SAFETY DATA SHEET



Date of issue/Date of revision14 October 2024Version 19

Section 1. Identification					
Product name	: SIGMACOVER 256/435/456/522 K HARDENER				
Product code	: 00223298				
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 <u>Emergency telephone</u> number	 PPG Industries, Inc. One PPG Place Pittsburgh, PA 15272 (412) 434-4515 (U.S.) (514) 645-1320 (Canada) 				
<u>IIUIIDEI</u>	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 CORROSION - Category 1C SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 23.5% (oral), 23.5% (dermal), 47.6% (inhalation)
GHS label elements	

Product name SIGMACOVER 256/435/456/522 K HARDENER

Section 2. Hazards identification

Hazard pictograms			
Signal word	: Danger		
Hazard statements	 Flammable liquid and vapor. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Harmful if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of causing cancer. May cause 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. 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. Immediately call a POISO CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or do Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediated contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER doctor. If skin irritation or rash occurs: Get medical advice or attention. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rins Immediately call a POISON CENTER or doctor. 			
Storage	: Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.		
Disposal	 Dispose of contents and container in accordance with all local, regional, national and international regulations. 		
Supplemental label elements	: Do not taste or swallow. 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	: Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation.		

Product name SIGMACOVER 256/435/456/522 K HARDENER

Section 3. Composition/information on ingredients

- Substance/mixture
- : Mixture

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Product name
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: SIGMACOVER 256/435/456/522 K HARDENER

Ingredient name	%	CAS number
xylene	≥20 - ≤25	1330-20-7
2-methylpropan-1-ol	≥20 - ≤24	78-83-1
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil	≥10 - ≤19	68082-29-1
fatty acids and triethylenetetramine		
ethylbenzene	≥1.0 - ≤4.5	100-41-4
2,4,6-tris(dimethylaminomethyl)phenol	≥1.0 - ≤4.5	90-72-2
3,6-diazaoctanethylenediamin	≥0.10 - ≤2.1	112-24-3

SUB codes represent substances without registered CAS Numbers.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

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

Section 4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Description of necessary first aid measures

Eye contact	: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
Inhalation	: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Skin contact	: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Ingestion	: If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health	<u>n effects</u>				
Eye contact	: Causes serious eye damage.				
Inhalation	: Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.				
Skin contact	: Causes severe burns. Defatting to the skin. May cause an allergic skin reaction.				
Ingestion	: Corrosive to the digestive tract. Causes burns. Can cause central nervous system (CNS) depression.				
Over-exposure signs/					
Eye contact	: Adverse symptoms may include the following: pain watering redness				
	United States Page: 3/17				

United States

Page: 4/17

Product name SIGMACOVER 256/435/456/522 K HARDENER

Section 4. First aid measures

Inhalation	: Adverse symptoms may include the following: respiratory tract irritation
	coughing
	nausea or vomiting
	headache
	drowsiness/fatigue
	dizziness/vertigo
	unconsciousness
Skin contact	: Adverse symptoms may include the following:
	pain or irritation
	redness
	dryness
	cracking
	blistering may occur
Ingestion	: Adverse symptoms may include the following:
	stomach pains
Indication of immediate me	dical 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.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon oxides nitrogen 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.

Product name SIGMACOVER 256/435/456/522 K HARDENER

Section 5. Fire-fighting measures

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, protec	tive equipment and emergency procedures			
For non-emergency personnel For emergency responders	 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. 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	ions : 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			

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.

information and Section 13 for waste disposal.

Product name SIGMACOVER 256/435/456/522 K HARDENER

Section 7. Handling and storage

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		
xylene	ACGIH TLV (United States, 7/2023) [p-		
	xylene and mixtures containing p-xylene]		
	Ototoxicant.		
	TWA 8 hours: 20 ppm.		
	OSHA PEL (United States, 5/2018) [Xylenes]		
	TWA 8 hours: 100 ppm.		
	TWA 8 hours: 435 mg/m ³ .		
2-methylpropan-1-ol	ACGIH TLV (United States, 7/2023)		
	TWA 8 hours: 50 ppm.		
	TWA 8 hours: 152 mg/m ³ .		
	OSHA PEL (United States, 5/2018)		
	TWA 8 hours: 100 ppm.		
	TWA 8 hours: 300 mg/m ³ .		
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall- oil fatty acids and triethylenetetramine	None.		
ethylbenzene	ACGIH TLV (United States, 7/2023)		
	Ototoxicant.		
	TWA 8 hours: 20 ppm.		
	OSHA PEL (United States, 5/2018)		
	TWA 8 hours: 100 ppm.		
	TWA 8 hours: 435 mg/m ³ .		
2,4,6-tris(dimethylaminomethyl)phenol	None.		
3,6-diazaoctanethylenediamin	IPEL (-) Absorbed through skin.		
	TWA: 1 ppm.		

