

Date of issue 3 July 2025
Version 2.02

Section 1. Product and company identification

Product name : SIGMAFAST 278 BASE (TINTED)
Product code : 00437894Z
Other means of identification : Not available.
Product type : Liquid.

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

Identified uses Coating. Paints. Painting-related materials.	
Uses advised against	Reason
Not applicable.	

Supplier's details:

Supplier : PPG Industrial do Brasil – Tintas e Vernizes Ltda
Via Anhanguera KM 106, Bairro Sao Judas Tadeu
Sumare / SP, Brasil
55 19 2103-6000 (Recepção e Portaria)

Email address: : fds@ppg.com

Emergency telephone number : 0800 707 1767 / 0800 707 7022 – Empresa Ambipar response (24hs)
0800 014 8110 / (011)2661-8571 – CEATOX - Centro de Assistência Toxicológica
(atendimento 24hs)

Section 2. Hazards identification

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

Target organs : Contains material which causes damage to the following organs: blood, liver, heart, brain.
Contains material which may cause damage to the following organs: kidneys, lungs, the nervous system, cardiovascular system, upper respiratory tract, skin, central nervous system (CNS), ears, eye, lens or cornea.

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 37.1%

Section 2. Hazards identification

GHS label elements

Hazard pictograms :






Signal word : Danger

Hazard statements :

- Flammable liquid and vapor.
- Causes skin irritation.
- May cause an allergic skin reaction.
- Causes serious eye irritation.
- Suspected of causing cancer.
- May damage fertility or the unborn child.
- Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention :

- 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. Avoid release to the environment. Avoid breathing vapor. Wash thoroughly after handling.

Response :

- Collect spillage. IF exposed or concerned: Get medical advice or attention. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse. 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 :

- Not applicable.

Disposal :

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

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

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Not available.

Ingredient name	%	CAS number/other identifiers	Classification
Bis-[4-(2,3-epoxipropoxy)phenyl] propane	≥10 - ≤20	1675-54-3	SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1B AQUATIC HAZARD (ACUTE) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 2
Talc , not containing asbestiform	≥10 - ≤13	14807-96-6	SPECIFIC TARGET ORGAN

Section 3. Composition/information on ingredients

fibres			TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
titanium dioxide	≥5 - ≤10	13463-67-7	CARCINOGENICITY - Category 2
xylene	≥3 - ≤6	1330-20-7	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (oral) - Category 5 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 AQUATIC HAZARD (LONG-TERM) - Category 3
benzyl alcohol	≥1 - ≤3	100-51-6	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 5 EYE IRRITATION - Category 2A ASPIRATION HAZARD - Category 2
Phenol, styrenated	≥1 - ≤3	61788-44-1	ACUTE TOXICITY (oral) - Category 5 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1B AQUATIC HAZARD (ACUTE) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 2
1-methoxy-2-propanol	≥1 - ≤3	107-98-2	FLAMMABLE LIQUIDS - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
2-methoxy-1-methylethyl acetate	≥1 - ≤3	108-65-6	FLAMMABLE LIQUIDS - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
ethylbenzene	≥1 - ≤3	100-41-4	FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 5 ACUTE TOXICITY (inhalation) - Category 4 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 ASPIRATION HAZARD - Category 1

Section 3. Composition/information on ingredients

oxirane, mono[(C12-14-alkyloxy) methyl] derivs.	<1	68609-97-2	AQUATIC HAZARD (ACUTE) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 3 ACUTE TOXICITY (dermal) - Category 5 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1B TOXIC TO REPRODUCTION - Category 1B AQUATIC HAZARD (ACUTE) - Category 2
trizinc bis(orthophosphate)	≤1	7779-90-0	AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1
Octadecanamide, N, N'-1,6-hexanediylbis[12-hydroxy-	<1	55349-01-4	SKIN SENSITIZATION - Category 1B AQUATIC HAZARD (LONG-TERM) - Category 4

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.

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.

Potential acute health effects

Section 4. First aid measures

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

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 : 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
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.

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

Section 6. Accidental release measures

- 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** : 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. 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.
- 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. 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
 alcl, not containing asbestiform fibres	ACGIH TLV (United States, 1/2024) TWA 8 hours: 2 mg/m³. Form: Respirable fraction.
titanium dioxide	ACGIH TLV (United States, 1/2024) TWA 8 hours: 2.5 mg/m³. Form: respirable fraction, finescale particles.
xylene	Ministry of Labor and Employment (Brazil, 11/2001) [Xylenes (o-, m-, p- isomers)] TWA 8 hours: 78 ppm. TWA 8 hours: 340 mg/m³.
1-methoxy-2-propanol	ACGIH TLV (United States, 1/2024) TWA 8 hours: 50 ppm. TWA 8 hours: 184 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 369 mg/m³.
ethylbenzene	Ministry of Labor and Employment (Brazil, 11/2001) TWA 8 hours: 78 ppm. TWA 8 hours: 340 mg/m³.

