SAFETY DATA SHEET

Date of issue/Date of revision 18 May 2021

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Version2

Section 1. Identification

Product code	: 00427063
Product name	: SIGMACOVER 410 Y BASE RAL 7046
CAS number	: Not applicable.
EC number	: Mixture.
Product type	: Liquid.
Relevant identified uses	of the substance or mixture and uses advised against
Product use	 Coating. Professional applications, Used by spraying.
Uses advised against	: Product is not intended, labelled or packaged for consumer use.
Supplier's details	 PPG Yung Chi Coatings Co. Ltd Lot 219, Amata Street, Long Binh IZ Bien Hoa City, Dong Nai Province Vietnam Tel : +84 61 3936121/22
Emergency telephone number (with hours of operation)	: CHEMTREC +(84)-444581938 (CCN 17704)

Section 2. Hazards identification

Classification of the	: FLAMMABLE LIQUIDS - Category 3
substance or mixture	ACUTE TOXICITY (oral) - Category 5
	ACUTE TOXICITY (dermal) - Category 5
	SKIN IRRITATION - Category 2
	SERIOUS EYE DAMAGE - Category 1
	SKIN SENSITIZATION - Category 1 TOXIC TO REPRODUCTION - Category 2
	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
	AQUATIC TOXICITY (ACUTE) - Category 1
	AQUATIC TOXICITY (CHRONIC) - Category 1
	Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 51%
	Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 55%
	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 63.6%
GHS label elements	
Hazard pictograms	
Signal word	: Danger
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Product code 00427063

Section 2. Hazards identification

	-	
Hazard statements	:	Flammable liquid and vapor. May be harmful if swallowed or in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.
Precautionary statements		
Prevention	:	Øbtain 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. Avoid release to the environment. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Response	:	Collect spillage. IF exposed or concerned: Get medical advice or attention. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. 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.
Disposal	:	Sispose of contents and container in accordance with all local, regional, national and international regulations.
Routes of entry	:	Not available.
Other hazards which do not result in classification	:	Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

CAS number/other identifiers

In gradient neme	
EC number	: Mixture.
CAS number	: Not applicable.

Ingredient name	CAS number	Chemical formula	%
crystalline silica, respirable powder (<10 microns)	14808-60-7	O2-Si	≥25 - ≤50
bis-[4-(2,3-epoxipropoxi)phenyl]propane	1675-54-3	C21-H24-O4	≤10
4-nonylphenol, branched	84852-15-3	C15-H24-O	<5
Epoxy Resin (700 <mw<=1100)< td=""><td>25036-25-3</td><td>(C21H24O4.</td><td>≤5</td></mw<=1100)<>	25036-25-3	(C21H24O4.	≤5
		C15H16O2)x	
xylene	1330-20-7	C8-H10	≤4.8
benzyl alcohol	100-51-6	C7-H8-O	≤4.6
2-methylpropan-1-ol	78-83-1	C4-H10-O	≤3
Phenol, 2-nonyl-, branched	91672-41-2	-	≤0.3

There are no 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.

SUB codes represent substances without registered CAS Numbers.

Product name SIGMACOVER 410 Y BASE RAL 7046 Section 3. Composition/information on ingredients

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

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 e	<u>ifects</u>
Eye contact	: Causes serious eye damage.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: May be harmful in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: May be harmful if swallowed. Corrosive to the digestive tract. Causes burns.
<u>Over-exposure signs/sy</u>	<u>mptoms</u>
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: 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 r	nedical attention and special treatment needed, if necessary
Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.

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Section 4. First aid measures

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 ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon oxides metal oxide/oxides
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	 Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. 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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

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Section 6. Accidental release measures

Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling	L	
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. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name		Exposure limits	
ørystalline silica, respirable p xylene	owder (<10 microns)	ACGIH TLV (United States, 3/2020). TWA: 0.025 mg/m ³ 8 hours. Form: Respirable Ministry of Health (Viet Nam, 6/2019).	
2-methylpropan-1-ol		STEL: 300 mg/m ³ 15 minutes. TWA: 100 mg/m ³ 8 hours. Ministry of Health (Viet Nam, 6/2019). STEL: 250 mg/m ³ 15 minutes. TWA: 150 mg/m ³ 8 hours.	
Recommended monitoring procedures	atmosphere or biological of the ventilation or other protective equipment. R standards. Reference to	ngredients with exposure limits, personal, workplace I monitoring may be required to determine the effectiveness r control measures and/or the necessity to use respiratory Reference should be made to appropriate monitoring o national guidance documents for methods for the bus substances will also be required.	
Appropriate engineering controls	ventilation or other engin contaminants below any also need to keep gas, v	ventilation. Use process enclosures, local exhaust neering controls to keep worker exposure to airborne recommended or statutory limits. The engineering controls apor or dust concentrations below any lower explosive oof ventilation equipment.	
Environmental exposure controls	they comply with the req cases, fume scrubbers,	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 measur	res		
Hygiene measures	eating, smoking and usir Appropriate techniques s Contaminated work cloth	and face thoroughly after handling chemical products, before ng the lavatory and at the end of the working period. should be used to remove potentially contaminated clothing. hing should not be allowed out of the workplace. Wash efore reusing. Ensure that eyewash stations and safety workstation location.	
Eye/face protection	: Chemical splash goggles	s and face shield.	
Skin protection			
Hand protection	be worn at all times whe this is necessary. Consi check during use that the should be noted that the different for different glov several substances, the	ervious gloves complying with an approved standard should in handling chemical products if a risk assessment indicates idering the parameters specified by the glove manufacturer, e gloves are still retaining their protective properties. It time to breakthrough for any glove material may be ve manufacturers. In the case of mixtures, consisting of protection time of the gloves cannot be accurately	
	estimated.		

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Section 8. Exposure controls/personal protection

Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	 Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Section 9. Physical and chemical properties

