SAFETY DATA SHEET



Date of issue/Date of revision 3 September 2024 Version 3

Section 1. Identification		
Product name	: SIGMACOVER 435 HARDENER	
Product code	: 00427560	
Other means of identification	: Not available.	
Product type	: Liquid.	
Relevant identified uses o	f the substance or mixture and uses advised against	
Product use	: Professional applications, Used by spraying.	
Use of the substance/ mixture	: 🖉oating.; Hardener.	
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 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: 43.5% (oral), 43.5% (dermal), 47% (inhalation)
GHS label elements	

Product name SIGMACOVER 435 HARDENER

Section 2. Hazards identification

Hazard pictograms	
Signal word	: Danger
Hazard statements	 Flammable liquid and vapor. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. 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	2
Prevention	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.
Response	: IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
Storage	: Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	: 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.

Section 3. Composition/information on ingredients

- Substance/mixture Product name
- : Mixture

: SIGMACOVER 435 HARDENER

Ingredient name	%	CAS number
∕∠methylpropan-1-ol	≥20 - ≤27	78-83-1
xylene	≥20 - ≤24	1330-20-7
Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	≥20 - ≤50	68410-23-1
ethylbenzene	≥1.0 - ≤4.6	100-41-4
2,4,6-tris(dimethylaminomethyl)phenol	≥0.10 - ≤2.6	90-72-2
3,6-diazaoctanethylenediamin	≤1.0	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>1 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 skin irritation. 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.
<u>Over-exposure signs/</u>	
Eye contact	: Adverse symptoms may include the following: pain watering redness
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Section 4. First aid measures

Inhalation	: Adverse symptoms may include the following: 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 med	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.	

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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	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.	
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".	
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).	
Methods and materials for 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.	

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.

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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
2-methylpropan-1-ol	ACGIH TLV (United States, 7/2023).
	TWA: 152 mg/m ³ 8 hours.
	TWA: 50 ppm 8 hours.
	OSHA PEL (United States, 5/2018).
	TWA: 300 mg/m ³ 8 hours.
	TWA: 100 ppm 8 hours.
kylene	OSHA PEL (United States, 5/2018).
	[Xylenes]
	TWA: 435 mg/m³ 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.
Fatty acids, C18-unsatd., dimers, reaction products with	None.
polyethylenepolyamines	
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.
	TWA: 100 ppm 8 hours.
2,4,6-tris(dimethylaminomethyl)phenol	None.
3,6-diazaoctanethylenediamin	IPEL (-). Absorbed through skin.
-,- ···,·····	TWA: 1 ppm

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Section 8. Exposure controls/personal protection

	Key to abbreviations	
C = Ceiling Limit F = Fume IPEL = Internal Permissible Exp OSHA = Occupational Safety and R = Respirable	eak Governmental Industrial Hygienists. osure Limit Health Administration. 10 Subpart Z - Toxic and Hazardous Substances	S= Potential skin absorptionSR= Respiratory sensitizationSS= Skin sensitizationSTEL= Short term Exposure limit valuesTD= Total dustTLV= Threshold Limit ValueTWA= Time Weighted Average
Recommended monitoring	: Reference should be made to appropria	ate monitoring standards. Reference to national
procedures	guidance documents for methods for th also be required.	e determination of hazardous substances will
Appropriate engineering controls	other engineering controls to keep work recommended or statutory limits. The	e process enclosures, local exhaust ventilation or ser exposure to airborne contaminants below any engineering controls also need to keep gas, lower explosive limits. Use explosion-proof
Environmental exposure controls	: Emissions from ventilation or work proc they comply with the requirements of er	ess equipment should be checked to ensure nvironmental protection legislation. In some eering modifications to the process equipment o acceptable levels.
Individual protection measur	<u>es</u>	
Hygiene measures	eating, smoking and using the lavatory Appropriate techniques should be used Contaminated work clothing should not	to remove potentially contaminated clothing. be allowed out of the workplace. Wash Ensure that eyewash stations and safety
Eye/face protection	: Chemical splash goggles and face shie	ld.
Skin protection		
Hand protection	worn at all times when handling chemic necessary. Considering the parameters during use that the gloves are still retain noted that the time to breakthrough for	complying with an approved standard should be al products if a risk assessment indicates this is s specified by the glove manufacturer, check hing their protective properties. It should be any glove material may be different for different xtures, consisting of several substances, the accurately estimated.
Gloves	: butyl rubber	
Body protection	performed and the risks involved and sl handling this product. When there is a	body should be selected based on the task being hould be approved by a specialist before risk of ignition from static electricity, wear anti- est protection from static discharges, clothing s and gloves.
Other skin protection	: Appropriate footwear and any additiona	l skin protection measures should be selected I the risks involved and should be approved by a

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Section 8. Exposure controls/personal protection

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

<u>Appearance</u>					
Physical state	:	Liquid.			
Color	1	Not available.			
Odor	:	Aromatic. [Strong]			
Odor threshold	:	Not available.			
рН	1	Not applicable.			
Melting point	1	Not available.			
Boiling point	1	>37.78°C (>100°F)			
Flash point	1	Closed cup: 28°C (82.4°F)			
Auto-ignition temperature	1	Not available.			
Decomposition temperature	1	Not available.			
Flammability	:	Not available.			
Lower and upper explosive (flammable) limits	1	Not available.			
Evaporation rate	:	Not available.			
Vapor pressure	:	Not available.			
Vapor density	:	Not available.			
Relative density	:	0.95			
Density(lbs / gal)	:	7.93			
		Media	Result		
Solubility(ies)	÷	cold water	Not soluble		
Partition coefficient: n- octanol/water	:	Not applicable.			
Viscosity	1	Kinematic (room temperature): >400 mm²/s (>400 cSt) Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt)			
Volatility	:	61% (v/v), 53% (w/w)			
% Solid. (w/w)	:	47			

