# SAFETY DATA SHEET



Date of issue/Date of revision 19 August 2023

**Version 13** 

# **Section 1. Identification**

Product name : 2.1 VOC WHITE EPOXY PRIMER

Product code : 274530SP

Other means of : Not available.

identification Product type

: Liquid.

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

Product use : Industrial applications.

Use of the substance/

**Emergency telephone** 

mixture

number

: Coating. Paints. Painting-related materials.

Uses advised against : Not applicable.

Manufacturer : PPG Industries, Inc.

One PPG Place,

Pittsburgh, PA 15272 : (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**: 1-800-647-6050

# Section 2. Hazards identification

**OSHA/HCS** status

Classification of the substance or mixture

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

FLAMMABLE LIQUIDS - Category 2
SKIN IRRITATION - Category 2
SERIOUS EYE DAMAGE - Category 1
SKIN SENSITIZATION - Category 1
CARCINOGENICITY - Category 1A

TOXIC TO REPRODUCTION - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 11.9%

(oral), 27% (dermal), 21.9% (inhalation)

United States Page: 1/18

# 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

: Highly flammable liquid and vapor.

Causes skin irritation.

May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation.

May cause cancer.

Suspected of damaging fertility or the unborn child.

May cause damage to organs through prolonged or repeated exposure.

### **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. Do not breathe 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. Wash contaminated clothing before reuse. 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. Immediately call a POISON CENTER or doctor.

#### Storage

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

#### **Disposal**

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

# Supplemental label elements

: Sanding and grinding dusts may be harmful if inhaled. This product contains crystalline silica which can cause lung cancer or silicosis. The risk of cancer depends on the duration and level of exposure to dust from sanding surfaces or mist from spray applications. Trimethoxysilanes are capable of forming methanol if hydrolyzed or ingested. If swallowed, methanol may be harmful or fatal or cause blindness. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol

United States Page: 2/18

Date of issue 19 August 2023

Version 13

**Product name 2.1 VOC WHITE EPOXY PRIMER** 

# Section 2. Hazards identification

concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing. Wash thoroughly after handling. Emits toxic fumes when heated.

Hazards not otherwise classified

: May form explosive peroxides. Hazardous reactions or instability may occur under certain conditions of storage or use. Prolonged or repeated contact may dry skin and cause irritation.

# Section 3. Composition/information on ingredients

Substance/mixture

Mixture

**Product name** 

: 2.1 VOC WHITE EPOXY PRIMER

Ingredient name	%	<b>CAS</b> number
#-chloro-α,α,α-trifluorotoluene	≥20 - ≤50	98-56-6
titanium dioxide	≥10 - ≤20	13463-67-7
Epoxy Resin (700 <mw<=1100)< td=""><td>≥10 - ≤20</td><td>25036-25-3</td></mw<=1100)<>	≥10 - ≤20	25036-25-3
acetone	≥5.0 - ≤10	67-64-1
Wollastonite	≥5.0 - ≤10	13983-17-0
Talc , not containing asbestiform fibres	≥5.0 - ≤10	14807-96-6
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	≥1.0 - ≤5.0	2530-83-8
toluene	≥1.0 - ≤5.0	108-88-3
3-butoxypropan-2-ol	≥1.0 - ≤4.9	5131-66-8
ethyl 3-ethoxypropionate	≥1.0 - ≤5.0	763-69-9
crystalline silica, respirable powder (<10 microns)	<1.0	14808-60-7

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

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** 

: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

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

United States Page: 3/18

#### **Product name 2.1 VOC WHITE EPOXY PRIMER**

# Section 4. First aid measures

### Potential acute health effects

Eye contact : Causes serious eye damage.Inhalation : 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 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:

pain or irritation

redness dryness cracking

blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations

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

stomach pains reduced fetal weight increase in fetal deaths skeletal malformations

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

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

The exposed person may need to be kept under medical surveillance for 48 hours.

**Specific treatments**: No specific treatment.

**Protection of first-aiders**: No action shall be taken involving any personal risk or without suitable training. If it is

suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water

before removing it, or wear gloves.

