SAFETY DATA SHEET



Date of issue/Date of revision 14 August 2025

Version 1

Section 1. Identification

Product name : SIGMAFAST 278 BASE RAL 7043

Product code : 000001202980
Other means of : 00477808

identification

Product type : Liquid.

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

Product use : Professional applications, Used by spraying.

Use of the substance/

mixture

: Coating.

Uses advised against : Not applicable.

Manufacturer : PPG Industries, Inc.

One PPG Place Pittsburgh, PA 15272

Emergency telephone

<u>number</u>

: (412) 434-4515 (U.S.) (514) 645-1320 (Canada)

SETIQ Interior de la República: 800-00-214-00 (México) SETIQ Ciudad de México: (55) 5559-1588 (México)

Technical Phone Number: 888-977-4762

Section 2. Hazards identification

OSHA/HCS status

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

: FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2

TOXIC TO REPRODUCTION - Category 1B

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 40.1%

(dermal), 37.2% (inhalation)

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Section 2. Hazards identification

This product contains TiO2 which has been classified as a GHS Carcinogen Category 2 based on its IARC 2B classification. For many products, TiO2 is utilized as a raw material in a liquid coating formulation. In this case, the TiO2 particles are bound in a matrix with no meaningful potential for human exposure to unbound particles of TiO2 when the product is applied with a brush or roller. Sanding the coating surface or mist from spray applications may be harmful depending on the duration and level of exposure and require the use of appropriate personal protective equipment and/or engineering controls (see Section 8).

GHS label elements

Hazard pictograms







Signal word

Hazard statements

: Danger

: Flammable liquid and vapor.

Causes skin irritation.

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

May damage fertility or the unborn child.

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 only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response

: IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with 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

Disposal

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

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

Supplemental label elements

: 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. Emits toxic fumes when heated.

Hazards not otherwise classified

: None known.

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Product name SIGMAFAST 278 BASE RAL 7043

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Product name : SIGMAFAST 278 BASE RAL 7043

Other means of : 00477808

identification

Ingredient name	Synonyms	%	CAS number
Talc , not containing asbestiform fibres	Talc; magnesium silicate monohydrate (talc) not containing asbestiform fibres	10 - 30	14807-96-6
bis-[4-(2,3-epoxipropoxi)phenyl]propane	2,2'-[(1-methylethylidene)bis (4,1-phenyleneoxymethylene)]bisoxirane; Oxirane, 2,2'-[(1-methylethylidene)bis (4,1-phenyleneoxymethylene)]bis-; Bisphenol A diglycidyl ether; Bisphenol A, diglycidyl ether; Bis-[4- (2,3-epoxypropoxy)phenyl]propane; 2,2-bis[4-(2,3-epoxypropoxy)phenyl] propane; Propane, 2,2-bis(p- (2,3-epoxypropoxy)phenyl)-; diglycidyl ether of bisphenol-A; 2,2-bis (4-hydroxyphenyl) propane bis (2,3-epoxypropyl) ether; Araldite; DIPHENYLOL PROPANE DIGLYCIDYL ETHER	10 - 30	1675-54-3
Limestone	Calcium carbonate; Marble; calcite; MARBLE DUST; VALERITE; GROUND LIMESTONE; LIMESTONE FLOUR; LIMESTONE, GROUND; Agstone; CALCIUM CARBONATE (MARBLE)	10 - 30	1317-65-3
xylene	Benzene, dimethyl-; Xylol; Benzene, dimethyl-, mixed isomers; xylene, mixed isomers, pure; xylene, crude; photosensitive emulsion consisting of cyclized polyisoprene containing: — 55 % or more but not more than 75 % by weight of xylene (CAS RN 1330-20-7) and — 12 % or more but not more than 18 % by weight of ethylbenzene (CAS RN 100-41-4); Benzene, dimethyl-,; Xylene (mixed); xylene (total); Xylenes; Dimethylbenzene	3 - 7	1330-20-7
titanium dioxide	Titanium oxide; Titanium oxide (TiO2); CI 77891; Titanium peroxide; Rutile; C.I. Pigment White 6; titanium dioxide coated with isopropoxytitanium triisostearate, containing by weight 1,5 % or more but not more than 2,5 % of isopropoxytitanium triisostearate; glass	1 - 5	13463-67-7
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Section 3. Composition/information on ingredients

