SAFETY DATA SHEET



Date of issue/Date of revision 14 August 2024 Version 14

Section 1. Identification	
Product name	: SIGMACOVER 456 BASE RAL 5010
Product code	: 00247562
Other means of identification	: Not available.
Product type	: Liquid.
Relevant identified uses of	the substance or mixture and uses advised against
Product use	: Professional applications, Used by spraying.
Use of the substance/ mixture	: Coating.
Uses advised against	: Not applicable.
Manufacturer	: PPG Industries, Inc. One PPG Place Pittsburgh, PA 15272
Emergency telephone number	: (412) 434-4515 (U.S.) (514) 645-1320 (Canada) SETIQ Interior de la República: 800-00-214-00 (México) SETIQ Ciudad de México: (55) 5559-1588 (México)
Technical Phone Number	: 888-977-4762

Section 2. Hazards identification

OSHA/HCS status	 This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	 FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 1A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 Fercentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 45% (oral), 51.3% (dermal), 70.1% (inhalation)

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Section 2. Hazards identification

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

	engineering controls (see Section 8).
GHS label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements	 Flammable liquid and vapor. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation. May cause cancer. Causes damage to organs through prolonged or repeated exposure. (hearing organs)
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 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. If eye irritation persists: Get medical advice or attention.
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.

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Section 2. Hazards identification

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. 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.

Section 3. Composition/information on ingredients

Substance/mixture Product name : Mixture : SIGMACOVER 456 BASE RAL 5010

Ingredient name	%	CAS number
Epoxy Resin	≥20 - ≤50	Not available.
crystalline silica, respirable powder (<10 microns)	≥10 - ≤20	14808-60-7
xylene	≥10 - ≤20	1330-20-7
barium sulfate	≥10 - ≤15	7727-43-7
Talc , not containing asbestiform fibres	≥5.0 - ≤10	14807-96-6
Epoxy resin (MW ≤ 700)	≥5.0 - ≤8.1	25068-38-6
titanium dioxide	≥1.0 - ≤5.0	13463-67-7
ethylbenzene	≥1.0 - ≤4.6	100-41-4
2-methoxy-1-methylethyl acetate	≥1.0 - ≤5.0	108-65-6
Solvent naphtha (petroleum), light aromatic	≤1.6	64742-95-6

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	: Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
Inhalation	: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Skin contact	: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

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Section 4. First aid measures

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

wost important symptoms/e	nects, acute and delayed	
Potential acute health effect	<u>ets</u>	
Eye contact	: Causes serious eye irritation.	
Inhalation	: Harmful if inhaled. May cause respiratory irritation.	
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.	
Ingestion	: No known significant effects or critical hazards.	
Over-exposure signs/symp	i <u>toms</u>	
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness	
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing	
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking	
Ingestion	: No specific data.	
	lical 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 ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

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Section 5. Fire-fighting measures

Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur 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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.	
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".	
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).	
Methods and materials for co	entainment 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. 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	: Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Epoxy Resin crystalline silica, respirable powder (<10 microns)	None. ACGIH TLV (United States, 7/2023). [Silica, crystalline] TWA: 0.025 mg/m ³ 8 hours. Form: Respirable OSHA PEL Z3 (United States, 6/2016). TWA: 10 mg/m ³ / (%SiO ₂ +2) 8 hours. Form: Respirable TWA: 250 mppcf / (%SiO ₂ +5) 8 hours. Form: Respirable
	OSHA PEL (United States, 5/2018). [Silica,
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Section 8. Exposure controls/personal protection