- 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

Hand protection

: Chemical splash goggles.
- : 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.

Section 8. Exposure controls/personal protection

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	: Various
Odor	: Aromatic. [Slight]
pH	: Not applicable.
Melting point	: Not available.
Boiling point	: >37.78°C (>100°F)
Flash point	: Closed cup: 38°C (100.4°F)
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 1.68

Solubility(ies)	Media	Result
	cold water	Not soluble

Partition coefficient: n-octanol/water	: Not applicable.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Dynamic (room temperature): Not available. Kinematic (room temperature): >400 mm ² /s (>400 cSt) Kinematic (40°C (104°F)): >21 mm ² /s (>21 cSt)
Viscosity	: > 100 s (ISO 6mm)
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.
- 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 metal oxide/oxides

Section 11. Toxicological information

Information on toxicological effects

This section contains information about toxicological effects and routes of exposure for the substances or mixtures that have these data or information available. There might be substances listed in section 3 of this SDS that will not have the information available.

-  Causes serious eye irritation.
- Causes skin irritation.
- May cause an allergic skin reaction.
- May damage fertility.
- Suspected of causing cancer.

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
titanium dioxide	Rat - Oral - LD50	>5000 mg/kg
	Rabbit - Dermal - LD50	>5000 mg/kg
	Rat - Inhalation - LC50 Dusts and mists	>6.82 mg/l [4 hours]
xylene	Rat - Oral - LD50	4.3 g/kg
	Rabbit - Dermal - LD50	1.7 g/kg
benzyl alcohol	Rabbit - Dermal - LD50	>2000 mg/kg
	Rat - Oral - LD50	1200 mg/kg
	Rat - Inhalation - LC50 Dusts and mists	>5 mg/l [4 hours]
Phenol, styrenated	Rabbit - Dermal - LD50	>5010 mg/kg
	Rat - Oral - LD50	3550 mg/kg
1-methoxy-2-propanol	Rabbit - Dermal - LD50	13 g/kg
	Rat - Oral - LD50	5.2 g/kg
	Rat - Inhalation - LC50 Vapor	>7000 ppm [6 hours]
2-methoxy-1-methylethyl acetate	Rabbit - Dermal - LD50	>5 g/kg
	Rat - Oral - LD50	6190 mg/kg
	Rat - Inhalation - LC50 Vapor	30 mg/l [4 hours]
ethylbenzene	Rat - Oral - LD50	3.5 g/kg
	Rabbit - Dermal - LD50	17.8 g/kg

Section 11. Toxicological information

oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	Rat - Inhalation - LC50 Vapor	17.8 mg/l [4 hours]
	Rat - Oral - LD50	17100 mg/kg
trizinc bis(orthophosphate)	Rabbit - Dermal - LD50	>4000 mg/kg
	Rat - Oral - LD50	>5000 mg/kg
	Rat - Inhalation - LC50 Dusts and mists	>5.7 mg/l [4 hours]

Conclusion/Summary : Based on available data, the classification criteria are not met.

Irritation/Corrosion

Product/ingredient name	Species	Dose	Score
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Rabbit - Eyes - Redness of the conjunctivae	Duration of treatment/exposure: 24 hours	Irritation score: 0.4
	Rabbit - Eyes - Mild irritant	Duration of treatment/exposure: 24 hours	-
	Rabbit - Skin - Erythema/ Eschar	Fully reversible in 7 days or less Duration of treatment/exposure: 4 hours	Irritation score: 0.8
	Rabbit - Skin - Edema	Duration of treatment/exposure: 4 hours	Irritation score: 0.5
xylene	Rabbit - Skin - Mild irritant	Duration of treatment/exposure: 4 hours	-
	Rabbit - Skin - Moderate irritant	Amount/concentration applied: 500 mg Duration of treatment/exposure: 24 hours	-

Conclusion/Summary

Skin : Causes skin irritation.

Eyes : Causes serious eye irritation.

Respiratory : Based on available data, the classification criteria are not met.

Sensitization

Product/ingredient name	Species	Result
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Mouse - skin	Result: Sensitizing
	Mouse - skin	Result: Sensitizing
	OECD 429	

Conclusion/Summary

Skin : May cause an allergic skin reaction.

Respiratory : Based on available data, the classification criteria are not met.

Mutagenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Carcinogenicity

Conclusion/Summary : Suspected of causing cancer.

Classification

Section 11. Toxicological information

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

Carcinogen Classification code:

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

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

OSHA: +

Not listed/not regulated: -

Reproductive toxicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

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

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure)

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

Conclusion/Summary : Based on available data, the classification criteria are not met.

Target organs

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

Aspiration hazard

Name	Result
xylene	ASPIRATION HAZARD - Category 1
benzyl alcohol	ASPIRATION HAZARD - Category 2
ethylbenzene	ASPIRATION HAZARD - Category 1

Conclusion/Summary : Based on available data, the classification criteria are not met.