	flakes (CAS RN 65997-17-3): — of a thickness of 0,3 μm or more but not more than 10 μm, and — coated with titanium dioxide (CAS RN 13463-67-7) or iron oxide (CAS RN 18282- 10-5); titanium dioxide, other than those of heading 3206 11 00; C.I. 77891; E 171; titanium(IV) oxide, other than those of heading 3206 11 00			
benzyl alcohol	Benzenemethanol; .alpha Hydroxytoluene; Phenylcarbinol; Phenylmethanol; E 1519; α- hydroxytoluene; Phenylmethyl alcohol; toluenol, alpha-; (hydroxymethyl) benzene; BENZENECARBINOL; alpha- Hydroxytoluene	1 - 5	100-51-6	
Phenol, styrenated	Styrenated phenol; Phenol modified styrene and styrene homologues; Styrenated phenols; Antioxidant SP; Mono (or di or tri)-(alpha-methylbenzyl) phenol; Phenol, derivatives (general), styrenated	1 - 5	61788-44-1	
1-methoxy-2-propanol	monopropylene glycol methyl ether; 1-methoxypropan-2-ol; 2-Propanol, 1-methoxy-; Propylene glycol monomethyl ether; Dowtherm 209; Propylene glycol methyl ether; 1-Methoxy-2-hydroxypropane; 2-Methoxy-1-methylethanol; PGME; methoxyisopropanol; α-propylene glycol 1-methyl ether	1 - 5	107-98-2	
carbon black	Lampblack; Acetylene black; C.I. 77266; C.I. Pigment Black 6; C.I. Pigment Black 7; Charcoal	0.5 - 1.5	1333-86-4	
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	Oxirane, 2-[(C12-14-alkyloxy)methyl] derivs.; Alkyl (C12-C14) Glycidyl Ether; Oxirane, mono[(C12-14-alkyloxy)methyl] derivatives; (C12-14) Alkylglycidyl ether; Oxirane, mono((C12-14-alkyloxy)methyl) derivatives; Alkyl -C12-14-glycidyl ether; 2-[(Alkyloxy)methyl]oxirane; Oxirane 2-[(alkyl(C12-14)oxy)methyl] derivatives; oxirane, mono[(C12-14-alkyloxy)methyl] derivs; Alkyl(C8-18) glycidyl ether; Oxirane, mono[(alkyl(C=12-14)oxy) methyl] derivs.	0.5 - 1.5	68609-97-2	
ethylbenzene	Benzene, ethyl-; Phenylethane; Ethylbenzol; photosensitive emulsion	0.1 - 1	100-41-4	

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Section 3. Composition/information on ingredients				
cor mc (C/ mc of (Mc bro	nsisting of cyclized polyisoprene ntaining: — 55 % or more but not bre than 75 % by weight of xylene AS RN 1330-20-7) and — 12 % or bre but not more than 18 % by weight ethylbenzene (CAS RN 100-41-4); EB; bno-(or di-) methyl (ethyl,bromoallyl, bmopropyloxycarbonyl chloropropyloxycarbonyl) benzene			

SUB codes represent substances without registered CAS Numbers.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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.

Section 4. First aid measures

00000400000

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

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 contactInhalationCauses serious eye irritation.May cause respiratory irritation.

Skin contact: Causes skin irritation. 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

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Section 4. First aid measures

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

reduced fetal weight increase in fetal deaths skeletal malformations

Skin contact: Adverse symptoms may include the following:

irritation redness

reduced fetal weight increase in fetal deaths skeletal malformations

Ingestion : Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

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

Unsuitable extinguishing

media

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

: Do not use water jet.