	crystalline]
	TWA: 50 µg/m³ 8 hours. Form: Respirable
undama.	dust
xylene	OSHA PEL (United States, 5/2018).
	[Xylenes]
	TWA: 435 mg/m ³ 8 hours.
	TWA: 100 ppm 8 hours.
	ACGIH TLV (United States, 7/2023). [p-
	xylene and mixtures containing p-xylene]
	Ototoxicant.
	TWA: 20 ppm 8 hours.
barium sulfate	ACGIH TLV (United States, 7/2023).
	TWA: 5 mg/m ³ 8 hours. Form: Inhalable
	fraction
	OSHA PEL (United States, 5/2018).
	TWA: 5 mg/m ³ 8 hours. Form: Respirable
	fraction
	TWA: 15 mg/m ³ 8 hours. Form: Total dust
Talc , not containing asbestiform fibres	ACGIH TLV (United States, 7/2023).
	TWA: 2 mg/m ³ 8 hours. Form: Respirable
	OSHA PEL Z3 (United States).
	TWA: 2 mg/m ³
Epoxy resin (MW ≤ 700)	
titanium dioxide	OSHA PEL (United States, 5/2018).
	TWA: 15 mg/m ³ 8 hours. Form: Total dust
	ACGIH TLV (United States, 7/2023).
	TWA: 2.5 mg/m ³ 8 hours. Form: respirable
	fraction, finescale particles
ethylbenzene	ACGIH TLV (United States, 7/2023).
	Ototoxicant.
	TWA: 20 ppm 8 hours.
	OSHA PEL (United States, 5/2018).
	TWA: 435 mg/m ³ 8 hours.
2 motherwy 1 mothy dathy dispetate	TWA: 100 ppm 8 hours.
2-methoxy-1-methylethyl acetate	IPEL (-, 10/2017). Absorbed through skin.
	TWA: 30 ppm
Solvent neghthe (petroleum) light gromatic	STEL: 90 ppm
Solvent naphtha (petroleum), light aromatic	None.
Kauta akkaujatia	

Key to abbreviations

А	 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 : 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.

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Section 8. Exposure controls/personal protection

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 meas	ures
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	: Chemical splash goggles.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Gloves	: butyl rubber
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. The respiratory protection shall be in accordance to 29 CFR 1910.134.

Section 9. Physical and chemical properties

		United States	Page: 8/17
рН	: Not applicable.		
Odor threshold	: Not available.		
Odor	: Aromatic.		
Color	: Blue.		
Physical state	: Liquid.		
<u>Appearance</u>			

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Section 9. Physical and chemical properties

Melting point	:	Not available.			
Boiling point	1	>37.78°C (>100°F)			
Flash point	1	Closed cup: 29°C (84.2°F)			
Auto-ignition temperature	:	Not available.			
Decomposition temperature	1	Not available.			
Flammability	1	Not available.			
Lower and upper explosive (flammable) limits	1	Not available.			
Evaporation rate	1	Not available.			
Vapor pressure	1	Not available.			
Vapor density	1	Not available.			
Relative density	1	1.32			
Density(lbs / gal)	1	11.02			
		Media	Result		
Solubility(ies)	÷	old water	Not soluble		
Partition coefficient: n- octanol/water	:	Not applicable.			
Viscosity	:	: Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt)			
Volatility	1	: 35% (v/v), 26.328% (w/w)			
% Solid. (w/w)	:	73.672			

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.
Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
Hazardous decomposition products	: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur oxides halogenated compounds metal oxide/ oxides

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Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
X lene	LD50 Dermal	Rabbit	1.7 g/kg	-
-	LD50 Oral	Rat	4.3 g/kg	-
barium sulfate	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Epoxy resin (MW ≤ 700)	LD50 Dermal	Rabbit	>2 g/kg	-
	LD50 Oral	Rat	>2 g/kg	-
titanium dioxide	LC50 Inhalation Dusts and mists	Rat	>6.82 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
ethylbenzene	LC50 Inhalation Vapor	Rat	17.8 mg/l	4 hours
-	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
2-methoxy-1-methylethyl acetate	LC50 Inhalation Vapor	Rat	30 mg/l	4 hours
	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	6190 mg/kg	-
Solvent naphtha (petroleum), light aromatic	LD50 Dermal	Rabbit	3.48 g/kg	-
-	LD50 Oral	Rat	8400 mg/kg	-

Conclusion/Summary

: There are no data available on the mixture itself.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
x ylene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Epoxy resin (MW ≤ 700)	Eyes - Mild irritant Skin - Mild irritant	Rabbit Rabbit	-	-	-

Conclusion/Summary	
Skin	: There are no data available on the mixture itself.
Eyes	: 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			
Epoxy resin (MW \leq 700)	skin	Mouse	Sensitizing			
Conclusion/Summary						
Skin	: There are no data available on the mixture itself.					
Respiratory	: There are no data available on the mixture itself.					
<u>Mutagenicity</u>						
Conclusion/Summary	: There are no	data available on the mixt	ure itself.			
Carcinogenicity						
Conclusion/Summary	: There are no	data available on the mixto	ure itself.			