Physical state:Liquid.Color:Gray.Odor:Aromatic. [Strong]Odor:Aromatic. [Strong]Odor threshold:Not available.pH:Not available.Boiling point:>37.78°C (>100°F)Flash point:Closed cup: 34°C (93.2°F)Evaporation rate:Not available.Flammability (solid, gas):Not available.Ifmamability (solid, gas):Not available.Vapor pressure:Not available.Vapor density:Not available.Relative density:Instalable.Solubility:Instalable.Partition coefficient: n- octanol/water:Not available.Partition temperature:Not available.Decomposition temperature:Not available.Viscosity::Not available.Viscosity::Not available.Viscosity::Not available.Viscosity:::Viscosity:::Viscosity:::Viscosity:::Viscosity:::Out available.::Out available.:Out available.:Out available.:Out available.:Out available.:Out available.:Out available.Out av	<u>Appearance</u>	
Odor: Aromatic. [Strong]Odor threshold: Not available.pH: Not available.Melting point: >37.78°C (>100°F)Flash point: Closed cup: 34°C (93.2°F)Evaporation rate: Not available.Flammability (solid, gas): Not available.Vapor pressure: Rot available.Vapor density: Not available.Relative density: Not available.Partition coefficient: n- octanol/water: Not available.Auto-ignition temperature: Not available.Partition temperature: Not available.Vapor jostion temperature: Not available.Vator is pressure: Not available.Relative density: Insoluble in the following materials: cold water.Partition coefficient: n- octanol/water: Not available.Auto-ignition temperature: Not available.Viscosity: Not avai	Physical state	: Liquid.
Odor threshold:Not available.pH:Not applicable.Melting point:Not available.Boiling point:>37.78°C (>100°F)Flash point:Closed cup: 34°C (93.2°F)Evaporation rate:Not available.Flammability (solid, gas):Not available.Lower and upper explosive (flammable) limits:Greatest known range: Lower: 1.3% Upper: 13% (benzyl alcohol)Vapor pressure:Not available.Vapor density:Not available.Relative density:1.72Solubility:Insoluble in the following materials: cold water.Partition coefficient: n- octanol/water:Not available.Auto-ignition temperature Uscosity:Not available.Viscosity:Not available.	Color	: Gray.
pH:Not applicable.Melting point:Not available.Boiling point:>37.78°C (>100°F)Flash point:Closed cup: 34°C (93.2°F)Evaporation rate:Not available.Flammability (solid, gas):Not available.Lower and upper explosive (flammable) limits:Greatest known range: Lower: 1.3% Upper: 13% (benzyl alcohol)Vapor pressure:Not available.Vapor density:Not available.Relative density:1.72Solubility:Insoluble in the following materials: cold water.Partition coefficient: n- octanol/water:Not available.Auto-ignition temperature Viscosity:Not available.Viscosity:Kinematic (40°C): >21 mm²/s	Odor	: Aromatic. [Strong]
Melting point:Not available.Boiling point:>37.78°C (>100°F)Flash point:Closed cup: 34°C (93.2°F)Evaporation rate:Not available.Flammability (solid, gas):Not available.Lower and upper explosive (flammable) limits:Greatest known range: Lower: 1.3% Upper: 13% (benzyl alcohol)Vapor pressure:Not available.Vapor density:Not available.Relative density:1.72Solubility:Insoluble in the following materials: cold water.Partition coefficient: n- octanol/water:Not available.Auto-ignition temperature:Not available.Decomposition temperature:Not available.Viscosity:!Not available.Viscosity:!Not available.	Odor threshold	: Not available.
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Flash point: Closed cup: 34°C (93.2°F)Evaporation rate: Not available.Flammability (solid, gas): Not available.Lower and upper explosive (flammable) limits: Greatest known range: Lower: 1.3% Upper: 13% (benzyl alcohol)Vapor pressure: Not available.Vapor density: Not available.Relative density: 1.72Solubility: Insoluble in the following materials: cold water.Partition coefficient: n- octanol/water: Not available.Auto-ignition temperature: Not available.Viscosity: Not available.Viscosity: Kinematic (40°C): >21 mm²/s	Melting point	: Not available.
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Flammability (solid, gas): Not available.Lower and upper explosive (flammable) limits: Greatest known range: Lower: 1.3% Upper: 13% (benzyl alcohol)Vapor pressure: Not available.Vapor density: Not available.Relative density: 1.72Solubility: Insoluble in the following materials: cold water.Partition coefficient: n- octanol/water: Not available.Auto-ignition temperature Decomposition temperature Viscosity: Not available.Viscosity: Not available.	Flash point	: Closed cup: 34°C (93.2°F)
Lower and upper explosive (flammable) limits: Greatest known range: Lower: 1.3% Upper: 13% (benzyl alcohol)Vapor pressure: Not available.Vapor density: Not available.Relative density: 1.72Solubility: Insoluble in the following materials: cold water.Partition coefficient: n- octanol/water: Mot available.Auto-ignition temperature: Not available.Decomposition temperature: Not available.Viscosity: Insoluble in the following materials: cold water.	Evaporation rate	: Not available.
(flammable) limitsVapor pressure: Not available.Vapor density: Not available.Relative density: 1.72Solubility: Insoluble in the following materials: cold water.Partition coefficient: n- octanol/water: Mot applicable.Auto-ignition temperature: Not available.Decomposition temperature: Not available.Viscosity: Kinematic (40°C): >21 mm²/s	Flammability (solid, gas)	: Not available.
Vapor density: Not available.Relative density: 1.72Solubility: Insoluble in the following materials: cold water.Partition coefficient: n- octanol/water: Not applicable.Auto-ignition temperature: Not available.Decomposition temperature: Not available.Viscosity: Minematic (40°C): >21 mm²/s		: Greatest known range: Lower: 1.3% Upper: 13% (benzyl alcohol)
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Solubility: Insoluble in the following materials: cold water.Partition coefficient: n- octanol/water: Mot applicable.Auto-ignition temperature: Not available.Decomposition temperature: Not available.Viscosity: Minematic (40°C): >21 mm²/s	Vapor density	Not available.
Partition coefficient: n-octanol/water : Not applicable. Auto-ignition temperature : Not available. Decomposition temperature : Not available. Viscosity : Minematic (40°C): >21 mm²/s	Relative density	: 1.72
octanol/water Auto-ignition temperature : Not available. Decomposition temperature : Not available. Viscosity : Minematic (40°C): >21 mm²/s	Solubility	: Insoluble in the following materials: cold water.
Decomposition temperature : Not available. Viscosity : Kinematic (40°C): >21 mm²/s		: Not applicable.
Viscosity : Kinematic (40°C): >21 mm²/s	Auto-ignition temperature	: Not available.
	Decomposition temperature	: Not available.
Viscosity : 60 - 100 s (ISO 6mm)	Viscosity	: Kinematic (40°C): >21 mm²/s
	Viscosity	: 60 - 100 s (ISO 6mm)

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.

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Section 10. Stability and reactivity

Conditions to avoid	-	When exposed to high temperatures may produce hazardous decomposition products.
Incompatible materials	:	Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
Hazardous decomposition products	:	Depending on conditions, decomposition products may include the following materials: carbon oxides metal oxide/oxides
	_	

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
bis-[4-(2,3-epoxipropoxi) phenyl]propane	LD50 Dermal	Rabbit	23000 mg/kg	-
	LD50 Oral	Rat	15000 mg/kg	-
4-nonylphenol, branched	LD50 Dermal	Rabbit	2.14 g/kg	-
	LD50 Oral	Rat	1300 mg/kg	-
Epoxy Resin (700 <mw <=1100)</mw 	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
benzyl alcohol	LC50 Inhalation Dusts and mists	Rat	>4178 mg/m ³	4 hours
-	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	1.23 g/kg	-
2-methylpropan-1-ol	LC50 Inhalation Vapor	Rat	24.6 mg/l	4 hours
	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 mg/kg	-

Conclusion/Summary Irritation/Corrosion

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

Conclusion/Summary

: There are no data available on the mixture itself.

