SAFETY DATA SHEET

Safety Data Sheet according to GB/T 16483-2008 and GB/T 17519-2013



Date of issue/Date of revision

Version 1.06

Section 1. Chemical product and company identification

Product code : 00472070

Product name : SIGMAFAST 278 BASE RAL 7040
Product name : SIGMAFAST 278 BASE RAL 7040

Product type : Liquid.

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

3 June 2024

Product use : Professional applications, Used by spraying.

Use of the substance/

mixture

: Coating.

Uses advised against : Not applicable.

Supplier's details : PPG Coatings (Kunshan) Co., Ltd

53 Jinyang Road, Lujia Town,

215331 Kunshan City, Jiangsu Province, P.R. China Tel: 86 512 57678859 Fax: 86 512 57678857

Emergency telephone number (with hours of

operation)

: 00 86 532 83889090

Section 2. Hazards identification

Classification of the substance or mixture according to GB 13690-2009 and GB 30000-2013

Emergency overview

Liquid.

Characteristic.

Highly flammable liquid and vapor.

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation.

Harmful if inhaled.

May cause respiratory irritation.

Suspected of causing cancer.

Toxic to aquatic life.

Toxic to aquatic life with long lasting effects.

Prolonged or repeated contact may dry skin and cause irritation.

IF exposed or concerned: Get medical advice or attention. IF INHALED: Call a POISON CENTER or doctor if you feel unwell. If skin irritation or rash occurs: Get medical advice or attention. If eye irritation persists: Get medical advice or attention.

See Section 12 for environmental precautions.

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Product name SIGMAFAST 278 BASE RAL 7040

Section 2. Hazards identification

Classification of the substance or mixture

: FLAMMABLE LIQUIDS - Category 2

ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A

SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

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

Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 74.4%

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 44%

GHS label elements

Hazard pictograms









Signal word : Danger

Hazard statements : Highly flammable liquid and vapor.

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation.

Harmful if inhaled.

May cause respiratory irritation. Suspected of causing cancer.

Toxic to aquatic life.

Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use 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 release to the environment. Avoid breathing vapor. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

Response

: Collect spillage. IF exposed or concerned: Get medical advice or attention. IF 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. IF ON SKIN: 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.

Suitable extinguishing media

: Use dry chemical, CO₂, water spray (fog) or foam.

Storage

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

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Product name SIGMAFAST 278 BASE RAL 7040

Section 2. Hazards identification

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

and international regulations.

Physical and chemical

hazards

: Highly flammable liquid and vapor.

: Causes skin irritation. May cause an allergic skin reaction. Causes serious eye **Health hazards**

irritation. Harmful if inhaled. May cause respiratory irritation. Suspected of causing

cancer. Prolonged or repeated contact may dry skin and cause irritation.

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

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

effects

: Not available.

Potential delayed effects : Not available.

Environmental hazards : Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

result in classification

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

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

CAS number/other identifiers

CAS number : Not applicable.

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Product name SIGMAFAST 278 BASE RAL 7040

Section 3. Composition/information on ingredients

| Ingredient name | % | CAS number |
|--|----------|------------|
| ▼alc , not containing asbestiform fibres | 40 - <70 | 14807-96-6 |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | 10 - <25 | 1675-54-3 |
| calcium carbonate | 10 - <25 | 471-34-1 |
| ethylbenzene | 1 - <10 | 100-41-4 |
| benzyl alcohol | 1 - <10 | 100-51-6 |
| xylene isomers mixture | 1 - <10 | 1330-20-7 |
| Phenol, styrenated | 1 - <10 | 61788-44-1 |
| 1-methoxy-2-propanol | 1 - <10 | 107-98-2 |
| oxirane, mono[(C12-14-alkyloxy)methyl] derivs. | 1 - <10 | 68609-97-2 |
| trizinc bis(orthophosphate) | 0.1 - <1 | 7779-90-0 |

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: 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 : Harmful if inhaled. May cause respiratory irritation.