Key to abbreviations

United States Page: 6/17

Product name SIGMACOVER 256/435/456/522 K HARDENER

Section 8. Exposure controls/personal protection

А	=	Acceptable Maximum Pea	ık		S	=	Potential skin absorption
ACGIH	=	American Conference of G	Go	/ernmental Industrial Hygienists.	SR	=	Respiratory sensitization
С	=	Ceiling Limit			SS	=	Skin sensitization
F	=	Fume			STEL	=	Short term Exposure limit values
IPEL	=	Internal Permissible Expos	sui	e Limit	TD	=	Total dust
OSHA	=	Occupational Safety and H	lea	alth Administration.	TLV	=	Threshold Limit Value
R	=	Respirable			TWA	=	Time Weighted Average
Z	=	OSHA 29 CFR 1910.1200	S	ubpart Z - Toxic and Hazardous Substances			
Consult	: Ic	cal authorities for a	cc	eptable exposure limits.			
Recom proced		-	:	Reference should be made to appropria guidance documents for methods for th also be required.			
Approp controls		te engineering	:	Use only with adequate ventilation. Use other engineering controls to keep work recommended or statutory limits. The vapor or dust concentrations below any ventilation equipment.	er expo engineer	su rin	re to airborne contaminants below any g controls also need to keep gas,

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

Individual protection measures

Hygiene measures		Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: (Chemical splash goggles and face shield.
Skin protection		
Hand protection	v r c r ç	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	: r	nitrile neoprene
Body protection Other skin protection	۲ ۲ ۲	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. Appropriate footwear and any additional skin protection measures should be selected
	k	based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Product name SIGMACOVER 256/435/456/522 K HARDENER

Section 8. Exposure controls/personal protection

Respiratory protection :	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. The respiratory protection shall be in accordance to 29 CFR 1910.134.
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Section 9. Physical and chemical properties

<u>Appearance</u>					
Physical state	: Liquid.				
Color	: Not available.				
Odor	: Aromatic.				
Odor threshold	Not available.				
рН	Not applicable.				
Melting point	: Not available.				
Boiling point	: >37.78°C (>100°F)				
Flash point	: Closed cup: 26°C (78.8°F)				
Auto-ignition temperature	: Not available.				
Decomposition temperature	: Not available.				
Flammability	: Not available.				
Lower and upper explosive (flammable) limits	: Not available.				
Evaporation rate	: Not available.				
Vapor pressure	: Not available.				
Vapor density	: Not available.				
Relative density	: 0.93				
Density(lbs / gal)	: 7.76				
	Media Result				
Solubility(ies)	Not soluble				
Partition coefficient: n- octanol/water	: Not applicable.				
Viscosity	 ∫ynamic (room temperature): Not available. Kinematic (room temperature): >400 mm²/s (>400 cSt) Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt) 				
% Solid. (w/w)	: 48.325				

Section 10. Stability and reactivity

	United States Page: 8	8/17
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	S.

Product name SIGMACOVER 256/435/456/522 K HARDENER

Section 10. Stability and reactivity

Conditions to avoid	: When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.
Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
Hazardous decomposition products	: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 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	-
Fatty acids, C18-unsatd.,	LD50 Dermal	Rat	>2000 mg/kg	-
dimers, oligomeric reaction				
products with tall-oil fatty				
acids and				
triethylenetetramine				
	LD50 Oral	Rat	>2000 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	-
2,4,6-tris	LD50 Dermal	Rat	1280 mg/kg	-
(dimethylaminomethyl)phenol				
	LD50 Oral	Rat	1200 mg/kg	-
3,6-diazaoctanethylenediamin	LD50 Dermal	Rabbit	1465 mg/kg	-
-	LD50 Oral	Rat	1716 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	-	
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Eyes - Severe irritant	Rabbit	-	-	-	
	Skin - Irritant	Human	-	-	-	

Eyes

: There are no data available on the mixture itself.

