# SAFETY DATA SHEET



Date of issue/Date of revision 29 June 2021

**Version 6** 

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

Product code : 00317914

Product name : SIGMASHIELD 880 BASE YELLOW BS 10E53

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 (dermal) - Category 5
SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A

SKIN SENSITIZATION - Category 1

GERM CELL MUTAGENICITY - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

AQUATIC HAZARD (ACUTE) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 2

Percentage of the mixture consisting of ingredient(s) of unknown acute dermal

toxicity: 53.3%

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### Section 2. Hazards identification

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aguatic environment: 45.6%

#### **GHS** label elements

**Hazard pictograms** 









Signal word

: Warning

**Hazard statements** 

Mammable liquid and vapor.

May be harmful in contact with skin.

Causes skin irritation.

May cause an allergic skin reaction. Causes serious eye irritation. May cause respiratory irritation. Suspected of causing genetic defects.

May cause damage to organs through prolonged or repeated exposure.

Toxic to aquatic life with long lasting effects.

#### **Precautionary statements**

**Prevention** 

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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 nonsparking tools. Take action to prevent static discharges. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe vapor. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

Response

collect spillage. IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. 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. Wash contaminated clothing before reuse. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. Wash with plenty of water. If skin irritation or rash 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. If eye irritation persists: Get medical advice or attention.

**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.

result in classification

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

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**Product name SIGMASHIELD 880 BASE YELLOW BS 10E53** 

# Section 3. Composition/information on ingredients

Substance/mixture : Mixture

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

**CAS number** : Not applicable.

| Ingredient name   | %          | CAS number |
|---|------------|------------|
| <b>E</b> poxy resin (MW ≤ 700)  | 20- <25    | 25068-38-6 |
| Talc, not containing asbestiform fibers   | 10- <20    | 14807-96-6 |
| xylene  | 5- <10     | 1330-20-7  |
| Epoxy Resin (700 <mw<=1100)< td=""><td>3 - &lt;5</td><td>25036-25-3</td></mw<=1100)<> | 3 - <5     | 25036-25-3 |
| crystalline silica, respirable powder (<10 microns)                                   | 3 - <5     | 14808-60-7 |
| Phenol, methylstyrenated  | 3 - <5     | 68512-30-1 |
| 2-methylpropan-1-ol   | 1- <3      | 78-83-1    |
| 2,3-epoxypropyl neodecanoate  | 1- <3      | 26761-45-5 |
| ethylbenzene  | 1- <3      | 100-41-4   |
| trizinc bis(orthophosphate)   | 0.1- < 0.3 | 7779-90-0  |

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**: Remove contact lenses, irrigate copiously with clean, fresh water, holding the

eyelids apart for at least 10 minutes and seek immediate medical advice.

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 irritation.Inhalation : May cause respiratory irritation.

Skin contact: May be harmful in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.

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

#### Over-exposure signs/symptoms

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

pain or irritation

watering redness

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

respiratory tract irritation

coughing

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### Section 4. First aid measures

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

irritation redness dryness cracking

Ingestion : No specific data.

#### Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** 

: 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.

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. 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:

carbon oxides

halogenated compounds metal oxide/oxides

Special protective actions for fire-fighters

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

Special protective 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.

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### Section 6. Accidental release measures

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

For non-emergency personnel

Product code 00317914

: 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. Avoid breathing 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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

#### 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.

# Section 7. Handling and storage

**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. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. 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.

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# Section 7. Handling and storage

including any incompatibilities

Product code 00317914

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   |
|---|---|
| ralc, not containing asbestiform fibers             | Ministry of Labor (Thailand, 8/2017).  TWA: 0.1 fibres/1 cc 8 hours. Form: Respirable dust  TWA: 2 mg/m³ 8 hours. Form: Respirable dust |
| xylene  | Ministry of Labor (Thailand, 8/2017). TWA: 100 ppm 8 hours.   |
| crystalline silica, respirable powder (<10 microns) | Ministry of Labor (Thailand, 8/2017). TWA: 0.025 mg/m³ 8 hours. Form: Respirable dust   |
| 2-methylpropan-1-ol                                 | ACGIH TLV (United States, 3/2020). TWA: 152 mg/m³ 8 hours. TWA: 50 ppm 8 hours.   |
| ethylbenzene  | Ministry of Labor (Thailand, 8/2017). TWA: 100 ppm 8 hours.   |

### Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. 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 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.

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# Section 8. Exposure controls/personal protection

#### **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.

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.

Eye protection

: Chemical splash goggles.

Skin protection

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 : butyl rubber

**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.

# Section 9. Physical and chemical properties

**Appearance** 

Physical state : Liquid.
Color : Yellow.
Odor : Aromatic.
Odor threshold : Not available.
pH : insoluble in water.