See toxicological information (Section 11)

United States Page: 4/18

Date of issue 19 August 2023

Version 13

**Product name 2.1 VOC WHITE EPOXY PRIMER** 

# Section 5. Fire-fighting measures

### **Extinguishing media**

Suitable extinguishing

media

**Unsuitable extinguishing** 

media

: Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

: Do not use water jet.

Specific hazards arising from the chemical

: Highly 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 phosphorus oxides halogenated compounds carbonyl halides 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. Do not breathe 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).

#### 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.

United States Page: 5/18

Date of issue 19 August 2023

Version 13

**Product name 2.1 VOC WHITE EPOXY PRIMER** 

# Section 6. Accidental release measures

### 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 breathe vapor or mist. Do not ingest. 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.

### 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. May form explosive peroxides. Keep away from combustible materials. Avoid shock and friction. Avoid all possible sources of ignition (spark or flame). 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.

# including any incompatibilities

Conditions for safe storage, : Do not store above the following temperature: 50°C (122°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.

> **United States** Page: 6/18

Version 13

# Section 8. Exposure controls/personal protection

# **Control parameters**

### **Occupational exposure limits**

Ingredient name Exposure lim	nits
#-chloro-α,α,α-trifluorotoluene IPEL (-).	
TWA: 0.57 p	
STEL: 1.71 p	
titanium dioxide OSHA PEL (U	United States, 5/2018).
TWA: 15 mg	g/m³ 8 hours. Form: Total dust
ACGIH TLV (	United States, 1/2022).
TWA: 2.5 mg	g/m³ 8 hours. Form: respirable
fraction, finese	cale particles
Epoxy Resin (700 <mw<=1100) none.<="" td=""><td></td></mw<=1100)>	
	(United States, 1/2022).
• • • • • • • • • • • • • • • • • • •	ppm 15 minutes.
TWA: 250 pp	
	United States, 5/2018).
	mg/m <sup>3</sup> 8 hours.
	ppm 8 hours.
	(United States, 1/2022).
	m³ 8 hours. Form: Inhalable
fraction	
	(United States, 1/2022).
	m³ 8 hours. Form: Respirable
	3 (United States).
TWA: 2 mg/r	m³
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane None.	
	2 (United States, 2/2013).
• •	pm 10 minutes.
CEIL: 300 pp	
TWA: 200 pp	
· ·	(United States, 1/2022).
Ototoxicant.	
TWA: 20 ppr	m 8 hours.
3-butoxypropan-2-ol IPEL (-).	
TWA: 50 ppr	m
ethyl 3-ethoxypropionate IPEL (-).	
TWA: 50 ppr	
STEL: 100 p	
	United States, 1/2022). [Silica,
crystalline]	/ 301 = 5
	mg/m³ 8 hours. Form:
Respirable	(0 (Haite d Otate a 0/0040)
	3 (United States, 6/2016).
	g/m³ / (%SiO2+2) 8 hours. Form:
Respirable	annof / (0/ SiOO : E) 0 k
	nppcf / (%SiO2+5) 8 hours. Form:
Respirable	United States E/2049\ [Silica
	United States, 5/2018). [Silica,
crystalline]	/m3 0 hours Form, Dooninghis
, •	/m³ 8 hours. Form: Respirable
dust	

#### Product name 2.1 VOC WHITE EPOXY PRIMER

# Section 8. Exposure controls/personal protection

Key to abbreviations

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

SS = Skin sensitization

F STEL = Short term Exposure limit values IPEL = Internal Permissible Exposure Limit TD = Total dust

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

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

#### Consult local authorities for acceptable exposure limits.

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.

**Eve/face protection** Skin protection **Hand protection** 

: Chemical splash goggles and face shield.

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Gloves Body protection**  : butyl rubber

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.

> **United States** Page: 8/18

**Product name 2.1 VOC WHITE EPOXY PRIMER** 

# Section 8. Exposure controls/personal protection

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

# Section 9. Physical and chemical properties

**Appearance** 

Physical state : Liquid.