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Section 11. Toxicological information

Classification

Product/ingredient name	OSHA	IARC	NTP
vystalline silica, respirable powder (<10 microns)	+	1	Known to be a human carcinogen.
xylene	-	3	-
titanium dioxide	-	2B	-
ethylbenzene	-	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
x ýlene	Category 3	-	Respiratory tract irritation
Talc , not containing asbestiform fibres	Category 3	-	Respiratory tract irritation
2-methoxy-1-methylethyl acetate	Category 3	-	Narcotic effects
Solvent naphtha (petroleum), light aromatic	Category 3	-	Narcotic effects

Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
	Category 1	inhalation	-
	Category 2	-	hearing organs

Target organs

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

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

Aspiration hazard

Name	Result
ethylbenzene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

Potential acute health effects

Eye contact

: Causes serious eye irritation.

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Section 11. Toxicological information

Inhalation	Harmful if inhaled. May cause respiratory irritation.
Skin contact	 Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction. No known significant effects or critical hazards.
Ingestion Over-exposure signs/symp	6
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking
Ingestion	No specific data.
Delayed and immediate effect Conclusion/Summary	 If here 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. This product contains TiO2 which has been classified as a GHS Carcinogen Category 2 based on its IARC 2B classification. For many products, TiO2 is utilized as a raw material in a liquid coating formulation. In this case, the TiO2 particles are bound in a matrix with no meaningful potential for human exposure to unbound particles of TiO2 when the product is applied with a brush or roller. Sanding the coating surface or mist from spray applications may be harmful depending on the duration and level of exposure and require the use of appropriate personal protective equipment and/or engineering controls (see Section 8). Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.
Short term exposure Potential immediate effects	: There are no data available on the mixture itself.
Potential delayed effects	: There are no data available on the mixture itself.
Long term exposure	
Potential immediate effects	: There are no data available on the mixture itself.
Potential delayed effects	: There are no data available on the mixture itself.
Potential chronic health effe	

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Section 11. Toxicological information

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	: No known significant effects or critical hazards.
Reproductive toxicity	: No known significant effects or critical hazards.

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)
GMACOVER 456 BASE RAL 5010	7694.5 4300	2862.0 1700	N/A N/A	17.2 11	2.2 1.5
barium sulfate	N/A	2500	N/A	N/A	N/A
Epoxy resin (MW ≤ 700)	2500	2500	N/A	N/A	N/A
ethylbenzene	3500	17800	N/A	17.8	1.5
2-methoxy-1-methylethyl acetate	6190	N/A	N/A	30	N/A
Solvent naphtha (petroleum), light aromatic	8400	3480	N/A	N/A	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Epoxy resin (MW ≤ 700)	Acute LC50 1.8 mg/l	Daphnia	48 hours
	Chronic NOEC 0.3 mg/l	Daphnia	21 days
titanium dioxide	Acute LC50 >100 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
5	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
2-methoxy-1-methylethyl acetate	Acute LC50 134 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
Solvent naphtha (petroleum), light aromatic	Acute LC50 8.2 mg/l	Fish	96 hours

Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Epoxy resin (MW ≤ 700) ethylbenzene 2-methoxy-1-methylethyl acetate	-	5 % - 28 days 79 % - Readily - 10 days 83 % - Readily - 28 days	- -	- -

		United States	Page: 13/17
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Product name SIGMACOVER 456 BASE RAL 5010

Section 12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
kylene Epoxy resin (MW ≤ 700) ethylbenzene 2-methoxy-1-methylethyl acetate			Readily Not readily Readily Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
x ylene	3.12	7.4 to 18.5	Low
Epoxy resin (MW ≤ 700)	3	31	Low
ethylbenzene	3.6	79.43	Low
2-methoxy-1-methylethyl acetate	1.2	-	Low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact 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

