SAFETY DATA SHEET



The information in this Safety Data Sheet is required pursuant to Hazardous Product Regulations 2015.

Date of issue/Date of revision20 December 2023Version 10.02

Section 1. Identification		
Product name	: SIGMACOVER 456 BASE BLUE 1188	
Product code	: 00165809	
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.	
Supplier	 PPG Architectural Coatings Canada, Inc. 1550, rue Ampère, bureau 500 Boucherville (Québec) J4B 7L4 Canada +1 450-655-3121 	
	PPG Industries, Inc. One PPG Place Pittsburgh, PA 15272	
<u>Emergency telephone</u> <u>number</u>	: (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. Hazard identification

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 1B CARCINOGENICITY - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 Health Hazards Not Otherwise Classified - Category 1
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Product name SIGMACOVER 456 BASE BLUE 1188

Section 2. Hazard 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).

	protective equipment and/or 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 cancer. May cause damage to organs through prolonged or repeated exposure. (hearing organs) Prolonged or repeated contact may dry skin and cause irritation.
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 only outdoors or in a well-ventilated area. Do not breathe vapor. Wash thoroughly after handling. Contaminated work clothing should 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. 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.
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. Avoid contact with skin and clothing. Wash thoroughly after handling. Emits toxic fumes when heated. Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 54.1% (oral), 59.1% (dermal), 65.1% (inhalation)

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Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Product name	: SIGMACOVER 456 BASE BLUE 1188
Other means of identification	: Not available.

CAS number/other identifiers

Ingredient name	Synonyms	% (w/w)	CAS number
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with fatty acids, C18-unsatd., dimers	Fatty acids, C18-unsatd., dimers, polymers with bisphenol A and epichlorohydrin; Fatty acids,	10 - 30*	67989-52-0
crystalline silica, respirable powder (>10 microns)	alpha-quartz; Silica, crystalline (quartz); Silica, Crystalline Quartz; SILICA, CRYSTALLINE, QUARTZ; Silica- Crystalline, Quartz; Silica - Crystalline Quartz; Silica-Crystalline : Quartz; Silica, crystalline - quartz	10 - 30*	14808-60-7
xylene	Benzene, dimethyl-; Xylol; Benzene, dimethyl-, mixed isomers; xylene, mixed isomers, pure; xylene, crude; Benzene, dimethyl-,; Xylene (mixed); xylene (total); Xylenes; Dimethylbenzene; XYLENES (Isomer Mixture)	10 - 30*	1330-20-7
ethylbenzene	Benzene, ethyl-; Phenylethane; Ethylbenzol; photosensitive emulsion consisting of cyclized polyisoprene containing: — 55 % or more but not more than 75 % by weight of xylene (CAS RN 1330-20-7) and — 12 % or more but not more than 18 % by weight of ethylbenzene (CAS RN 100-41-4); EB; Mono-(or di-) methyl (ethyl,bromoallyl, bromopropyloxycarbonyl	5 - 10*	100-41-4

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Section 3. Composition/information on ingredients

titanium dioxide	Titanium oxide; Titanium oxide (TiO2); CI 77891; Titanium peroxide; Rutile; C.I. Pigment White 6; titanium dioxide coated with isopropoxytitanium triisostearate, containing by weight 1,5 % or more but not more than 2,5 % of isopropoxytitanium triisostearate; glass flakes (CAS RN 65997-17-3): — of a thickness of 0,3 µm or more but not more than 10 µm, and — coated with titanium dioxide (CAS RN 13463-67-7) or iron oxide (CAS RN 18282- 10-5); titanium dioxide, other than those of heading 3206 11 00; C.I. 77891; E 171; titanium(IV) oxide, other than those of heading 3206 11 00	5 - 10*	13463-67-7
barium sulfate	Sulfuric acid, barium salt (1:1); CI 77120; Barytes; Barium salt of sulfuric acid; Barite; Artificial barite; barium sulphate; C. I. Pigment White 21; barium sulfate, natural; blanc fixe; C.I. 77120	3 - 7*	7727-43-7
Talc , not containing asbestiform fibres	Talc; magnesium silicate monohydrate (talc) not containing asbestiform fibres	1 - 5*	14807-96-6
2-methylpropan-1-ol	iso-butanol; 1-Propanol, 2-methyl-; Isobutyl alcohol; Isobutanol; 2-Methyl- 1-propanol; Isopropylcarbinol; IBA; i-Butyl alcohol; catalyst consisting predominantly of dinonylnaphthalenedisulphonic acid in the form of a solution in isobutanol; isobutanol; iso-butanol; Isobutyl alcohol (I, T)	0.5 - 1.5*	78-83-1

*Ranges if listed above for hazardous ingredient(s) are prescribed ranges. The actual concentration(s) or actual concentration range(s) are being withheld as a trade secret.