: There are no data available on the mixture itself.

United States Page: 9/17

Date of issue 14 October 2024 Version 19

Product name SIGMACOVER 256/435/456/522 K HARDENER

Section 11. Toxicological information

Respiratory

: There are no data available on the mixture itself.

Sensitization

Product/ingredient name	Route of exposure		Species		Result		
Atty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine 3,6-diazaoctanethylenediamin			louse uinea pi			Sensitizing	
	ontin		aniea pi	9		eenenizing	
Conclusion/Summary Skin	• There are	no data a	wailahle	on the mixture	itself		
Respiratory				on the mixture			
Mutagenicity					noon.		
	There are	no data a	available	on the mixture	itself.		
Carcinogenicity		no data c			noom		
	: There are	no data a	available	on the mixture	itself.		
Classification							
Product/ingredient name	OSHA	IARC	NTP				
<mark>xy</mark> lene ethylbenzene	- 3 - - 2B -						
Carcinogen Classification	code:						
IARC: 1, 2A, 2B, 3, 4 NTP: Known to be OSHA: + Not listed/not regul	a human carc	inogen; Rea	isonably a	nticipated to be a	human c	arcinogen	
Reproductive toxicity							
Conclusion/Summary :	There are	no data a	vailable	on the mixture	itself.		
Teratogenicity							
Conclusion/Summary :	There are	no data a	vailable	on the mixture	itself.		
Specific target organ toxicity	(single exp	<u>osure)</u>					
Name				Category		ute of oosure	Target organs
xylene				Category 3	-		Respiratory tract irritation
2-methylpropan-1-ol				Category 3	-		Respiratory tract
				Category 3			Narcotic effects

Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
ethylbenzene	Category 2	-	hearing organs

United St	tates Page: 10/17

Product name SIGMACOVER 256/435/456/522 K HARDENER

Section 11. Toxicological information

Target organs

: Contains material which causes damage to the following organs: brain. Contains material which may cause damage to the following organs: blood, kidneys,

lungs, the nervous system, liver, upper respiratory tract, 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 damage.
Inhalation	: Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
Skin contact	: Causes severe burns. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: Corrosive to the digestive tract. Causes burns. Can cause central nervous system (CNS) depression.

Over-exposure signs/symptoms

Eye contact	: Adverse symptoms may include the following:
	pain
	watering
	redness
Inhalation	: Adverse symptoms may include the following:
	respiratory tract irritation
	coughing
	nausea or vomiting
	headache
	drowsiness/fatigue
	dizziness/vertigo unconsciousness
Skin contact	
Skin contact	: Adverse symptoms may include the following:
	pain or irritation redness
	dryness
	cracking
	blistering may occur
Ingestion	: Adverse symptoms may include the following:
ingestion	stomach pains
Delayed and immediate of	fects and also chronic effects from short and long term exposure
Conclusion/Summary	: There are no data available on the mixture itself. 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.

Product name SIGMACOVER 256/435/456/522 K HARDENER

Section 11. Toxicological information

	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. Exposure to amine vapor has been reported to cause transient corneal edema described as blue haze, halo effect, foggy or blurred vision for several hours. This condition is typically temporary and does not cause permanent visual effects. When the proper eye protection specified in Section 8 is worn, exposure is significantly reduced and the condition has not been observed.		
<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 eff	e <u>cts</u>		
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	: Suspected of causing 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 256/435/456/522 K HARDENER xylene 2-methylpropan-1-ol Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	2853.5 4300 2830 2500	2153.1 1700 2460 2500	N/A N/A N/A N/A	21.0 11 24.6 N/A	2.7 1.5 N/A N/A
ethylbenzene 2,4,6-tris(dimethylaminomethyl)phenol 3,6-diazaoctanethylenediamin	3500 1200 1716	17800 1280 1465	N/A N/A N/A	17.8 N/A N/A	1.5 N/A N/A