Product name SIGMACOVER 456 BASE RAL 5010

14. Transport information

	DOT	IMDG	ΙΑΤΑ	
UN number	UN1263	UN1263	UN1263	
UN proper shipping name	PAINT	PAINT	PAINT	
Transport hazard class (es)	3	3	3	
Packing group	111	111	111	
Environmental hazards	No.	No.	No.	
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	
Product RQ (lbs)	581.29	Not applicable.	Not applicable.	
RQ substances	(xylene, ethylbenzene)	Not applicable.	Not applicable.	

Additional information

- **DOT** : Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.
- IMDG : None identified.
- 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) : At least one component is not listed.

SARA 302/304 SARA 304 RQ

: Not applicable.

Composition/information on ingredients

No products were found.

SARA 311/312

Classification	: FLAMMABLE LIQUIDS - Category 3
	ACUTE TOXICITY (inhalation) - Category 4
	SKIN IRRITATION - Category 2
	EYE IRRITATION - Category 2A
	SKIN SENSITIZATION - Category 1
	CARCINOGENICITY - Category 1A
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

United States Page: 15/17

Product name SIGMACOVER 456 BASE RAL 5010

Section 15. Regulatory information

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 HNOC - Defatting irritant

Composition/information on ingredients

	Classification
≥20 - ≤50	EYE IRRITATION - Category 2A
	SKIN SENSITIZATION - Category 1B
≥10 - ≤20	CARCINOGENICITY - Category 1A
	SPECIFIC TARGET ORGAN TOXICITY (REPEATED
	EXPOSURE) - Category 1
≥10 - ≤20	FLAMMABLE LIQUIDS - Category 3
	ACUTE TOXICITY (dermal) - Category 4
	ACUTE TOXICITY (inhalation) - Category 4
	SKIN IRRITATION - Category 2
	EYE IRRITATION - Category 2A
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
	(Respiratory tract irritation) - Category 3
	ASPIRATION HAZARD - Category 1
≥5.0 - ≤10	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
	(Respiratory tract irritation) - Category 3
≥5.0 - ≤8.1	SKIN IRRITATION - Category 2
	EYE IRRITATION - Category 2A
	SKIN SENSITIZATION - Category 1B
≥1.0 - ≤5.0	CARCINOGENICITY - Category 2
≥1.0 - ≤4.6	FLAMMABLE LIQUIDS - Category 2
	ACUTE TOXICITY (inhalation) - Category 4
	CARCINOGENICITY - Category 2
	SPECIFIC TARGET ORGAN TOXICITY (REPEATED
	EXPOSURE) - Category 2
	ASPIRATION HAZARD - Category 1
	HNOC - Defatting irritant
≥1.0 - ≤5.0	FLAMMABLE LIQUIDS - Category 3
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
	(Narcotic effects) - Category 3
≤1.6	FLAMMABLE LIQUIDS - Category 3
	SKIN IRRITATION - Category 2
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
	(Narcotic effects) - Category 3
	ASPIRATION HÁZARD - Category 1
	HNOC - Defatting irritant
	≥10 - ≤20 ≥10 - ≤20 ≥5.0 - ≤10 ≥5.0 - ≤8.1 ≥1.0 - ≤5.0 ≥1.0 - ≤4.6

<u>SARA 313</u>

Supplier notificationChemical name vylene ethylbenzene	<u>CAS number</u> 1330-20-7 100-41-4	<u>Concentration</u> 10 - 30 1 - 5
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SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

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

California Prop. 65

Product name SIGMACOVER 456 BASE RAL 5010

Section 15. Regulatory information

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

Section 16. Other information

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

Health : 2 * 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 Ass	ociation (U.S.A.)			
Health : 2 Flammability : 3 Instability : 0				
Date of previous issue	: 5/29/2021			
Organization that prepared the SDS	: EHS			
Key to abbreviations	ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = International Air Transport Association IBC = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available SGG = Segregation Group UN = United Nations			

Indicates information that has changed from previously issued version.

Disclaimer

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