SUB codes represent substances without registered CAS Numbers.

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.

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Section 4. First-aid measures

Skin contact	: Re	move contaminated clothing and shoes. Wash skin thoroughly with soap and
	wa	ter or use recognized skin cleanser. Do NOT use solvents or thinners.
Ingestion	: If s	swallowed, seek medical advice immediately and show this container or label.
	Ke	ep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/e Potential acute health effect		cts, acute and delayed
Eye contact		Causes serious eye irritation.
Inhalation	:	Harmful if inhaled.
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	ton	<u>15</u>
Eye contact	:	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	:	No specific data.
Skin contact	:	Adverse symptoms may include the following: irritation redness dryness cracking
Ingestion	1	No specific data.
Indication of immediate medical attention and special treatment needed, if necessary Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large		
	1	quantities have been ingested or inhaled.
Specific treatments	1	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. 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.

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Section 5. Fire-fighting measures

Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon 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	ont	ainment 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, ncluding any ncompatibilities	:	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
4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with fatty acids, C18-unsatd., dimers	None.
crystalline silica, respirable powder (>10 microns)	CA British Columbia Provincial (Canada, 6/2022). [Silica, Crystalline - alpha quartz and Cristobalite Respirable] TWA: 0.025 mg/m ³ 8 hours. Form: Respirable CA Ontario Provincial (Canada, 6/2019). [Silica, Crystalline (Quartz/Tripoli)] TWA: 0.1 mg/m ³ 8 hours. Form: Respirable CA Quebec Provincial (Canada, 6/2022). [Silica Crystalline -Quartz]
·	Canada Page: 7/17

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Section 8. Exposure controls/personal protection

	TWAEV: 0.1 mg/m ³ 8 hours. Form:
	Respirable dust.
	CA Alberta Provincial (Canada, 6/2018).
	OEL: 0.025 mg/m ³ 8 hours. Form:
	Respirable particulate
	CA Saskatchewan Provincial (Canada, 7/2013).
	TWA: 0.05 mg/m ³ 8 hours. Form:
	respirable fraction
xylene	CA Alberta Provincial (Canada, 6/2018).
	[Dimethylbenzene (o,m & p isomers)]
	OEL: 651 mg/m ³ 15 minutes.
	OEL: 150 ppm 15 minutes.
	OEL: 434 mg/m ³ 8 hours. OEL: 100 ppm 8 hours.
	CA British Columbia Provincial (Canada,
	6/2022). [Xylene (o, m & p isomers)]
	STEL: 150 ppm 15 minutes.
	TWA: 100 ppm 8 hours.
	CA Quebec Provincial (Canada, 6/2022).
	[Xylene (o-,m-,p- isomers)]
	STEV: 651 mg/m ³ 15 minutes.
	STEV: 150 ppm 15 minutes.
	TWAEV: 434 mg/m³ 8 hours. TWAEV: 100 ppm 8 hours.
	CA Ontario Provincial (Canada, 6/2019).
	[Xylene (o-, m-, p-isomers)]
	STEL: 150 ppm 15 minutes.
	TWA: 100 ppm 8 hours.
	CA Saskatchewan Provincial (Canada,
	7/2013). [Xylene (o, m-, p-isomers)]
	STEL: 150 ppm 15 minutes.
	TWA: 100 ppm 8 hours.
ethylbenzene	CA Alberta Provincial (Canada, 6/2018).
	OEL: 543 mg/m ³ 15 minutes.
	OEL: 125 ppm 15 minutes.
	OEL: 434 mg/m ³ 8 hours.
	OEL: 100 ppm 8 hours.
	CA British Columbia Provincial (Canada, 6/2022).
	TWA: 20 ppm 8 hours.
	CA Ontario Provincial (Canada, 6/2019).
	TWA: 20 ppm 8 hours.
	CA Quebec Provincial (Canada, 6/2022).
	TWAEV: 20 ppm 8 hours.
	CA Saskatchewan Provincial (Canada,
	7/2013).
	STEL: 125 ppm 15 minutes.
	TWA: 100 ppm 8 hours.
titanium dioxide	CA British Columbia Provincial (Canada,
	6/2022). [Titanium dioxide]
	TWA: 10 mg/m³ 8 hours. Form: Total dust TWA: 3 mg/m³ 8 hours. Form: respirable
	fraction
	naolon