Specific hazards arising from the chemical

: Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

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.

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Section 5. Fire-fighting measures

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

: 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 nonemergency personnel".

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent 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

Protective measures

: 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. Avoid exposure during pregnancy. 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. 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

Special precautions

: Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Vapors are heavier than air and may spread along floors. If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

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 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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits	
Talc , not containing asbestiform fibres	ACGIH TLV (United States, 1/2024) TWA 8 hours: 2 mg/m³. Form: Respirable fraction. OSHA PEL Z3 (United States) TWA: 2 mg/m³.	
bis-[4-(2,3-epoxipropoxi)phenyl]propane	None.	
Limestone	OSHA PEL (United States, 5/2018) TWA 8 hours: 15 mg/m³. Form: Total dust. TWA 8 hours: 5 mg/m³. Form: Respirable fraction.	
xylene	ACGIH TLV (United States, 1/2024) [p-xylene and mixtures containing p-xylene] Ototoxicant. TWA 8 hours: 20 ppm. OSHA PEL (United States, 5/2018) [Xylenes] TWA 8 hours: 100 ppm.	
titanium dioxide	TWA 8 hours: 435 mg/m³. ACGIH TLV (United States, 1/2024) TWA 8 hours: 2.5 mg/m³. Form: respirable fraction, finescale particles. OSHA PEL (United States, 5/2018) TWA 8 hours: 15 mg/m³. Form: Total dust.	
benzyl alcohol	None.	
Phenol, styrenated	None.	
1-methoxy-2-propanol	ACGIH TLV (United States, 1/2024)	

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oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

Section 8. Exposure controls/personal protection

STEL 15 minutes: 100 ppm. STEL 15 minutes: 369 mg/m³.

ACGIH TLV (United States, 1/2024) carbon black

TWA 8 hours: 3 mg/m³. Form: Inhalable

OSHA PEL (United States, 5/2018)

TWA 8 hours: 3.5 mg/m³.

TWA 8 hours: 50 ppm. TWA 8 hours: 184 mg/m³.

ACGIH TLV (United States, 1/2024)

Ototoxicant.

TWA 8 hours: 20 ppm.

OSHA PEL (United States, 5/2018)

TWA 8 hours: 100 ppm. TWA 8 hours: 435 mg/m³.

Key to abbreviations

S = Acceptable Maximum Peak = Potential skin absorption Α ACGIH = American Conference of Governmental Industrial Hygienists. SR = Respiratory sensitization

С SS = Skin sensitization Ceiling Limit F = Short term Exposure limit values = Fume STEL

IPEL = Internal Permissible Exposure Limit TD = Total dust

OSHA = Occupational Safety and Health Administration. TLV = Threshold Limit Value R = Respirable TWA = Time Weighted Average

= OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances

Consult local authorities for acceptable exposure limits.

procedures

ethylbenzene

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/face 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 antistatic 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.

: Respirator selection must be based on known or anticipated exposure levels, the Respiratory protection

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.

The respiratory protection shall be in accordance to 29 CFR 1910.134.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid. Color : Gray.

Odor : Aromatic. [Slight] рH : Not applicable. **Melting point** : Not available. : >37.78°C (>100°F) **Boiling point**

: Closed cup: 38°C (100.4°F) Flash point

Auto-ignition temperature : Not available. **Decomposition temperature** : Not available. : Not available. **Flammability**

Lower and upper explosive

(flammable) limits

Vapor pressure : Not available. Vapor density : Not available.

Relative density : 1.7 Density (lbs/gal) : 14.19

Media Result

Solubility(ies) cold water Not soluble

: Not available.

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Section 9. Physical and chemical properties

Partition coefficient: n-

octanol/water

: Not applicable.

Viscosity : Dynamic (room temperature): Not available.

Kinematic (room temperature): Not available. Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt)

% Solid. (w/w) : 91.191

Particle characteristics

Median particle size : Not applicable.