Color : Not available.

Odor : Not available.

Odor threshold : Not available.

pH : Not applicable.

Melting point : Not available.

Boiling point : >37.78°C (>100°F)

Flash point : Closed cup: -20°C (-4°F)

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Flammability : Not available.

Lower and upper explosive

(flammable) limits

: Not available.

Evaporation rate : Not available.

Vapor pressure : Not available.

Vapor density : Not available.

Relative density : 1.46

Density ( lbs / gal ) : 12.18

Media Result

Solubility(ies) : cold water Not soluble

Partition coefficient: n-

octanol/water

: Not applicable.

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

**Volatility** : 60% (v/v), 43.928% (w/w)

% **Solid.** (w/w) : 56.072

# 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.

United States Page: 9/18

**Product name 2.1 VOC WHITE EPOXY PRIMER** 

# Section 10. Stability and reactivity

**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 phosphorus oxides halogenated compounds carbonyl halides metal oxide/oxides

# **Section 11. Toxicological information**

#### Information on toxicological effects

### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
<b>4</b> -chloro-α,α,α-trifluorotoluene	LC50 Inhalation Vapor	Rat	33080 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rabbit	>2.7 g/kg	-
	LD50 Oral	Rat	13 g/kg	-
titanium dioxide	LC50 Inhalation Dusts and mists	Rat	>6.82 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Epoxy Resin (700 <mw <="1100)&lt;/td"><td>LD50 Dermal</td><td>Rat</td><td>&gt;2000 mg/kg</td><td>-</td></mw>	LD50 Dermal	Rat	>2000 mg/kg	-
,	LD50 Oral	Rat	>2000 mg/kg	-
acetone	LC50 Inhalation Vapor	Rat	76000 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rabbit	15.8 g/kg	-
	LD50 Oral	Rat	5800 mg/kg	-
[3-(2,3-epoxypropoxy)propyl] trimethoxysilane	LC50 Inhalation Dusts and mists	Rat	>5300 mg/m <sup>3</sup>	4 hours
,	LD50 Dermal	Rabbit	4.3 g/kg	-
	LD50 Oral	Rat	7.01 g/kg	-
toluene	LC50 Inhalation Vapor	Rat	49 g/m³	4 hours
	LD50 Dermal	Rabbit	8.39 g/kg	-
	LD50 Oral	Rat	5580 mg/kg	-
3-butoxypropan-2-ol	LD50 Dermal	Rabbit	3100 mg/kg	-
	LD50 Oral	Rat	2.2 g/kg	-
ethyl 3-ethoxypropionate	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	3200 mg/kg	-

# Conclusion/Summary

: There are no data available on the mixture itself.

# Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
[3-(2,3-epoxypropoxy)propyl] trimethoxysilane	Eyes - Cornea opacity	Rabbit	11.8	1 minutes	24 hours

#### **Conclusion/Summary**

Skin : There are no data available on the mixture itself.Eyes : There are no data available on the mixture itself.

United States Page: 10/18

### **Product name 2.1 VOC WHITE EPOXY PRIMER**

# **Section 11. Toxicological information**

**Respiratory**: There are no data available on the mixture itself.

**Sensitization** 

**Conclusion/Summary** 

Skin : There are no data available on the mixture itself.Respiratory : There are no data available on the mixture itself.

**Mutagenicity** 

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

**Carcinogenicity** 

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

**Classification** 

Product/ingredient name	OSHA	IARC	NTP
4-chloro-α,α,α-trifluorotoluene	-	2B	-
titanium dioxide	-	2B	-
Wollastonite	-	3	-
toluene	-	3	-
crystalline silica, respirable powder (<10 microns)	-	1	Known to be a human carcinogen.