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Section 8. Exposure controls/personal protection

	CA Quebec Provincial (Canada, 6/2022).
	TWAEV: 10 mg/m ³ 8 hours. Form: Total
	dust. CA Alberte Previnciel (Conado, 6/2018)
	CA Alberta Provincial (Canada, 6/2018). Skin sensitizer.
	OEL: 10 mg/m ³ 8 hours.
	CA Saskatchewan Provincial (Canada,
	7/2013).
	STEL: 20 mg/m³ 15 minutes.
	TWA: 10 mg/m ³ 8 hours.
	CA Ontario Provincial (Canada, 6/2019).
	TWA: 10 mg/m ³ 8 hours. Form: total dust
barium sulfate	CA British Columbia Provincial (Canada,
	6/2022).
	TWA: 5 mg/m³ 8 hours. Form: Inhalable CA Ontario Provincial (Canada, 6/2019).
	TWA: 5 mg/m ³ 8 hours. Form: Inhalable
	particulate matter.
	CA Alberta Provincial (Canada, 6/2018).
	OEL: 10 mg/m ³ 8 hours.
	CA Saskatchewan Provincial (Canada,
	7/2013).
	STEL: 20 mg/m³ 15 minutes. TWA: 10 mg/m³ 8 hours.
	CA Quebec Provincial (Canada, 6/2022).
	TWAEV: 5 mg/m ³ 8 hours. Form: inhalable
	dust
Talc , not containing asbestiform fibres	CA British Columbia Provincial (Canada,
	6/2022).
	TWA: 2 mg/m ³ 8 hours. Form: Respirable
	CA Ontario Provincial (Canada).
	TWA: 2 ppb Form: Respirable CA Quebec Provincial (Canada, 6/2022).
	TWAEV: 2 mg/m ³ 8 hours. Form:
	Respirable dust.
	CA Alberta Provincial (Canada, 6/2018).
	OEL: 2 mg/m ³ 8 hours. Form: Respirable
	particulate CA Ontario Provincial (Canada, 6/2019).
	TWA: 2 mg/m ³ 8 hours. Form: Respirable
	particulate matter.
	CA Saskatchewan Provincial (Canada,
	7/2013).
	TWA: 2 mg/m ³ 8 hours. Form: respirable fraction
2-methylpropan-1-ol	CA Alberta Provincial (Canada, 6/2018). Skin sensitizer.
	OEL: 152 mg/m ³ 8 hours.
	OEL: 50 ppm 8 hours.
	CA British Columbia Provincial (Canada,
	6/2022).
	TWA: 50 ppm 8 hours.
	CA Ontario Provincial (Canada, 6/2019). TWA: 50 ppm 8 hours.
	CA Quebec Provincial (Canada, 6/2022).
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Section 8. Exposure controls/personal protection

TWAEV: 152 mg/m³ 8 hours. TWAEV: 50 ppm 8 hours. **CA Saskatchewan Provincial (Canada, 7/2013).** STEL: 60 ppm 15 minutes. TWA: 50 ppm 8 hours.

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures	:	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 measur	res	
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	1	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.