Melting point : May start to solidify at the following temperature: -14°C (6.8°F) This is based on

data for the following ingredient: Phenol, methylstyrenated. Weighted average:

-71.9°C (-97.4°F)

**Boiling point** : >37.78°C (>100°F)

Flash point : Closed cup: 37°C (98.6°F)

**Evaporation rate** :

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# Section 9. Physical and chemical properties

: liquid

Highest known value: 0.84 (ethylbenzene) Weighted average: 0.74compared with

butyl acetate

Flammability (solid, gas)

Lower and upper explosive

(flammable) limits

: Greatest known range: Lower: 1.7% Upper: 10.9% (2-methylpropan-1-ol)

Vapor pressure : Highest known value: <1.6 kPa (<12 mm Hg) (at 20°C) (2-methylpropan-1-ol).

Weighted average: 0.67 kPa (5.03 mm Hg) (at 20°C)

: Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.37 (Air = 1) Vapor density

Relative density

: Insoluble in the following materials: cold water. Solubility

Partition coefficient: n-

octanol/water

: Not applicable.

**Auto-ignition temperature** : Lowest known value: 276°C (528.8°F) (2,3-epoxypropyl neodecanoate).

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

: Kinematic (room temperature): >400 mm<sup>2</sup>/s **Viscosity** 

Kinematic (40°C): >21 mm<sup>2</sup>/s

: 60 - 100 s (ISO 6mm) **Viscosity** 

# 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 halogenated compounds metal oxide/oxides

# Section 11. Toxicological information

Information on toxicological effects

**Acute toxicity** 

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**Product name SIGMASHIELD 880 BASE YELLOW BS 10E53** 

# **Section 11. Toxicological information**

| Product/ingredient name   | Result                          | Species | Dose        | Exposure |
|---|---------------------------------|---------|-------------|----------|
| Epoxy resin (MW ≤ 700)  | LD50 Dermal                     | Rabbit  | >2 g/kg     | -        |
|   | LD50 Oral                       | Rat     | >2 g/kg     | -        |
| xylene  | LD50 Dermal                     | Rabbit  | 1.7 g/kg    | -        |
|   | LD50 Oral                       | Rat     | 4.3 g/kg    | -        |
| Epoxy Resin (700 <mw<=1100)< td=""><td>LD50 Dermal</td><td>Rat</td><td>&gt;2000 mg/kg</td><td>-</td></mw<=1100)<> | LD50 Dermal                     | Rat     | >2000 mg/kg | -        |
|   | LD50 Oral                       | Rat     | >2000 mg/kg | -        |
| Phenol, methylstyrenated  | LD50 Dermal                     | Rabbit  | >2000 mg/kg | -        |
|   | LD50 Oral                       | Rat     | >2000 mg/kg | -        |
| 2-methylpropan-1-ol   | LC50 Inhalation Vapor           | Rat     | 24.6 mg/l   | 4 hours  |
|   | LD50 Dermal                     | Rabbit  | 2460 mg/kg  | -        |
|   | LD50 Oral                       | Rat     | 2830 mg/kg  | -        |
| 2,3-epoxypropyl neodecanoate  | LD50 Dermal                     | Rat     | 3800 mg/kg  | -        |
|   | LD50 Oral                       | Rat     | 9.6 g/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    | -        |
| trizinc bis(orthophosphate)   | LC50 Inhalation Dusts and mists | Rat     | >5.7 mg/l   | 4 hours  |
|   | LD50 Oral                       | Rat     | >5000 mg/kg | -        |

**Conclusion/Summary** 

: There are no data available on the mixture itself.

### **Irritation/Corrosion**

| Product/ingredient name | Result                   | Species | Score | Exposure     | Observation |
|-------------------------|--------------------------|---------|-------|--------------|-------------|
| Epoxy resin (MW ≤ 700)  | Skin - Mild irritant     | Rabbit  | -     | -            | -           |
| ,                       | Eyes - Mild irritant     | Rabbit  | -     | -            | -           |
| xylene                  | Skin - Moderate irritant | Rabbit  | -     | 24 hours 500 | -           |
|                         |                          |         |       | 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**

| 3                      | Route of exposure | Species | Result      |
|------------------------|-------------------|---------|-------------|
| Epoxy resin (MW ≤ 700) | 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.

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# **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                |
|---|------------|-------------------|------------------------------|
| ▼alc, not containing asbestiform fibers | Category 3 | -                 | Respiratory tract irritation |
| xylene                                  | Category 3 | -                 | Respiratory tract irritation |
| 2-methylpropan-1-ol                     | Category 3 | -                 | Respiratory tract irritation |
|   | Category 3 |                   | Narcotic effects             |

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

| Name | 3 3 3      | Route of exposure | Target organs  |
|------|------------|-------------------|----------------|
|      | Category 1 | inhalation        | -              |
|      | Category 2 | -                 | hearing organs |

### **Aspiration hazard**

| Name | Result   |
|------|--|
|      | ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 2 ASPIRATION HAZARD - Category 1 |

Information on the likely routes of exposure

: Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.Inhalation : May cause respiratory irritation.

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

May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

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

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

pain or irritation watering redness

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

respiratory tract irritation

coughing

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# Section 11. Toxicological information

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

irritation redness dryness cracking

Ingestion : No specific data.