#### **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**: There are no data available on the mixture itself.

**Teratogenicity** 

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

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
4-chloro- $\alpha$ , $\alpha$ , $\alpha$ -trifluorotoluene	Category 3	-	Respiratory tract irritation
acetone	Category 3	-	Narcotic effects
Talc , not containing asbestiform fibres	Category 3	-	Respiratory tract irritation
toluene	Category 3	-	Narcotic effects

### Specific target organ toxicity (repeated exposure)

Name	,	Route of exposure	Target organs
toluene crystalline silica, respirable powder (<10 microns)	Category 2	-	-
	Category 1	inhalation	-

United States Page: 11/18

#### **Product name 2.1 VOC WHITE EPOXY PRIMER**

# **Section 11. Toxicological information**

<u>Target organs</u>: Contains material which causes damage to the following organs: brain, skin, central

nervous system (CNS).

Contains material which may cause damage to the following organs: blood, kidneys, lungs, the reproductive system, liver, heart, gastrointestinal tract, cardiovascular system,

upper respiratory tract, adrenal, ears, eye, lens or cornea.

#### **Aspiration hazard**

Name	Result
toluene	ASPIRATION HAZARD - Category 1

### Information on the likely routes of exposure

### Potential acute health effects

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

pain or irritation

redness dryness cracking

blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations

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

stomach pains 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. Trimethoxysilanes are capable of forming methanol if hydrolyzed or ingested. If swallowed, methanol may be harmful or fatal or cause blindness. This product contains crystalline silica which can cause lung cancer or silicosis. The risk of cancer depends on the duration and level of exposure to dust from sanding surfaces or mist from spray applications. 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

United States Page: 12/18

#### Version 13

# **Section 11. Toxicological information**

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 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

<u>Long term exposure</u>

- Cong term exposure

Potential immediate

: There are no data available on the mixture itself.

: 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

General

: May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity

: May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity

: No known significant effects or critical hazards.

Reproductive toxicity : Suspected of damaging 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/ I)
2.1 VOC WHITE EPOXY PRIMER	17438.9	4578.0	N/A	N/A	N/A
4-chloro-α,α,α-trifluorotoluene	13000	2500	N/A	33.08	N/A
Epoxy Resin (700 <mw<=1100)< td=""><td>2500</td><td>2500</td><td>N/A</td><td>N/A</td><td>N/A</td></mw<=1100)<>	2500	2500	N/A	N/A	N/A
acetone	5800	15800	N/A	76	N/A
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	7010	4300	N/A	N/A	N/A
toluene	5580	8390	N/A	49	N/A
3-butoxypropan-2-ol	2200	3100	N/A	N/A	N/A
ethyl 3-ethoxypropionate	3200	N/A	N/A	N/A	N/A

United States Page: 13/18

# Section 12. Ecological information

### **Toxicity**

Product/ingredient name	Result	Species	Exposure
titanium dioxide	Acute LC50 >100 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
acetone	Acute LC50 4.42589 ml/L Marine water	Crustaceans - Acartia tonsa - Copepodid	48 hours
	Acute LC50 5540 mg/l	Fish	96 hours
[3-(2,3-epoxypropoxy)propyl] trimethoxysilane	Acute LC50 324 mg/l	Daphnia	48 hours
ethyl 3-ethoxypropionate	Acute LC50 60.9 mg/l	Fish	96 hours

### Persistence and degradability

Product/ingredient name	Test	Result		Dose		Inoculum		
acetone	-	90.9 % - Readily - 28 days		90.9 % - Readily - 28 days -		-		-
Product/ingredient name	Aquatic half-life	Photolysis		Biodeg		radability		
acetone toluene ethyl 3-ethoxypropionate	- - -		-		Readily Readily Readily			

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
cetone	-0.23	3	Low
toluene	2.73	8.32	Low
3-butoxypropan-2-ol	1.2	-	Low
ethyl 3-ethoxypropionate	1.47	-	Low

#### **Mobility in soil**

Soil/water partition coefficient (Koc)

: Not available.