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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.
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Section 9. Physical and chemical properties

<u>Appearance</u>			
Physical state		Liquid.	
Color	÷	Various	
Odor	4	Aromatic.	
Odor threshold	1	Not available.	
рН	÷	Not applicable.	
Melting point		Not available.	
Boiling point		>37.78°C (>100°F)	
Flash point	1	Closed cup: 26°C (78.8°F)	
Auto-ignition temperature	1	Not available.	
Decomposition temperature	1	Not available.	
Flammability	:	Not available.	
Lower and upper explosive (flammable) limits	:	Not available.	
Evaporation rate	:	Not available.	
Vapor pressure	:	Not available.	
Vapor density	:	Not available.	
Relative density	:	1.4	
Density(lbs / gal)	:	11.68	
		Media	Result
Solubility(ies)	1	cold water	Not soluble
Partition coefficient: n- octanol/water	:	Not applicable.	
Viscosity	:	Kinematic (40°C (104°F)): >	>21 mm²/s (>21 cSt)
Volatility	:	32% (v/v), 24.541% (w/w)	
% Solid. (w/w)	:	75.459	

Section 10. Stability and reactivity

Conditions to avoid	: When exposed to high temperatures may produce hazardous decomposition products.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Chemical stability	: The product is stable.
Reactivity	: No specific test data related to reactivity available for this product or its ingredients.

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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 sulfur oxides halogenated compounds metal oxide/oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
X ylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/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	-
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	-
barium sulfate	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/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 : There are no data available on the mixture itself.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	

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	
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	

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Section 11. Toxicological information

Product/ingredient name	OSHA	IARC	NTP
vystalline silica, respirable powder (>10 microns)	+	1	Known to be a human carcinogen.
xylene	-	3	-
ethylbenzene	-	2B	-
titanium dioxide	-	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
xylene	Category 3	-	Respiratory tract irritation
Talc , not containing asbestiform fibres	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		Category	Route of exposure	Target organs	
ethylbenzene		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
	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.
Inhalation	: Harmful if inhaled.
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.

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Section 11. Toxicological information

Over-exposure signs/symptoms

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking
Ingestion	: No specific data.

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. 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 eff	<u>cts</u>

Product name SIGMACOVER 456 BASE BLUE 1188

Section 11. Toxicological information

General	: May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	: May cause cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: 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/l)
GMACOVER 456 BASE BLUE 1188	7496.6	3906.5	N/A	20.3	2.3
xylene	4300	1700	N/A	11	1.5
ethylbenzene	3500	17800	N/A	17.8	1.5
barium sulfate	N/A	2500	N/A	N/A	N/A
2-methylpropan-1-ol	2830	2460	N/A	24.6	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - <i>Ceriodaphnia dubia</i>	-
titanium dioxide	Acute LC50 >100 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours

Persistence and degradability

Product/ingredient name	Test	Result		Dose	Inoculum
e thylbenzene	-	79 % - Readily - 10 c	days	-	-
Product/ingredient name	Aquatic half-life		Photolysis	5	Biodegradability
xylene ethylbenzene			-		Readily Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
₩jlene	3.12	7.4 to 18.5	Low
ethylbenzene	3.6	79.43	Low
2-methylpropan-1-ol	1	-	Low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Canada Page: 15/17

Product name SIGMACOVER 456 BASE BLUE 1188

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

Section 14. Transport information

	TDG	IMDG	ΙΑΤΑ
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class (es)	3	3	3
Packing group	III		III
Environmental hazards	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	 (4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro- 2,3-epoxypropane, reaction products with fatty acids, C18-unsatd., dimers) 	 (4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro- 2,3-epoxypropane, reaction products with fatty acids, C18-unsatd., dimers) 	Not applicable.

Additional information

TDG	: The marine pollutant mark is not required when transported by road or rail.
IMDG	: The marine pollutant mark is not required when transported in sizes of \leq 5 L or \leq 5 kg.
ΙΑΤΑ	: 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.

Date of issue 20 December 2023 Version 10.02

Product name SIGMACOVER 456 BASE BLUE 1188

Section 14. Transport information

Transport in bulk according : Not applicable. to IMO instruments

Proof of classification
statement: Product classified as per the following sections of the Transportation of Dangerous
Goods Regulations: 2.18-2.19 (Class 3), 2.7 (Marine pollutant mark).

Section 15. Regulatory information

National Inventory List

Canada inventory (DSL)

: At least one component is not listed.

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 issue/Date of revision	20 December 2023		
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.

<u>Disclaimer</u>

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.