## SAFETY DATA SHEET



Date of issue/Date of revision 22 June 2021

Version 26

## **Section 1. Identification**

Product name : 515X349 BASE COMPONENT
Product code : 515X349 BASE COMPONENT

Other means of identification

: 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/

mixture

: Coating.

Uses advised against : Not applicable.

**Manufacturer** : PPG Aerospace PRC-DeSoto

12780 San Fernando Road

Sylmar, CA 91342 Phone: 818 362 6711

**Emergency telephone** 

number

: (412) 434-4515 (U.S.) (514) 645-1320 (Canada) 01-800-00-21-400 (Mexico)

## 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 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4

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

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 45.5%

(oral), 57.9% (dermal), 45.5% (inhalation)

#### **GHS** label elements

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## Section 2. Hazards identification

#### **Hazard pictograms**









#### Signal word Hazard statements

- : Danger
- : Highly flammable liquid and vapor. Harmful if swallowed or if inhaled.

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye damage.

May cause drowsiness or dizziness.

May cause genetic defects.

May cause cancer.

Suspected of damaging fertility or the unborn child.

Causes 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. Do not eat, drink or smoke when using this product. 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 SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth. 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. 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. NTP, IARC and OSHA have classified chromium (+6) compounds as carcinogenic. Avoid contact with skin and clothing. Wash thoroughly after handling. Emits toxic fumes when heated.

## Hazards not otherwise classified

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

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## Section 3. Composition/information on ingredients

Substance/mixture : Mixture

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%	CAS number
≥20 - ≤50	14808-60-7
≥10 - ≤20	123-86-4
≥10 - ≤20	78-93-3
≥10 - ≤14	7789-06-2
≥5.0 - ≤10	108-94-1
≥1.0 - ≤3.5	71-36-3
<1.0	10294-40-3
≤1.0	1333-86-4
	≥20 - ≤50 ≥10 - ≤20 ≥10 - ≤20 ≥10 - ≤14 ≥5.0 - ≤10 ≥1.0 - ≤3.5 <1.0

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

#### Potential acute health effects

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

Inhalation : Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause

drowsiness or dizziness.

**Skin contact**: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.

**Ingestion**: Harmful if swallowed. Can cause central nervous system (CNS) depression.

Over-exposure signs/symptoms

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

pain watering redness

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#### Section 4. First aid measures

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

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness 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)

## 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.

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## Section 5. Fire-fighting measures

Hazardous thermal decomposition products

: Decomposition products may include the following materials:

carbon oxides nitrogen oxides

halogenated compounds metal oxide/oxides

Special protective actions for fire-fighters

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

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### Section 6. Accidental release measures

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

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. 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.

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.

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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**

: Ingestion of product or cured coating may be harmful. 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

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.

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## Section 8. Exposure controls/personal protection

#### **Control parameters**

Occupational exposure limits

Ingredient name	<b>Exposure limits</b>
crystalline silica, respirable powder (<10 microns)	ACGIH TLV (United States, 3/2020).  TWA: 0.025 mg/m³ 8 hours. Form: Respirable  OSHA PEL Z3 (United States, 6/2016).  TWA: 10 mg/m³ / (%SiO2+2) 8 hours. Form: Respirable  TWA: 250 mppcf / (%SiO2+5) 8 hours. Form: Respirable  OSHA PEL (United States, 5/2018).  TWA: 50 μg/m³ 8 hours. Form: Respirable

butanone

strontium chromate

cyclohexanone

butan-1-ol

barium chromate

carbon black

## Section 8. Exposure controls/personal protection

n-butyl acetate OSHA PEL (United States, 5/2018).

ACGIH TLV (United States, 3/2020).

STEL: 150 ppm 15 minutes. TWA: 50 ppm 8 hours.

TWA: 710 mg/m<sup>3</sup> 8 hours. TWA: 150 ppm 8 hours.

ACGIH TLV (United States, 3/2020).