Product name SIGMACOVER 256/435/456/522 K HARDENER

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	EC10 1.78 mg/l	Algae	72 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water Chronic NOEC 1 mg/l Fresh water	Daphnia Daphnia - <i>Ceriodaphnia dubia</i>	48 hours -
2,4,6-tris (dimethylaminomethyl)phenol	Acute LC50 >100 mg/l	Daphnia	48 hours
	Acute LC50 >100 mg/l	Fish	96 hours

Persistence and degradability

Test	Result		Dose		Inoculum
- OECD 301D Ready Biodegradability - Closed Bottle Test			-		-
Aquatic half-life		Photolysis		Biodeg	radability
		-		Not read	
	- OECD 301D Ready Biodegradability - Closed Bottle Test	- 79 % - Rea OECD 301D Ready Biodegradability - Closed Bottle Test	- 79 % - Readily - 10 days OECD 301D Ready Biodegradability - Closed Bottle Test	- 79 % - Readily - 10 days OECD 301D Ready Biodegradability - Closed Bottle Test	- 79 % - Readily - 10 days OECD 301D Ready Biodegradability - Closed Bottle Test

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
X lene	3.12	7.4 to 18.5	Low
2-methylpropan-1-ol	1	-	Low
ethylbenzene	3.6	79.43	Low
2,4,6-tris	0.219	-	Low
(dimethylaminomethyl)phenol			
3,6-diazaoctanethylenediamin	-1.66 to -1.4	-	Low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

United States Page: 13/17

Product name SIGMACOVER 256/435/456/522 K HARDENER

Section 12. Ecological information

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

	DOT	IMDG	ΙΑΤΑ		
UN number	UN3469	UN3469	UN3469		
UN proper shipping name	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE		
Transport hazard class (es)	3 (8)	3 (8)	3 (8)		
Packing group	111	111			
Environmental hazards	No.	No.	No.		
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.		
Product RQ (lbs)	404.63	Not applicable.	Not applicable.		
RQ substances	(xylene, ISOBUTYL ALCOHOL)	Not applicable.	Not applicable.		

14. Transport information

Additional i	nformation
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.
ΙΑΤΑ	: 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.

United States Page: 14/17

Product name SIGMACOVER 256/435/456/522 K HARDENER

14. Transport information

Transport in bulk according : Not applicable. to IMO instruments

Section 15. Regulatory information

United States

United States inventory (TSCA 8b) : All components are active or exempted.

SARA 302/304

SARA 304 RQ : Not applicable.

Composition/information on ingredients

No products were found.

SARA 311/312

Classification	 FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION - Category 1C SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 HNOC - Corrosive to digestive tract
	HNOC - Corrosive to digestive tract HNOC - Defatting irritant

Composition/information on ingredients

Name	%	Classification
x ylene	≥20 - ≤25	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
2-methylpropan-1-ol	≥20 - ≤24	FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 HNOC - Defatting irritant
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	≥10 - ≤19	SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1A
		United States Page: 15/17

Product name SIGMACOVER 256/435/456/522 K HARDENER

Section 15. Regulatory information

ethylbenzene	≥1.0 - ≤4.5	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
2,4,6-tris(dimethylaminomethyl)	≥1.0 - ≤4.5	ACUTE TOXICITY (oral) - Category 4
phenol		ACUTE TOXICITY (dermal) - Category 4
		SKIN CORROSION - Category 1C
		SERIOUS EYE DAMAGE - Category 1
3,6-diazaoctanethylenediamin	≥0.10 - ≤2.1	ACUTE TOXICITY (oral) - Category 4
		ACUTE TOXICITY (dermal) - Category 4
		SKIN CORROSION - Category 1
		SERIOUS EYE DAMAGE - Category 1
		SKIN SENSITIZATION - Category 1B
		HNOC - Corrosive to digestive tract

SARA 313

Supplier notification	 Chemical name ethylbenzene 	<u>CAS number</u> 1330-20-7 100-41-4	<u>Concentration</u> 10 - 30 1 - 5

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

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

California Prop. 65

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

Section 16. Other information

Please refer to Section 2 of this document for GHS hazard classifications. The customer is responsible for determining the PPE code for this material.

Date of previous issue	4/21/2022	
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, 1 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.		

Indicates information that has changed from previously issued version.

Product name SIGMACOVER 256/435/456/522 K HARDENER

Section 16. Other information

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.