Skin contact: 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

Skin contact: Adverse symptoms may include the following:

irritation redness dryness cracking

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Product name SIGMAFAST 278 BASE RAL 7040

Section 4. First aid measures

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, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media

: Do not use water jet.

Specific hazards arising from the chemical

: Highly 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.

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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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Section 6. Accidental release measures

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 ingest. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

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.

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Section 7. Handling and storage

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits |
|--|--|
| ▼alc , not containing asbestiform fibres | GBZ 2.1 (China, 11/2022). |
| | PC-TWA: 1 mg/m ³ 8 hours. Form: |
| | respirable dust |
| | PC-TWA: 3 mg/m³ 8 hours. Form: total dust |
| calcium carbonate | ACGIH TLV (United States). |
| | TWA: 3 mg/m³ Form: Respirable |
| | TWA: 10 mg/m³ Form: Total dust |
| ethylbenzene | GBZ 2.1 (China, 11/2022). |
| | PC-STEL: 150 mg/m³ 15 minutes. |
| | PC-TWA: 100 mg/m ³ 8 hours. |
| xylene isomers mixture | GBZ 2.1 (China, 11/2022). [Xylene] |
| | PC-STEL: 100 mg/m ³ 15 minutes. |
| | PC-TWA: 50 mg/m ³ 8 hours. |
| 1-methoxy-2-propanol | ACGIH TLV (United States, 7/2023). |
| | STEL: 369 mg/m³ 15 minutes. |
| | STEL: 100 ppm 15 minutes. |
| | TWA: 184 mg/m³ 8 hours. |
| | TWA: 50 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.

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. 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 Skin protection : Chemical splash goggles.

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Section 8. Exposure controls/personal 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 : butvl 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.

Odor : Characteristic.

Boiling point : >37.78°C (>100°F)

Flash point : Closed cup: 19°C (66.2°F)

Lower and upper explosive

(flammable) limits

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

Relative density : 1.19

Solubility(ies) : Media Result

cold water Not soluble

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

Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous

reactions

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

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

products.

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Product name SIGMAFAST 278 BASE RAL 7040

Section 10. Stability and reactivity

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

oxidizing agents, strong alkalis, strong acids.

Hazardous decomposition : D

products

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

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---------------------------------|-----------------------|---------|-------------|----------|
| s-[4-(2,3-epoxipropoxi)phenyl] | LD50 Dermal | Rabbit | 23000 mg/kg | - |
| propane | | | | |
| | LD50 Oral | Rat | 15000 mg/kg | - |
| calcium carbonate | LD50 Dermal | Rat | >2000 mg/kg | - |
| | LD50 Oral | Rat | 6450 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 | - |
| benzyl alcohol | LC50 Inhalation Dusts | Rat | >4178 mg/m³ | 4 hours |
| | and mists | | | |
| | LD50 Dermal | Rabbit | 2000 mg/kg | - |
| | LD50 Oral | Rat | 1.23 g/kg | - |
| xylene isomers mixture | LD50 Dermal | Rabbit | 1.7 g/kg | - |
| | LD50 Oral | Rat | 4.3 g/kg | - |
| Phenol, styrenated | LD50 Dermal | Rabbit | >5010 mg/kg | - |
| _ | LD50 Oral | Rat | 3550 mg/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 | - |
| oxirane, mono[(C12-14-alkyloxy) | LD50 Oral | Rat | 17100 mg/kg | - |
| methyl] derivs. | | | | |
| trizinc bis(orthophosphate) | LC50 Inhalation Dusts | Rat | >5.7 mg/l | 4 hours |
| , , , , | and mists | | | |
| | LD50 Oral | Rat | >5000 mg/kg | - |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---|------------------------------------|---------|-------|--------------------|-------------|
| pris-[4-(2,3-epoxipropoxi) phenyl]propane | Eyes - Mild irritant | Rabbit | - | 24 hours | - |
| . , , . | Eyes - Redness of the conjunctivae | Rabbit | 0.4 | 24 hours | - |
| | Skin - Edema | Rabbit | 0.5 | 4 hours | - |
| | Skin - Erythema/Eschar | Rabbit | 0.8 | 4 hours | - |
| | Skin - Mild irritant | Rabbit | - | 4 hours | - |
| xylene isomers mixture | Skin - Moderate irritant | Rabbit | - | 24 hours 500 mg | - |