STEL: 885 mg/m³ 15 minutes. STEL: 300 ppm 15 minutes. TWA: 590 mg/m³ 8 hours. TWA: 200 ppm 8 hours.

OSHA PEL (United States, 5/2018).

TWA: 590 mg/m³ 8 hours. TWA: 200 ppm 8 hours.

ACGIH TLV (United States, 3/2020).

TWA: 0.0005 mg/m³, (measured as Cr) 8

hours.

OSHA PEL Z2 (United States, 2/2013).

CEIL: 1 mg/10m<sup>3</sup>

OSHA PEL (United States, 5/2018). TWA: 0.005 mg/m³, (as Cr) 8 hours.

ACGIH TLV (United States, 3/2020).

Absorbed through skin.
STEL: 50 ppm 15 minutes.
TWA: 20 ppm 8 hours.

OSHA PEL (United States, 5/2018).

TWA: 200 mg/m<sup>3</sup> 8 hours. TWA: 50 ppm 8 hours.

ACGIH TLV (United States, 3/2020).

TWA: 20 ppm 8 hours.

OSHA PEL (United States, 5/2018).

TWA: 300 mg/m<sup>3</sup> 8 hours. TWA: 100 ppm 8 hours.

ACGIH TLV (United States, 3/2020).

TWA: 0.0002 mg/m³, (measured as Cr) 8

hours. Form: Inhalable fraction

STEL: 0.0005 mg/m³, (measured as Cr) 15

minutes. Form: Inhalable fraction OSHA PEL (United States, 5/2018). TWA: 0.005 mg/m³, (as Cr) 8 hours.

OSHA PEL Z2 (United States, 2/2013).

CEIL: 1 mg/10m<sup>3</sup>

OSHA PEL (United States).

TWA: 5 mg/m<sup>3</sup>

ACGIH TLV (United States, 3/2020).

TWA: 3 mg/m³ 8 hours. Form: Inhalable

fraction

OSHA PEL (United States, 5/2018).

TWA: 3.5 mg/m<sup>3</sup> 8 hours.

Key to abbreviations

= Acceptable Maximum Peak

S = Potential skin absorption

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= Respiratory sensitization

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## Section 8. Exposure controls/personal protection

= American Conference of Governmental Industrial Hygienists.

С = Ceiling Limit SS = Skin sensitization

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

OSHA = Occupational Safety and Health Administration. TLV = Threshold Limit Value

R = Respirable TWA = Time Weighted Average

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

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

## procedures

Recommended monitoring: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

#### **Environmental exposure** controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

#### **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 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.

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## 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 : Green.

: Not available. Odor : Not available. **Odor threshold** Ha : Not applicable. : Not available. **Melting point Boiling point** : >37.78°C (>100°F)

Flash point : Closed cup: -0.56°C (31°F)

**Auto-ignition temperature** : Not available. **Decomposition temperature** : Not available. Flammability (solid, gas) : Not available. Lower and upper explosive

(flammable) limits

: Not available.

**Evaporation rate** : Not available. : Not available. Vapor pressure Vapor density : Not available.

: 1.3 Relative density Density (lbs/gal) : 10.85

**Solubility** : Insoluble in the following materials: cold water.

Partition coefficient: n-

octanol/water

: Not applicable.

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

VOC : 514 g/l : 60.9 % Solid. (w/w)

## Section 10. Stability and reactivity

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

**Chemical stability** : The product is stable.

Possibility of hazardous

reactions

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

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

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## Section 10. Stability and reactivity

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 nitrogen oxides halogenated compounds metal oxide/oxides