# 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

United States Page: 14/18

Date of issue 19 August 2023

Version 13

**Product name 2.1 VOC WHITE EPOXY PRIMER** 

# Section 13. Disposal considerations

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	II	II	II	
Environmental hazards	No.	Yes.	Yes. The environmentally hazardous substance mark is not required.	
Marine pollutant substances	Not applicable.	(trizinc bis(orthophosphate))	Not applicable.	
Product RQ (lbs)	<b>2</b> 6615.1	Not applicable.	Not applicable.	
RQ substances	(xylene, toluene)	Not applicable.	Not applicable.	

#### Additional information

**DOT** 

: Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

**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.

Transport in bulk according : Not applicable.

to IMO instruments

# **Section 15. Regulatory information**

### **United States**

United States inventory (TSCA 8b): At least one component is inactive.

United States - TSCA 5(a)2 - Final significant new use rules:

4-chloro-α,α,α-trifluorotoluene Listed 40 CFR 799.5089

SARA 302/304

**SARA 304 RQ** : Not applicable.

> **United States** Page: 15/18

# **Section 15. Regulatory information**

## **Composition/information on ingredients**

No products were found.

### **SARA 311/312**

Classification : FLAMMABLE LIQUIDS - Category 2

SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 1A TOXIC TO REPRODUCTION - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

HNOC - Defatting irritant

HNOC - May form explosive peroxides.

### **Composition/information on ingredients**

Name	%	Classification
<b>⊈</b> -chloro-α,α,α-trifluorotoluene	≥20 - ≤50	FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A
		CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
		(Respiratory tract irritation) - Category 3
titanium dioxide	≥10 - ≤20	HNOC - Defatting irritant CARCINOGENICITY - Category 2
Epoxy Resin (700 <mw<=1100)< td=""><td>≥10 - ≤20</td><td>COMBUSTIBLE DUSTS</td></mw<=1100)<>	≥10 - ≤20	COMBUSTIBLE DUSTS
		SKIN IRRITATION - Category 2
		EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1B
acetone	≥5.0 - ≤10	FLAMMABLE LIQUIDS - Category 2
		EYE IRRITATION - Category 2A
		SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
		HNOC - Defatting irritant
Talc , not containing asbestiform	≥5.0 - ≤10	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
fibres	S4.0 45.0	(Respiratory tract irritation) - Category 3
[3-(2,3-epoxypropoxy)propyl] trimethoxysilane	≥1.0 - ≤5.0	SERIOUS EYE DAMAGE - Category 1
toluene	≥1.0 - ≤5.0	FLAMMABLE LIQUIDS - Category 2
		SKIN IRRITATION - Category 2
		TOXIC TO REPRODUCTION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
		(Narcotic effects) - Category 3
		SPECIFIC TARGET ORGAN TOXICITY (REPEATED
		EXPOSURE) - Category 2 ASPIRATION HAZARD - Category 1
		HNOC - Defatting irritant
3-butoxypropan-2-ol	≥1.0 - ≤4.9	FLAMMABLE LIQUIDS - Category 4
		SKIN IRRITATION - Category 2
ethyl 3-ethoxypropionate	≥1.0 - ≤5.0	EYE IRRITATION - Category 2A FLAMMABLE LIQUIDS - Category 3

United States Page: 16/18

#### Product name 2.1 VOC WHITE EPOXY PRIMER

# **Section 15. Regulatory information**

crystalline silica, respirable powder (<10 microns)	<1.0	HNOC - Defatting irritant HNOC - May form explosive peroxides. CARCINOGENICITY - Category 1A SPECIFIC TARGET ORGAN TOXICITY (REPEATED
		EXPOSURE) - Category 1

**SARA 313** 

Chemical name CAS number Concentration

: trizinc bis(orthophosphate) 7779-90-0 5 - 10 **Supplier notification** 1 - 5

108-88-3

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

↑ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

# Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health: Flammability: 3 Physical hazards:

(\*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on MSDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)

Health: 3 Flammability: 3 **Instability**: 0

Date of previous issue : 6/14/2023 Organization that prepared : EHS

the SDS

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** 

	<b>United States</b>	Page: 17/18
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Date of issue 19 August 2023

Version 13

**Product name 2.1 VOC WHITE EPOXY PRIMER** 

# **Section 16. Other information**

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

United States Page: 18/18