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.

Refer to protective measures listed in sections 7 and 8.

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

Product/ingredient name	Result	Dose
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Rabbit - Dermal - LD50	23000 mg/kg
	Rat - Oral - LD50	15000 mg/kg
Limestone	Rat - Oral - LD50	6450 mg/kg
xylene	Rat - Oral - LD50	4.3 g/kg
•	Rabbit - Dermal - LD50	1.7 g/kg
titanium dioxide	Rat - Oral - LD50	>5000 mg/kg
	Rabbit - Dermal - LD50	>5000 mg/kg
	Rat - Inhalation - LC50 Dusts and	>6.82 mg/l [4 hours]
	mists	
benzyl alcohol	Rabbit - Dermal - LD50	>2000 mg/kg
•	Rat - Oral - LD50	1200 mg/kg
	Rat - Inhalation - LC50 Dusts and	>5 mg/l [4 hours]
	mists	
Phenol, styrenated	Rabbit - Dermal - LD50	>5010 mg/kg
•	Rat - Oral - LD50	3550 mg/kg
1-methoxy-2-propanol	Rabbit - Dermal - LD50	13 g/kg
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Section 11. Toxicological information

	Rat - Oral - LD50	5.2 g/kg
	Rat - Inhalation - LC50 Vapor	>7000 ppm [6 hours]
carbon black	Rat - Oral - LD50	>10 g/kg
oxirane, mono[(C12-14-alkyloxy)methyl]	Rat - Oral - LD50	17100 mg/kg
derivs.		
	Rabbit - Dermal - LD50	>4000 mg/kg
ethylbenzene	Rat - Oral - LD50	3.5 g/kg
	Rabbit - Dermal - LD50	17.8 g/kg
	Rat - Inhalation - LC50 Vapor	17.8 mg/l [4 hours]

Product Conclusion : There are no data available on the mixture itself.

Skin corrosion/irritation

Product/ingredient name	Species	Dose	Score
bis-[4-(2,3-epoxipropoxi) phenyl]propane	Rabbit - Skin - Erythema/ Eschar	Duration of treatment/exposure: 4 hours	Irritation score: 0.8
, , , ,	Rabbit - Skin - Edema	Duration of treatment/exposure: 4 hours	Irritation score: 0.5
	Rabbit - Skin - Mild irritant	Duration of treatment/exposure: 4 hours	-
xylene	Rabbit - Skin - Moderate irritant	Amount/concentration applied: 500 mg	-
		Duration of treatment/exposure: 24 hours	

Conclusion/Summary

There are no data available on the mixture itself.

Serious eye damage/eye irritation

Product/ingredient name	Species	Dose	Score
bis-[4-(2,3-epoxipropoxi) phenyl]propane	Rabbit - Eyes - Redness of the conjunctivae Rabbit - Eyes - Mild irritant	Duration of treatment/exposure: 24 hours Duration of treatment/exposure: 24 hours Fully reversible in 7 days or less	Irritation score: 0.4

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

Respiratory corrosion/irritation

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

Sensitization

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	Product/ingredient name	Species	Result		
	bis-[4-(2,3-epoxipropoxi)phenyl]propane Phenol, styrenated		Result: Sensitizing Result: Sensitizing		

Skin

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

Respiratory

Conclusion/Summary: 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.

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Section 11. Toxicological information

Classification

Product/ingredient name	OSHA	IARC	NTP
bis-[4-(2,3-epoxipropoxi)phenyl]	-	3	-
propane			
xylene	-	3	-
titanium dioxide	-	2B	-
carbon black	_	2B	_
ethylbenzene	-	2B	-

Carcinogen Classification

IARC: 1, 2A, 2B, 3, 4

code:

NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen

OSHA: +

Not listed/not regulated: -

Reproductive toxicity

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

Specific target organ toxicity (single exposure)

Product/ingredient name	Result
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
xylene	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
1-methoxy-2-propanol	(Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Result
	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (hearing organs) - Category 2