## **Section 11. Toxicological information**

#### Information on toxicological effects

#### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
<mark>ଜ-</mark> butyl acetate	LC50 Inhalation Vapor	Rat	>21.1 mg/l	4 hours
	LC50 Inhalation Vapor	Rat	2000 ppm	4 hours
	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10.768 g/kg	-
butanone	LD50 Dermal	Rabbit	6480 mg/kg	-
	LD50 Oral	Rat	2737 mg/kg	-
strontium chromate	LC50 Inhalation Dusts and mists	Rat	0.27 mg/l	4 hours
	LD50 Oral	Rat	3118 mg/kg	-
cyclohexanone	LC50 Inhalation Gas.	Rat	8000 ppm	4 hours
	LC50 Inhalation Vapor	Rat	11 mg/l	4 hours
	LD50 Dermal	Rabbit	1100 mg/kg	-
	LD50 Oral	Rat	1.62 g/kg	-
butan-1-ol	LC50 Inhalation Vapor	Rat	24000 mg/m <sup>3</sup>	4 hours
	LC50 Inhalation Vapor	Rat	8000 ppm	4 hours
	LD50 Dermal	Rabbit	3400 mg/kg	-
	LD50 Oral	Rat	790 mg/kg	-
carbon black	LD50 Oral	Rat	>10 g/kg	-

**Conclusion/Summary** 

**Irritation/Corrosion** 

**Conclusion/Summary** 

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

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

: There are no data available on the mixture itself.

**Sensitization** 

Conclusion/Summary

Skin

Respiratory **Mutagenicity** 

**Conclusion/Summary** 

Carcinogenicity

**Conclusion/Summary** 

Classification

: There are no data available on the mixture itself.

: There are no data available on the mixture itself.

: There are no data available on the mixture itself.

: There are no data available on the mixture itself.

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## **Section 11. Toxicological information**

Product/ingredient name	OSHA	IARC	NTP
crystalline silica, respirable powder (<10 microns)	-	1	Known to be a human carcinogen.
strontium chromate	+	1	Known to be a human carcinogen.
cyclohexanone	-	3	-
barium chromate	+	1	Known to be a human carcinogen.
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**: 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
n-butyl acetate butanone	Category 3 Category 3	-	Narcotic effects Narcotic effects
strontium chromate	Category 3	-	Respiratory tract
butan-1-ol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects

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

Name		Route of exposure	Target organs
crystalline silica, respirable powder (<10 microns) barium chromate	Category 1 Category 1	inhalation -	- kidneys, respiratory tract

#### **Target organs**

: Contains material which causes damage to the following organs: blood, liver, spleen, brain, bone marrow.

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

#### Aspiration hazard

Not available.

#### Information on the likely routes of exposure

#### Potential acute health effects

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

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## Section 11. Toxicological information

: Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause Inhalation

drowsiness or dizziness.

**Skin contact** : Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction. Ingestion

: Harmful if swallowed. Can cause central nervous system (CNS) depression.

Over-exposure signs/symptoms

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

> pain watering redness

Inhalation : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness 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

Adverse symptoms may include the following: Ingestion

> 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. 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. 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** 

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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.

Long term exposure

**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

General : Causes 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 : May cause genetic defects.

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)
₹5X349 BASE COMPONENT	1399.7	4577.1	47168.1	64.9	1.2
n-butyl acetate	10768	N/A	N/A	N/A	N/A
butanone	2737	6480	N/A	N/A	N/A
strontium chromate	500	N/A	N/A	N/A	0.27
cyclohexanone	1620	1100	8000	11	N/A
butan-1-ol	790	3400	N/A	24	N/A
barium chromate	500	300	N/A	11	N/A

## **Section 12. Ecological information**

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
n-butyl acetate	Acute LC50 18 mg/l	Fish	96 hours
butan-1-ol	Acute LC50 1376 mg/l	Fish	96 hours

#### Persistence and degradability

Product/ingredient name	Test	Result		Dose		Inoculum
n-butyl acetate	TEPA and OECD 301D	83 % - Rea	dily - 28 days	-		-
Product/ingredient name	Aquatic half-life		Photolysis		Biodeg	radability
n-butyl acetate	-		-		Readily	

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**Product name 515X349 BASE COMPONENT** 

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## **Section 12. Ecological information**

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
n-butyl acetate	2.3	-	low
butanone	0.3	-	low
cyclohexanone	0.86	-	low
butan-1-ol	1	-	low

**Mobility in soil** 

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

: 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 with soil, waterways, drains and sewers.