Eyes

Skin

: There are no data available on the mixture itself.

Respiratory

: There are no data available on the mixture itself.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
bis-[4-(2,3-epoxipropoxi) phenyl]propane	skin	Mouse	Sensitizing

Product name SIGMACOVER 410 Y BASE RAL 7046

Section 11. Toxicological information

Namo		Category	Pout
Specific target organ toxicit	<u>y (single exposure)</u>		
Conclusion/Summary	: There are no data availab	e on the mixture its	self.
Teratogenicity			
Conclusion/Summary	: There are no data availab	e on the mixture its	self.
Reproductive toxicity			
<u>Carcinogenicity</u> Conclusion/Summary	: There are no data availab	e on the mixture its	self.
Mutagenicity Conclusion/Summary	: There are no data availab	e on the mixture its	self.
Respiratory			sen.
	: There are no data availab		
Skin	: There are no data availab	e on the mixture its	self

Name	Category	Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation
2-methylpropan-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)	Category 1	inhalation	-

Aspiration hazard

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

Information on the likely routes of exposure	: Not available.
Potential acute health effe	<u>cts</u>
Eye contact	: Causes serious eye damage.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: May be harmful in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: May be harmful if swallowed. Corrosive to the digestive tract. Causes burns.
<u>Symptoms related to the p</u> Eye contact	 hysical, chemical and toxicological characteristics Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

Section 11. Toxicological information

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 effect	ts	and also chronic effects from short and long term exposure
<u>Short term exposure</u>		
Potential immediate effects	:	There are no data available on the mixture itself.
Potential delayed effects	:	There are no data available on the mixture itself.
<u>Long term exposure</u>		
Potential immediate effects	:	There are no data available on the mixture itself.
Potential delayed effects	:	There are no data available on the mixture itself.
Potential chronic health effe	ect	<u>S</u>
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	:	No known significant effects or critical hazards.
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

Route	ATE value
Oral	4675.6 mg/kg
Dermal	4773.37 mg/kg
Inhalation (vapors)	85.09 mg/l
Inhalation (dusts and mists)	5.91 mg/l

Other information

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

Product name SIGMACOVER 410 Y BASE RAL 7046

Section 12. Ecological information

<u>Toxicity</u>

Product/ingredient name	Result	Species	Exposure
ofs-[4-(2,3-epoxipropoxi) phenyl]propane	Acute LC50 1.8 mg/l Fresh water	Daphnia - daphnia magna	48 hours
	Chronic NOEC 0.3 mg/l	Daphnia	21 days
4-nonylphenol, branched	Acute EC50 0.04 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 0.044 mg/l	Crustaceans - Moina macrocopa	48 hours
	Acute LC50 0.221 mg/l	Fish	96 hours
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
Phenol, 2-nonyl-, branched	Acute LC50 0.017 mg/l	Fish - Pleuronectes americanus	96 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
bis-[4-(2,3-epoxipropoxi) phenyl]propane	-	-	Not readily
xylene benzyl alcohol	-	-	Readily Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
-nonylphenol, branched	5.4	251.19	low
xylene	3.12	7.4 to 18.5	low
benzyl alcohol	0.87	-	low
2-methylpropan-1-ol	1	-	low

Mobility in soil

Soil/water partition : Not available. coefficient (Koc)

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods The generation of waste should be avoided or minimized wherever possible. 2 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 nonrecyclable 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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Section 14. Transport information

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

Additional information

UN	: None identified.
IMDG	: The marine pollutant mark is not required when transported in sizes of \leq 5 L or \leq 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

Safety, health and	: No known specific national and/or regional regulations applicable to this product
environmental regulations	(including its ingredients).
specific for the product	

Circular no. 05/1999/TT-BYT

Ingredient name	Category	Notes
benzene toluene xylene	Category 1 Category 2 Category 2	

Toxic classification (TCVN : 4

3164-79)

International regulations

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 18 May 2021
Date of previous issue	: 1/10/2021
Version	: 2
Prepared by	: EHS
Key to abbreviations	 ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate 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) UN = United Nations
References	: Not available.

V Indicates information that has changed from previously issued version.

Notice to reader

. . .

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