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

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
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	-
xylene	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	-
2,4,6-tris	LD50 Dermal	Rat	1280 mg/kg	-
(dimethylaminomethyl)phenol				
	LD50 Oral	Rat	1200 mg/kg	-
3,6-diazaoctanethylenediamir	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
kylene	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	

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Section 11. Toxicological information

Product/ingredient name	Route of exposure	S	pecies	Result	
Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	skin		louse	Sensitizing	
3,6-diazaoctanethylenediamin	skin	G	Guinea pig	Sensitizing	
Conclusion/Summary					
Skin	: There are	e no data a	available on the mixture	e itself.	
Respiratory	: There are	e no data a	available on the mixture	e itself.	
<u>Mutagenicity</u>					
Conclusion/Summary	: There are	e no data a	available on the mixture	e itself.	
Carcinogenicity					
Conclusion/Summary	: There are	e no data a	available on the mixture	e itself.	
Classification					
Product/ingredient name	OSHA	IARC	NTP		
x ylene	-	3	-		
ethylbenzene	-	2B	-		
Carcinogen Classification	code:				
IARC: 1, 2A, 2B, 3, NTP: Known to be OSHA: + Not listed/not regu	a human carc	inogen; Rea	asonably anticipated to be a	a human carcinogen	
Reproductive toxicity					
Conclusion/Summary	There are	no data a	vailable on the mixture	itself.	
<u>Feratogenicity</u>					
· · · · · · · · · · · · · · · · · · ·			vailable on the mixture	itself.	
Specific target organ toxicity	(single exp	<u>osure)</u>			
Name			Category	Route of exposure	Target organs
2-methylpropan-1-ol			Category 3	-	Respiratory tract irritation
xylene			Category 3 Category 3	-	Narcotic effects Respiratory tract irritation
Specific target organ toxicity	(repeated e	xposure)	•	· ·	· · ·
Name			Category	Route of	Target organs

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

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.

Section 11. Toxicological information

Aspiration hazard

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

Information on the likely routes of exposure

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Potential acute health effec	<u>ts</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 skin irritation. 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/symp	
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	: 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 effect	ts 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
conclusion/summary	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	

Section 11. Toxicological information

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	ects
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 435 HARDENER	3079.4	2115.7	N/A	22.9	2.9
2-methylpropan-1-ol	2830	2460	N/A	24.6	N/A
xylene	4300	1700	N/A	11	1.5
ethylbenzene	3500	17800	N/A	17.8	1.5
2,4,6-tris(dimethylaminomethyl)phenol	1200	1280	N/A	N/A	N/A
3,6-diazaoctanethylenediamin	1716	1465	N/A	N/A	N/A

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, reaction products with polyethylenepolyamines	EC50 4.11 mg/l Fresh water	Algae	72 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
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

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Section 12. Ecological information

Product/ingredient name	Test	Result		Dose		Inoculum
Atty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines ethylbenzene 2,4,6-tris (dimethylaminomethyl)phenol	- OECD 301D Ready Biodegradability - Closed Bottle Test		ays dily - 10 days eadily - 28 days	-		-
Product/ingredient name	Aquatic half-life		Photolysis		Biodeg	radability
Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines ethylbenzene 2,4,6-tris (dimethylaminomethyl)phenol					Readily Not read Readily Not read	dily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
-methylpropan-1-ol	1	-	Low
xylene	3.12	7.4 to 18.5	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 : Not available. coefficient (Koc)

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

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Section 13. Disposal considerations

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with soil, waterways, drains and sewers.
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Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

	DOT	IMDG	ΙΑΤΑ	
UN number	UN1263	UN1263	UN1263	
UN proper shipping name	PAINT	PAINT	PAINT	
Transport hazard class (es)	3	3	3	
Packing group	III	III	Ш	
Environmental hazards	No.	No.	No.	
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	
Product RQ (lbs)	435.73	Not applicable.	Not applicable.	
RQ substances	(xylene, ISOBUTYL ALCOHOL)	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	: This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5.
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.

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

Product name SIGMACOVER 435 HARDENER

Section 15. Regulatory information

Classification	 FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 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 - Defatting irritant
	HNOC - Defatting irritant

Composition/information on ingredients

Name	%	Classification
-methylpropan-1-ol	≥20 - ≤27	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
xylene	≥20 - ≤24	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
Fatty acids, C18-unsatd., dimers,	≥20 - ≤50	SKIN IRRITATION - Category 2
reaction products with		SERIOUS EYE DAMAGE - Category 1
polyethylenepolyamines		SKIN SENSITIZATION - Category 1A
ethylbenzene	≥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
2,4,6-tris(dimethylaminomethyl)	≥0.10 - ≤2.6	ACUTE TOXICITY (oral) - Category 4
phenol		ACUTE TOXICITY (dermal) - Category 4
F		SKIN CORROSION - Category 1C
		SERIOUS EYE DAMAGE - Category 1
3,6-diazaoctanethylenediamin	≤1.0	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

United States Page: 15/16

Supplier notification

Product name SIGMACOVER 435 HARDENER

Section 15. Regulatory information

<u>SARA 313</u>

	Chemical name
1	xylene
	ethylbenzene

CAS number 0 1330-20-7 100-41-4

Concentration 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

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 Flamma Date of previous issue Organization that prepared the SDS	bility : 3 Instability : 0 : 5/30/2021 : EHS
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) 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.