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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.	(strontium chromate)	Not applicable.

Product code 515X349 BASE COMPONENT Date of issue 22 June 2021 Version 26

Product name 515X349 BASE COMPONENT

## 14. Transport information

Product RQ (lbs) 80.797 Not applicable. Not applicable. **RQ** substances (strontium chromate, n-butyl Not applicable. Not applicable. acetate)

#### 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): All components are active or exempted.

United States - TSCA 12(b) - Chemical export notification:

Annual notification strontium chromate

TSCA 6 final risk management: strontium chromate: barium chromate

**SARA 302/304** 

**SARA 304 RQ** : Not applicable.

Composition/information on ingredients

No products were found.

**SARA 311/312** 

Classification : FLAMMABLE LIQUIDS - Category 2

ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4

SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1 GERM CELL MUTAGENICITY - Category 1

**CARCINOGENICITY - Category 1A** TOXIC TO REPRODUCTION - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

**HNOC** - Defatting irritant

Composition/information on ingredients

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## Section 15. Regulatory information

Name	%	Classification
crystalline silica, respirable	≥20 - ≤50	CARCINOGENICITY - Category 1A
powder (<10 microns)		SPECIFIC TARGET ORGAN TOXICITY (REPEATED
,		EXPOSURE) - Category 1
n-butyl acetate	≥10 - ≤20	FLAMMABLÉ LIQUIDS - Category 2
1		SPECIFIC TARGET ORGAN ŤOXICITY (SINGLE EXPOSURE)
		(Narcotic effects) - Category 3
		HNOC - Defatting irritant
butanone	≥10 - ≤20	FLAMMABLE LIQUIDS - Category 2
		EYE IRRITATION - Category 2A
		SPECIFIC TARGET ORĞAN TOXICITY (SINGLE EXPOSURE)
		(Narcotic effects) - Category 3
		HNOC - Defatting irritant
strontium chromate	≥10 - ≤14	ACUTE TOXICITY (oral) - Category 4
		ACUTE TOXICITY (inhalation) - Category 2
		SKIN SENSITIZATION - Category 1B
		GERM CELL MUTAGENICITY - Category 2
		CARCINOGENICITY - Category 1B
		TOXIC TO REPRODUCTION - Category 2
		SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
		(Respiratory tract irritation) - Category 3
cyclohexanone	≥5.0 - ≤10	FLAMMABLE LIQUIDS - Category 3
,		ACUTE TOXICITY (oral) - Category 4
		ACUTE TOXICITY (dermal) - Category 4
		ACUTE TOXICITY (inhalation) - Category 4
		SKIN IRRITATION - Category 2
		SERIOUS EYE DAMAGE - Category 1
butan-1-ol	≥1.0 - ≤3.5	FLAMMABLE LIQUIDS - Category 3
		ACUTE TOXICITY (oral) - Category 4
		SKIN IRRITATION - Category 2
		SERIOUS EYE DAMAGE - Category 1
		SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
		(Respiratory tract irritation) - Category 3
		SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
		(Narcotic effects) - Category 3
		HNOC - Defatting irritant
barium chromate	<1.0	ACUTE TOXICITY (oral) - Category 4
		ACUTE TOXICITY (dermal) - Category 3
		ACUTE TOXICITY (inhalation) - Category 4
		RESPIRATORY SENSITIZATION - Category 1B
		SKIN SENSITIZATION - Category 1B
		GERM CELL MUTAGENICITY - Category 1B
		CARCINOGENICITY - Category 1A
		TOXIC TO REPRODUCTION - Category 2
		SPECIFIC TARGET ORGAN TOXICITY (REPEATED
		EXPOSURE) - Category 1
		HNOC - Avoid contact with organic materials.
carbon black	≤1.0	COMBUSTIBLE DUSTS
		CARCINOGENICITY - Category 2

**SARA 313** 

<u>Chemical name</u> <u>CAS number</u> <u>Concentration</u>

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## SAFETY DATA SHEET



Date of issue/Date of revision 22 June 2021

Version 9.03

## **Section 1. Identification**

Product name : 910X533 CURING SOLUTION
Product code : 910X533 CURING SOLUTION

Other means of identification

: Not available.