Sensitization

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Product name SIGMAFAST 278 BASE RAL 7040

Section 11. Toxicological information

| Product/ingredient name | Route of exposure | Species | Result |
|---|----------------------|------------------------------|-------------------------------------|
| bis-[4-(2,3-epoxipropoxi) phenyl]propane Phenol, styrenated oxirane, mono[(C12-14-alkyloxy)methyl] derivs. | skin skin skin | Mouse Mouse Guinea pig | Sensitizing Sensitizing Sensitizing |

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

| Name | 3 3 3 | Route of exposure | Target organs |
|--|------------|-------------------|------------------------------|
| Talc , not containing asbestiform fibres | Category 3 | | Respiratory tract irritation |
| 1-methoxy-2-propanol | Category 3 | - | Narcotic effects |

Specific target organ toxicity (repeated exposure)

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

Aspiration hazard

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

Information on the likely

routes of exposure

: Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation: Harmful if inhaled. May cause respiratory irritation.

Skin contact: 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

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Product name SIGMAFAST 278 BASE RAL 7040

Section 11. Toxicological information

Eye contact: Adverse symptoms may include the following:

pain or irritation

watering redness

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

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

: Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate

: Not available.

effects

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. Once sensitized, a severe allergic reaction may occur when

subsequently exposed to very low levels.

Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of

exposure.

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

Numerical measures of toxicity

Acute toxicity estimates

| Product/ingredient name | Oral (mg/ kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|--|------------------|-------------------|--------------------------------|----------------------------------|--|
| SIGMAFAST 278 BASE RAL 7040 | 22708.6 | 6192.7 | N/A | 54.7 | 4.1 |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | 15000 | 23000 | N/A | N/A | N/A |
| calcium carbonate | 6450 | 2500 | N/A | N/A | N/A |
| ethylbenzene | 3500 | 17800 | N/A | 17.8 | 1.5 |
| benzyl alcohol | 1230 | 2000 | N/A | N/A | 1.5 |
| xylene isomers mixture | 4300 | 1700 | N/A | 11 | 1.5 |
| Phenol, styrenated | 3550 | N/A | N/A | N/A | N/A |
| 1-methoxy-2-propanol | 5200 | 13000 | N/A | N/A | N/A |
| oxirane, mono[(C12-14-alkyloxy)methyl] derivs. | 17100 | N/A | N/A | N/A | N/A |

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Product name SIGMAFAST 278 BASE RAL 7040

Section 11. Toxicological information

Other information

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

Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|---|-----------------------------------|------------------------------|----------|
| is-[4-(2,3-epoxipropoxi) phenyl]propane | Acute LC50 1.8 mg/l Fresh water | Daphnia - daphnia magna | 48 hours |
| prierryijproparie | Chronic NOEC 0.3 mg/l | Daphnia | 21 days |
| calcium carbonate | Acute EC10 >14 mg/l | Algae | 72 hours |
| ethylbenzene | Acute EC50 1.8 mg/l Fresh water | Daphnia | 48 hours |
| | Chronic NOEC 1 mg/l Fresh water | Daphnia - Ceriodaphnia dubia | - |
| Phenol, styrenated | Acute EC50 3.8 mg/l | Daphnia | 48 hours |
| 1-methoxy-2-propanol | Acute LC50 23300 mg/l | Daphnia | 48 hours |
| | Acute LC50 >4500 mg/l Fresh water | Fish | 96 hours |
| oxirane, mono[| LC50 >100 mg/l | Fish | 96 hours |
| (C12-14-alkyloxy)methyl] | | | |
| derivs. | | | |
| trizinc bis(orthophosphate) | Acute LC50 0.112 mg/l | Fish | 96 hours |
| | Chronic NOEC 0.026 mg/l | Fish | 30 days |