Target organs

: Contains material which causes damage to the following organs: blood, liver, heart,

Contains material which may cause damage to the following organs: kidneys, lungs, the nervous system, the reproductive system, cardiovascular system, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

Aspiration hazard

Product/ingredient name	Result
	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

Potential acute health effects

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

Skin contact: Causes skin irritation. May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

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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

reduced fetal weight increase in fetal deaths skeletal malformations

Skin contact: Adverse symptoms may include the following:

irritation redness

reduced fetal weight increase in fetal deaths skeletal malformations

Ingestion: Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Conclusion/Summary

: There are no data available on the mixture itself. This product contains TiO2 which has been classified as a GHS Carcinogen Category 2 based on its IARC 2B classification. For many products, TiO2 is utilized as a raw material in a liquid coating formulation. In this case, the TiO2 particles are bound in a matrix with no meaningful potential for human exposure to unbound particles of TiO2 when the product is applied with a brush or roller. Sanding the coating surface or mist from spray applications may be harmful depending on the duration and level of exposure and require the use of appropriate personal protective equipment and/or engineering controls (see Section 8). Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from shortterm and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Short term exposure

Potential immediate

effects

There are no data available on the mixture itself.

Potential delayed effects

: There are no data available on the mixture itself.

Long term exposure

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Section 11. Toxicological information

Potential immediate : There are no data available on the mixture itself.

effects

Potential delayed effects: There are no data available on the mixture itself.

Potential chronic health effects

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

General : 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: May damage fertility or the unborn child.

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 7043	25545.7	12947.9	N/A	125.6	17.1
bis-[4-(2,3-epoxipropoxi)phenyl]propane	15000	23000	N/A	N/A	N/A
Limestone	6450	N/A	N/A	N/A	N/A
xylene	4300	1700	N/A	11	1.5
benzyl alcohol	1200	2500	N/A	N/A	N/A
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	2500	N/A	N/A	N/A
ethylbenzene	3500	17800	N/A	17.8	1.5

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Chronic - NOEC	Daphnia
	0.3 mg/l [21 days]	
	Acute - LC50 - Fresh water	Daphnia - daphnia magna
	1.8 mg/l [48 hours]	
Limestone	Acute - LC50	Fish
	>56000 mg/l [96 hours]	
titanium dioxide	Acute - LC50 - Fresh water	Daphnia - <i>Daphnia magna</i>
	>100 mg/l [48 hours]	
Phenol, styrenated	Acute - EC50	Daphnia
	3.8 mg/l [48 hours]	
1-methoxy-2-propanol	Acute - LC50 - Fresh water	Fish - Goldfish
	>4500 mg/l [96 hours]	
	Acute - LC50	Daphnia - Daphnia
	23300 mg/l [48 hours]	
oxirane, mono[(C12-14-alkyloxy)methyl]	LC50	Fish
derivs.	OECD [Fish, Acute Toxicity Test]	

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Section 12. Ecological information

	>1.8 mg/l [96 hours] EC50 OECD [Daphnia sp. Acute Immobilization Test and	Daphnia
	Reproduction Test]	
	7.2 mg/l [48 hours]	
	EC50	Algae
	OECD [Alga, Growth Inhibition	
	Test]	
	844 mg/l [72 hours]	
ethylbenzene	Acute - EC50 - Fresh water	Daphnia
	1.8 mg/l [48 hours]	
	Chronic - NOEC - Fresh water 1 mg/l	Daphnia - Ceriodaphnia dubia

Conclusion/Summary : Not available.