Product type

: Liquid.

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

Product use : Industrial applications.

Use of the substance/

mixture

: Hardener.

Uses advised against : Not applicable.

**Manufacturer** : PPG Aerospace PRC-DeSoto

12780 San Fernando Road

Sylmar, CA 91342 Phone: 818 362 6711

**Emergency telephone** 

number

: (412) 434-4515 (U.S.) (514) 645-1320 (Canada) 01-800-00-21-400 (Mexico)

## 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

TOXIC TO REPRODUCTION - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 2.9%

(dermal), 1.8% (inhalation)

**GHS label elements** 

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### Section 2. Hazards identification

#### **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 drowsiness or dizziness.

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

: 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 concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. This product either contains formaldehyde or is capable of releasing formaldehyde above 0.5 ppm under certain conditions. Formaldehyde is a known cancer hazard, a skin sensitizer and a respiratory sensitizer. Avoid contact with skin and clothing. Wash thoroughly after handling. Emits toxic fumes when heated.

Hazards not otherwise classified

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

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Product code 910X533 CURING SOLUTION Date of issue 22 June 2021 Version 9.03

**Product name 910X533 CURING SOLUTION** 

## Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Product name : 910X533 CURING SOLUTION

Ingredient name	%	<b>CAS</b> number	
propan-1-ol	≥50 - ≤72	71-23-8	
toluene	≥20 - ≤50	108-88-3	
N-(3-(trimethoxysilyl)propyl)ethylenediamine	≥1.0 - ≤5.0	1760-24-3	
2,4,6-tris(dimethylaminomethyl)phenol	≥0.10 - ≤2.5	90-72-2	

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

#### Potential acute health effects

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

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or

dizziness.

**Skin contact**: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.

Ingestion : Can cause central nervous system (CNS) depression.

#### Over-exposure signs/symptoms

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

pain watering redness

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#### Section 4. First aid measures

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

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness 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)

## Section 5. Fire-fighting measures

#### **Extinguishing media**

Suitable extinguishing media

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

Unsuitable extinguishing

media

: Do not use water jet.

Specific hazards arising from the chemical

: 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.

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## **Section 5. Fire-fighting measures**

Hazardous thermal decomposition products

 Decomposition products may include the following materials: carbon oxides nitrogen oxides metal oxide/oxides Formaldehyde.

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.

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.

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## 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. 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

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.

## Section 8. Exposure controls/personal protection

#### **Control parameters**

#### Occupational exposure limits

Ingredient name	Exposure limits
propan-1-ol	OSHA PEL (United States, 5/2018).
	TWA: 500 mg/m <sup>3</sup> 8 hours.
	TWA: 200 ppm 8 hours.
	ACGIH TLV (United States, 3/2020).
	TWA: 100 ppm 8 hours.
toluene	OSHA PEL Z2 (United States, 2/2013).
	AMP: 500 ppm 10 minutes.
	CEIL: 300 ppm
	TWA: 200 ppm 8 hours.
	ACGIH TLV (United States, 3/2020).
	TWA: 20 ppm 8 hours.
N-(3-(trimethoxysilyl)propyl)ethylenediamine	None.
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## Section 8. Exposure controls/personal protection

2,4,6-	tris(dimethylaminomethyl)phenol	None	е.
	Key to abbreviations		
Α	= Acceptable Maximum Peak	S	= Potential skin absorption
ACGIH	= American Conference of Governmental Industrial Hygienists.	SR	= Respiratory sensitization
С	= Ceiling Limit	SS	= Skin sensitization
F	= Fume	STEL	= Short term Exposure limit values
IPEL	= Internal Permissible Exposure Limit	TD	= Total dust
OSHA	Occupational Safety and Health Administration.	TLV	= Threshold Limit Value
R	= Respirable	TWA	= Time Weighted Average
Ζ	= OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances		•

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

## procedures

**Recommended monitoring**: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

#### **Environmental exposure** controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

#### 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** 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**

- : butvl 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.