Persistence/degradability

| Product/ingredient name | Test | Result | | Dose | | Inoculum |
|------------------------------------|-------------------|---|------------|------|--------|------------|
| ethylbenzene Phenol, styrenated | - OECD 301F | 79 % - Readily - 10 days 7 % - Not readily - 28 days | | - | | - |
| Product/ingredient name | Aquatic half-life | | Photolysis | | Biodeg | radability |
| F4 (0 0 ' ') | | | 1 | | | 121 |

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|---------------------------|-------------------|------------|------------------|
| vís-[4-(2,3-epoxipropoxi) | - | - | Not readily |
| phenyl]propane | | | |
| ethylbenzene | - | - | Readily |
| benzyl alcohol | - | - | Readily |
| xylene isomers mixture | - | - | Readily |
| Phenol, styrenated | - | - | Not readily |

Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|---|-----------------------------------|-------------------------------------|--------------------------|
| ethylbenzene benzyl alcohol xylene isomers mixture 1-methoxy-2-propanol oxirane, mono[(C12-14-alkyloxy)methyl] derivs. | 3.6 0.87 3.12 <1 3.77 | 79.43 - 7.4 to 18.5 - - | Low Low Low Low |

Mobility in soil

Product name SIGMAFAST 278 BASE RAL 7040

Section 12. Ecological information

Soil/water partition coefficient (Koc)

: Not available.

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

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

| | China | UN | IMDG | IATA |
|-----------------------------|--|--|---|--|
| UN number | UN1263 | UN1263 | UN1263 | UN1263 |
| UN proper shipping name | PAINT | PAINT | PAINT | PAINT |
| Transport hazard class(es) | 3 | 3 | 3 | 3 |
| Packing group | II | II | II | II |
| Environmental hazards | Yes. The environmentally hazardous substance mark is not required. | Yes. The environmentally hazardous substance mark is not required. | Yes. | Yes. The environmentally hazardous substance mark is not required. |
| Marine pollutant substances | Not applicable. | Not applicable. | (bis-[4- (2,3-epoxipropoxi) phenyl]propane) | Not applicable. |

Additional information

CN : None identified.UN : None identified.

IMDG : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

IATA : The environmentally hazardous substance mark may appear if required by other transportation

regulations.

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Section 14. Transport information

Special precautions for user : Transport within user's premises: always transport in closed containers that are

upright and secure. Ensure that persons transporting the product know what to do in

the event of an accident or spillage.

Transport in bulk according: Not applicable.

to IMO instruments

Section 15. Regulatory information

China inventory (IECSC) : All components are listed or exempted.

References : Production Safety Law of the People's Republic of China

Code of Occupational Disease Prevention of the People's Republic of China

Environmental Protection Law of the People's Republic of China

Fire Control Law of the People's Republic of China

Regulations on the Control over Safety of Dangerous Chemicals

Occupational exposure limits for hazardous agents in the workplace chemical

hazardous agents (GBZ2.1)

General rule for classification and hazard communication of chemicals (GB13690) Safety data sheet for chemical products - Content and order of sections (GB/

T16483)

Guidance on the compilation of safety data sheet for chemical products (GB/

T17519)

General rule for preparation of precautionary label for chemicals (GB15258)

Safety rules for classification, precautionary labeling and precautionary statements

of chemicals (GB30000.2-29)

Section 16. Other information

History

Date of issue/Date of

revision

Date of previous issue 5/14/2024

: 1.06 Version

EHS

: 3 June 2024

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.

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Section 16. Other information

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.

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