### 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** 

: Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

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** : No known significant effects or critical hazards.

**Mutagenicity**: Suspected of causing genetic defects.

**Reproductive toxicity**: No known significant effects or critical hazards.

#### **Numerical measures of toxicity**

#### **Acute toxicity estimates**

| Route                        | ATE value     |
|------------------------------|---------------|
| <b>Ø</b> ral                 | 5816.38 mg/kg |
| Dermal                       | 2772.55 mg/kg |
| Inhalation (vapors)          | 57.58 mg/l    |
| Inhalation (dusts and mists) | 7.39 mg/l     |

#### Other information

Prolonged or repeated contact may dry skin and cause irritation. Sanding and grinding dusts may be harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing.

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**Product name SIGMASHIELD 880 BASE YELLOW BS 10E53** 

# Section 12. Ecological information

### **Toxicity**

| Product/ingredient name     | Result                                | Species                      | Exposure |
|-----------------------------|---------------------------------------|------------------------------|----------|
| Ppoxy resin (MW ≤ 700)      | Acute LC50 1.8 mg/l                   | Daphnia                      | 48 hours |
|                             | Chronic NOEC 0.3 mg/l                 | Daphnia                      | 21 days  |
| 2-methylpropan-1-ol         | Acute EC50 1100 mg/l                  | Daphnia                      | 48 hours |
| 2,3-epoxypropyl             | Acute EC50 3.5 mg/l                   | Algae                        | 96 hours |
| neodecanoate                |                                       |                              |          |
|                             | Acute EC50 4.8 mg/l                   | Daphnia - Daphnia magna      | 48 hours |
|                             | Acute LC50 9.6 mg/l                   | Fish - Oncorhynchus mykiss   | 96 hours |
| ethylbenzene                | Acute EC50 1.8 mg/l Fresh water       | Daphnia                      | 48 hours |
|                             | Acute LC50 150 to 200 mg/l Fresh      | Fish                         | 96 hours |
|                             | water Chronic NOEC 1 mg/l Fresh water | Daphnia - Ceriodaphnia dubia | -        |
| trizinc bis(orthophosphate) | Acute LC50 0.112 mg/l                 | Fish                         | 96 hours |
|                             | Chronic NOEC 0.026 mg/l               | Fish                         | 30 days  |

Conclusion/Summary

: There are no data available on the mixture itself.

### Persistence/degradability

| Product/ingredient name | Test      | Result                   | Dose | Inoculum |
|-------------------------|-----------|--------------------------|------|----------|
| poxy resin (MW ≤ 700)   | OECD 301F | 5 % - 28 days            | -    | -        |
| ethylbenzene            | -         | 79 % - Readily - 10 days | -    | -        |

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

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|------------|------------------|
| Epoxy resin (MW ≤ 700)  | -                 | -          | Not readily      |
| xylene                  | -                 | -          | Readily          |
| 2,3-epoxypropyl         | -                 | -          | Not readily      |
| neodecanoate            |                   |            |                  |
| ethylbenzene            | -                 | -          | Readily          |

### **Bioaccumulative potential**

| Product/ingredient name      | LogPow | BCF         | Potential |
|------------------------------|--------|-------------|-----------|
| Epoxy resin (MW ≤ 700)       | 3      | 31          | low       |
| xylene                       | 3.12   | 7.4 to 18.5 | low       |
| Phenol, methylstyrenated     | 3.627  | -           | low       |
| 2-methylpropan-1-ol          | 1      | -           | low       |
| 2,3-epoxypropyl neodecanoate | 4.4    | -           | high      |
| ethylbenzene                 | 3.6    | 79.43       | low       |

### **Mobility in soil**

Soil/water partition coefficient (K<sub>oc</sub>)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

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**Product name SIGMASHIELD 880 BASE YELLOW BS 10E53** 

# 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 nonrecyclable 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   | 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       | Yes. The environmentally hazardous substance mark is not required. | Yes.   | Yes. The environmentally hazardous substance mark is not required. |
| Marine pollutant substances | Not applicable.  | (Epoxy resin (MW ≤ 700),<br>2,3-epoxypropyl<br>neodecanoate) | Not applicable.  |

#### Additional information

UN

: This class 3 viscous liquid that is also environmentally hazardous is not subject to regulation in packagings up to 5 L, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 according to 2.3.2.5.2.

**IMDG** 

: This class 3 viscous liquid that is also environmentally hazardous is not subject to regulation in packagings up to 5 L, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 according to 2.3.2.5.

**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.

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**Product name SIGMASHIELD 880 BASE YELLOW BS 10E53** 

# **Section 14. Transport information**

**Transport in bulk according**: Not applicable.

to IMO instruments

# 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

: 29 June 2021

Date of previous issue : 2/3/2020

Version : 6
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

bv Rail

UN = United Nations

Indicates information that has changed from previously issued version.

**Notice to reader** 

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**Product name SIGMASHIELD 880 BASE YELLOW BS 10E53** 

### **Section 16. Other information**

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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