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## Section 8. Exposure controls/personal protection

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

## Section 9. Physical and chemical properties

**Appearance** 

Physical state : Liquid.
Color : Clear.

Odor : Not available.
Odor threshold : Not available.
pH : Not applicable.
Melting point : Not available.

**Boiling point** : 96.67 to 316.11°C (206 to 601°F)

Flash point : Closed cup: 7.22°C (45°F)

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Flammability (solid, gas) : Not available.

Lower and upper explosive : Not available.

(flammable) limits

Evaporation rate: Not available.Vapor pressure: Not available.Vapor density: Not available.

Relative density : 0.84

Density ( lbs / gal ) : 7.01

**Solubility** : Insoluble in the following materials: cold water.

Partition coefficient: n-

octanol/water

: Not applicable.

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

**VOC** : 804 g/l % **Solid.** (w/w) : 5.84

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## Section 10. Stability and reactivity

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

**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 nitrogen oxides Formaldehyde. metal oxide/oxides

## **Section 11. Toxicological information**

#### Information on toxicological effects

#### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
propan-1-ol	LC50 Inhalation Vapor	Rat	33.8 mg/l	4 hours
	LD50 Dermal	Rabbit	4.049 g/kg	-
	LD50 Oral	Rat	5800 mg/kg	-
toluene	LC50 Inhalation Vapor	Rat	49 g/m³	4 hours
	LD50 Dermal	Rabbit	8.39 g/kg	-
	LD50 Oral	Rat	5580 mg/kg	-
N-(3-(trimethoxysilyl)propyl) ethylenediamine	LD50 Oral	Rat	2413 mg/kg	-
2,4,6-tris (dimethylaminomethyl)phenol	LD50 Dermal	Rabbit	1.28 g/kg	-
, , , , , , , , , , , , , , , , , , , ,	LD50 Dermal	Rat	1280 mg/kg	-
	LD50 Oral	Rat	1200 mg/kg	-

## **Conclusion/Summary**

: There are no data available on the mixture itself.

#### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
2,4,6-tris (dimethylaminomethyl)phenol	Skin - Visible necrosis	Rabbit	-	4 hours	7 days
(difficulty artificulties by prient)					

#### **Conclusion/Summary**

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

**Sensitization** 

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## **Section 11. Toxicological information**

Product/ingredient name	Route of exposure	Species	Result
2,4,6-tris (dimethylaminomethyl)phenol	skin	Guinea pig	Sensitizing

**Conclusion/Summary** 

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

**Mutagenicity** 

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

**Carcinogenicity** 

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

**Classification** 

Product/ingredient name	OSHA	IARC	NTP
toluene	-	3	-

#### 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		Route of exposure	Target organs
	Category 3 Category 3		Narcotic effects Narcotic effects

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

Name	• •	Route of exposure	Target organs
toluene	Category 2	-	-

#### **Target organs**

: Contains material which causes damage to the following organs: brain.

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

#### **Aspiration hazard**

Name	Result
toluene	ASPIRATION HAZARD - Category 1

#### Information on the likely routes of exposure

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## **Section 11. Toxicological information**

#### Potential acute health effects

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

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or

dizziness

**Skin contact**: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.

Ingestion : Can cause central nervous system (CNS) depression.