Section 11. Toxicological information

Information on the likely routes of exposure : Not available.

Potential acute health effects

- Eye contact : Causes serious eye irritation.
- Inhalation : No known significant effects or critical hazards.
- 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

- Eye contact : Adverse symptoms may include the following:
 - pain or irritation
 - watering
 - redness
- Inhalation : Adverse symptoms may include the following:
 - reduced fetal weight
 - increase in fetal deaths
 - skeletal malformations
- Skin contact : Adverse symptoms may include the following:
 - irritation
 - redness
 - dryness
 - cracking
 - 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. 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). Carbon black is utilized as a raw material in many liquid coating formulations. In this case, the carbon black particles are bound in a matrix with no meaningful potential for human exposure to unbound particles of carbon black 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). Most carbon blacks contain trace quantities of polyaromatic hydrocarbons (PAH). PAHs are not expected to be released in biological fluids and are therefore not likely available for biological activity. 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

Section 11. Toxicological information

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 short-term 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

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

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

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 : 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 (TINTED)	24086.5	15758.0	N/A	121.3	15.6
bis-[4-(2,3-epoxipropoxy)phenyl]propane	15000	23000	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
2-methoxy-1-methylethyl acetate	6190	N/A	N/A	30	N/A
ethylbenzene	3500	17800	N/A	17.8	1.5
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	17100	2500	N/A	N/A	N/A

Other information : Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Dose / Exposure
Bis-[4-(2,3-epoxipropoxy)phenyl]propane	Chronic - NOEC	Daphnia	0.3 mg/l [21 days]
titanium dioxide	Acute - LC50 - Fresh water	Daphnia - <i>daphnia magna</i>	1.8 mg/l [48 hours]
Phenol, styrenated	Acute - LC50 - Fresh water	Daphnia - <i>Daphnia magna</i>	>100 mg/l [48 hours]
1-methoxy-2-propanol	Acute - EC50	Daphnia	3.8 mg/l [48 hours]
2-methoxy-1-methylethyl acetate	Acute - LC50 - Fresh water	Fish - Goldfish	>4500 mg/l [96 hours]
ethylbenzene	Acute - LC50	Daphnia - Daphnia	23300 mg/l [48 hours]
	Acute - LC50 - Fresh water	Fish - Trout - <i>Oncorhynchus mykiss</i>	134 mg/l [96 hours]
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	Acute - EC50 - Fresh water	Daphnia	1.8 mg/l [48 hours]
	Chronic - NOEC - Fresh water	Daphnia - <i>Ceriodaphnia dubia</i>	1 mg/l
	LC50	Fish	>1.8 mg/l [96 hours]
trizinc bis(orthophosphate)	EC50	Daphnia	7.2 mg/l [48 hours]
	EC50	Algae	844 mg/l [72 hours]
	Acute - LC50	Fish	0.112 mg/l [96 hours]
	Chronic - NOEC	Fish	0.026 mg/l [30 days]

Conclusion/Summary : Not available.

Persistence/degradability

Product/ingredient name	Test	Result	Dose / Inoculum
Phenol, styrenated	OECD 301F	7% [28 days] - Not readily	
2-methoxy-1-methylethyl acetate	-	83% [28 days] - Readily	
ethylbenzene	-	79% [10 days] - Readily	
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	OECD [Ready Biodegradability - Manometric Respirometry Test]	87% [28 days] - Readily	

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Bis-[4-(2,3-epoxipropoxy)phenyl]propane	-	-	Not readily
xylene	-	-	Readily
benzyl alcohol	-	-	Readily
Phenol, styrenated	-	-	Not readily
2-methoxy-1-methylethyl acetate	-	-	Readily
ethylbenzene	-	-	Readily
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	-	-	Readily

Section 12. Ecological information

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
xylene	3.12	7.4 to 18.5	Low
benzyl alcohol	0.87	-	Low
1-methoxy-2-propanol	<1	-	Low
2-methoxy-1-methylethyl acetate	1.2	-	Low
ethylbenzene	3.6	79.43	Low
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	3.77	160 to 263	Low

Mobility in soil

Soil/Water partition coefficient : 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

	Brazil (ANTT)	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

Section 14. Transport information

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.	(bis-[4-(2,3-epoxipropoxy) phenyl]propane)	Not applicable.

Additional information

- Brazil

: None identified.
- Risk number

: 30
- 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.

Transport in bulk according to IMO instruments
: Not applicable.

Section 15. Regulatory information

References
: ABNT NBR 14725: 2023 (April 2025)

Section 16. Other information

History

- Date of previous issue

: 6/25/2025
- Version

: 2.02
- Prepared by

: EHS

Key to abbreviations
:

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

UN = United Nations


Indicates information that has changed from previously issued version.

Code	00437894Z	Date of issue	3 July 2025	Version	2.02
Product name	SIGMAFAST 278 BASE (TINTED)				

Section 16. Other information

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.