Persistence and degradability

Product/ingredient name	Result
Phenol, styrenated	OECD 301F
	7% [28 days] - Not readily
oxirane, mono[(C12-14-alkyloxy)methyl]	OECD [Ready Biodegradability - Manometric Respirometry
derivs.	Test]
	87% [28 days] - Readily
ethylbenzene	79% [10 days] - Readily

Conclusion/Summary : Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
xylene benzyl alcohol	3.12 0.87	7.4 to 18.5	Low Low
1-methoxy-2-propanol	<1	-	Low
oxirane, mono[(C12-14-alkyloxy)methyl]	3.77	160 to 263	Low
derivs. ethylbenzene	3.6	79.43	Low

Mobility in soil

Soil/Water partition

coefficient

: Not available.

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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.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

	DOT	IMDG	IATA
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class (es)	3	3	3
Packing group	III	III	III
Environmental hazards	No.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	(bis-[4-(2,3-epoxipropoxi) phenyl]propane)	Not applicable.
Product RQ (lbs)	1818.6	Not applicable.	Not applicable.
RQ substances	(xylene)	Not applicable.	Not applicable.

Additional information

DOT

: This product may be re-classified as "Combustible Liquid," unless transported by vessel or aircraft. Non-bulk packages (less than or equal to 119 gal) of combustible liquids are not regulated as hazardous materials in package sizes less than the product reportable quantity.

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.

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 SIGMAFAST 278 BASE RAL 7043

14. Transport information

Transport in bulk according : Not applicable.

to IMO instruments

Section 15. Regulatory information

United States

United States inventory (TSCA 8b): All components are active or exempted.

SARA 302/304

SARA 304 RQ : Not applicable.

Composition/information on ingredients

No products were found.

SARA 311/312

Classification : FLAMMABLE LIQUIDS - Category 3

SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2

TOXIC TO REPRODUCTION - Category 1B

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

Composition/information on ingredients

Name	%	Classification
Talc , not containing asbestiform	≥10 - ≤20	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
fibres		(Respiratory tract irritation) - Category 3
bis-[4-(2,3-epoxipropoxi)phenyl]	≥10 - ≤20	SKIN IRRITATION - Category 2
propane		EYE IRRITATION - Category 2A
		SKIN SENSITIZATION - Category 1B
xylene	≥5.0 - ≤10	FLAMMABLE LIQUIDS - Category 3
		ACUTE TOXICITY (dermal) - Category 4
		ACUTE TOXICITY (inhalation) - Category 4
		SKIN IRRITATION - Category 2
		EYE IRRITATION - Category 2A
		SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
		(Respiratory tract irritation) - Category 3
		ASPIRATION HAZARD - Category 1
titanium dioxide	≥1.0 - ≤5.0	CARCINOGENICITY - Category 2
benzyl alcohol	≥1.0 - ≤5.0	ACUTE TOXICITY (oral) - Category 4
		EYE IRRITATION - Category 2A
Phenol, styrenated	≥1.0 - ≤5.0	SKIN IRRITATION - Category 2
		EYE IRRITATION - Category 2A
		SKIN SENSITIZATION - Category 1B
1-methoxy-2-propanol	≥1.0 - ≤5.0	FLAMMABLE LIQUIDS - Category 3
		SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
		(Narcotic effects) - Category 3
carbon black	≥1.0 - ≤5.0	COMBUSTIBLE DUSTS
		CARCINOGENICITY - Category 2
oxirane, mono[(C12-14-alkyloxy)	≥0.10 - ≤2.5	SKIN IRRITATION - Category 2

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Product name SIGMAFAST 278 BASE RAL 7043

Section 15. Regulatory information

SARA 313

Chemical name CAS number Concentration

 Supplier notification
 : xylene
 1330-20-7
 3 - 7

 ethylbenzene
 100-41-4
 0.1 - 1

 lead massive
 7439-92-1
 0.0001

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

California Prop. 65

MARNING: Cancer - www.P65Warnings.ca.gov.

Section 16. Other information

Please refer to Section 2 of this document for GHS hazard classifications. The customer is responsible for determining the PPE code for this material.

Date of previous issue : No previous validation

Organization that prepared

the SDS

: EHS

Key to abbreviations : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

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)

N/A = Not available SGG = Segregation Group UN = United Nations

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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