyrenated        | 3.627        | -     | Low       |
| xylene                          | 3.12         | 14.13 | Low       |

### D. Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

E. Other adverse effects : No known significant effects or critical hazards.

# Section 13. Disposal considerations

#### A. 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.

### **B.** Disposal precautions

: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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**Product name SIGMALINE 523 HARDENER OXIDE YELLOW** 

# **Section 14. Transport information**

|                                | UN              | IMDG            | IATA            |
|--------------------------------|-----------------|-----------------|-----------------|
| A. UN number                   | UN3066          | UN3066          | UN3066          |
| B. UN proper shipping name     | PAINT           | PAINT           | PAINT           |
| C. Transport hazard class(es)  | 8               | 8               | 8               |
| D. Packing group               | II              | II              | II              |
| Environmental hazards          | No.             | No.             | No.             |
| E. Marine pollutant substances | Not applicable. | Not applicable. | Not applicable. |

#### **Additional information**

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

### F. Special precaution which a user to be aware of or needs to comply with in connection with transport or tranportation

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**

#### A. Regulation according to ISHA

**ISHA** article 117 (Harmful substances prohibited from manufacture)

: None of the components are listed.

(Harmful substances requiring permission)

**ISHA** article 118 : None of the components are listed.

**Article 2 of Youth Protection Act on Substances Hazardous** 

: It is not allowed to sell to persons under the age of 19.

to Youth

#### **Exposure Limits of Chemical Substances and Physical Factors**

The following components have an OEL: Talc, not containing asbestiform fibres m-phenylenebis(methylamine) iron hydroxide oxide yellow xylene

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**Product name SIGMALINE 523 HARDENER OXIDE YELLOW** 

### Section 15. Regulatory information

ISHA Enforcement Regs : None of the components are listed.

**Annex 19 (Exposure** standards established for harmful factors)

**ISHA Enforcement Regs** 

Annex 21 (Harmful factors subject to Work

**Environment** Measurement)

**Annex 22 (Harmful Factors Subject to Special Health Check-**

up)

Standard of Industrial **Safety and Health Annex 12 (Hazardous** substances subject to control)

: The following components are listed: talc / soapstone, iron oxide

ISHA Enforcement Regs : The following components are listed: Iron oxide (dust, fume)

: The following components are listed: iron and its compounds

B. Regulation according to Chemicals Control Act

Article 11 (TRI) : None of the components are listed. **Article 18 Prohibited (K-**: None of the components are listed.

**Reach Article 27)** 

**Article 19 Subject to** 

authorization (K-Reach

Article 25)

Article 20 Restricted (K-Reach Article 27)

**Article 20 Toxic** 

**Chemicals (K-Reach** 

Article 20)

: Not applicable

**Korea inventory** : All components are listed or exempted. **Article 39 (Accident** : None of the components are listed.

**Precaution Chemicals**) C. <u>Dangerous Materials</u> Safety Management Act

: Class: Class 4 - Flammable Liquid

: None of the components are listed.

: None of the components are listed.

Item: 5. Class 3 petroleums - Water-insoluble liquid

Threshold: 2000 L Danger category: III

Signal word: Contact with sources of ignition prohibited

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

E. Regulation according to other foreign laws

Safety, health and environmental

regulations specific for

the product

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

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### Section 16. Other information

A. References : Korean Ministry of Environment; Chemical Control Act

Korean Ministry of Labor; Industrial Safety and Health Act

**NIER Notice** 

Registry of Toxic Effects of Chemical Substances (RTECS)

U.S. Environmental Protection Agency, AQUIRE (Aquatic toxicity Information

Retrieval) ECOTOX Database System.

B. First issue date : 6/17/2024C. Date of issue/Date of : 8/28/2024

revision

D. Version : 1.02
Prepared by : EHS

E. Other

✓ Indicates information that has changed from previously issued version.

#### **Disclaimer**

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.

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