Over-exposure signs/symptoms

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

pain watering redness

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

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness 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 either contains formaldehyde or is capable of releasing formaldehyde above 0.5 ppm under certain conditions. Formaldehyde is a known cancer hazard, a skin sensitizer and a respiratory sensitizer. 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

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**Product name 910X533 CURING SOLUTION** 

## **Section 11. Toxicological information**

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** 

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

: Suspected of damaging fertility or the unborn child. Reproductive toxicity

**Numerical measures of toxicity** 

**Acute toxicity estimates** 

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	(gases)	(vapors)	Inhalation (dusts and mists) (mg/ I)
910X533 CURING SOLUTION	36356	6876	N/A	374.3	51
propan-1-ol	5800	4049	N/A	33.8	N/A
toluene	5580	8390	N/A	49	N/A
N-(3-(trimethoxysilyl)propyl)ethylenediamine	2413	N/A	N/A	11	1.5
2,4,6-tris(dimethylaminomethyl)phenol	1200	1280	N/A	N/A	N/A

## Section 12. Ecological information

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
2,4,6-tris (dimethylaminomethyl)phenol	Acute LC50 175 mg/l	Fish	96 hours

#### Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
toluene	-	-	Readily

#### **Bioaccumulative potential**

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## Section 12. Ecological information

**Product name 910X533 CURING SOLUTION** 

Product/ingredient name	LogPow	BCF	Potential
propan-1-ol	0.2	-	low
toluene	2.73	8.32	low
2,4,6-tris	0.219	-	low
(dimethylaminomethyl)phenol			

**Mobility in soil** 

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

: 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 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
<b>Environmental hazards</b>	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.
Product RQ (lbs)	2437.3	Not applicable.	Not applicable.
RQ substances	(toluene, benzene)	Not applicable.	Not applicable.

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## 14. Transport information

#### Additional information

DOT : Package sizes shipped in quantities less than the product reportable quantity are not subject to the

RQ (reportable quantity) transportation requirements.

: None identified. **IMDG IATA** : None identified.

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): 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 2

SKIN IRRITATION - Category 2

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

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

**HNOC** - Defatting irritant

#### Composition/information on ingredients

Name	%	Classification
propan-1-ol	≥50 - ≤72	FLAMMABLE LIQUIDS - Category 3 SERIOUS EYE DAMAGE - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 HNOC - Defatting irritant
toluene	≥20 - ≤50	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

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## Product code 910X533 CURING SOLUTION Date of issue 22 June 2021 Version 9.03 Product name 910X533 CURING SOLUTION

## Section 15. Regulatory information

N-(3-(trimethoxysilyl)propyl)	≥1.0 - ≤5.0	ACUTE TOXICITY (inhalation) - Category 4
ethylenediamine		SERIOUS EYE DAMAGE - Category 1
		SKIN SENSITIZATION - Category 1B
2,4,6-tris(dimethylaminomethyl)	≥0.10 - ≤2.5	ACUTE TOXICITY (oral) - Category 4
phenol		ACUTE TOXICITY (dermal) - Category 4
		SKIN CORROSION - Category 1C
		SERIOUS EYE DAMAGE - Category 1
		SKIN SENSITIZATION - Category 1B

**SARA 313** 

<u>Chemical name</u> <u>CAS number</u> <u>Concentration</u>

**Supplier notification**: toluene 108-88-3 30 - 60

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.

#### California Prop. 65

MARNING: Reproductive Harm - www.P65Warnings.ca.gov.

#### Section 16. Other information

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

Health: 3 \* Flammability: 3 Physical hazards: 0

(\*) - 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 : 6/6/2021

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** 

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Product code 910X533 CURING SOLUTION Product name 910X533 CURING SOLUTION

Date of issue 22 June 2021

Version 9.03

## **Section 16. Other information**

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

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# Product code 515X349 BASE COMPONENT Date of issue 22 June 2021 Version 26 Product name 515X349 BASE COMPONENT Section 15. Regulatory information

 Supplier notification
 : strontium chromate
 7789-06-2
 7 - 13

 butan-1-ol
 71-36-3
 1 - 5

 barium chromate
 10294-40-3
 0.1 - 1

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.

#### California Prop. 65

#### Section 16. Other information

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

Health: 4 \* Flammability: 3 Physical hazards: 0

( \* ) - Chronic effects

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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: 4 Flammability: 3 Instability: 0

Date of previous issue : 6/1/2021
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

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#### **Disclaimer**

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