SAFETY DATA SHEET



Conforms to Official Mexican Standard NOM-018-STPS-2015

Date of revision 28 August 2024

Version 7

Date of issue 28 August 2024

SECTION 1: Identification of the substance/mixture and of the company/undertaking

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Product name	: SIGMACOVER 280 HARDENER
Product code	: 00142014
Other means of identification	: Not applicable.
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	: 🗭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

Classification of the substance or mixture	 FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (oral) - Category 5 ACUTE TOXICITY (dermal) - Category 5 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - 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)
CIIC label alamanta	

GHS label elements

Product code 00142014 Product name SIGMACOVER 280 HARDENER

FIGULE Halle SIGMACOVER 280 HARDENER

Hazard pictograms

SECTION 2: Hazards identification

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Signal word	: Danger		
Hazard statements	 H226 - Flammable liquid and vapor. H303 + H313 - May be harmful if swallowed or in contact with skin. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H318 - Causes serious eye damage. H332 - Harmful if inhaled. H335 - May cause respiratory irritation. H336 - May cause drowsiness or dizziness. H351 - Suspected of causing cancer. H373 - May cause damage to organs through prolonged or repeated exposure. (hearing organs) 		
Precautionary statements			
Prevention	 P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P280 - Wear protective gloves, protective clothing and eye or face protection. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P271 - Use only outdoors or in a well-ventilated area. P260 - Do not breathe vapor. P264 - Wash thoroughly after handling. P272 - Contaminated work clothing should not be allowed out of the workplace. 		
Response	 P308 + P313 - IF exposed or concerned: Get medical advice or attention. P304 + P340, P312 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P302 + P312, P352 - IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. Wash with plenty of water. P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention. P305 + P351 + P338, P310 - 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	 ▶ 405 - Store locked up. ▶ 403 + ₽233 - Store in a well-ventilated place. Keep container tightly closed. 		
Disposal	: P 501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.		
Other hazards which do not result in classification	: Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation. 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. Emits toxic fumes when heated.		
See toxicological information (Section 11)			

SECTION 3: Composition/information on ingredients

Substance/mixture
Product name

: Mixture

- Other means of identification
- : SIGMACOVER 280 HARDENER
- : Not applicable.

Ingredient name	%	CAS number
 methylpropan-1-ol xylene Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines ethylbenzene 2,4,6-tris(dimethylaminomethyl)phenol 3,6-diazaoctanethylenediamin 	 ≥20 - ≤27 ≥20 - ≤24 ≥20 - ≤50 ≥1.0 - ≤4.6 ≥0.10 - ≤2.6 ≤1.0 	78-83-1 1330-20-7 68410-23-1 100-41-4 90-72-2 112-24-3

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

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 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	: May be harmful in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.		
Ingestion	: May be harmful if swallowed. Corrosive to the digestive tract. Causes burns. Can cause central nervous system (CNS) depression.		

Over-exposure signs/symptoms

See toxicological information (Section 11)

Indication of immediate medical 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.

Product name SIGMACOVER 280 HARDENER

SECTION 4: First aid measures

 Protection of first-aiders No action shall be taken involving any personal risk or without suitable training. I 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.

SECTION 5: Firefighting 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.
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.
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, protect	tiv	e 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	nta	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.

SECTION 6: Accidental release measures

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 noncombustible, 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.
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

IPEL

Occupational exposure limits

Ingredient name		Exposure limits
₽-methylpropan-1-ol		NOM-010-STPS-2014 (Mexico, 4/2016).
		TWA: 50 ppm 8 hours.
xylene		NOM-010-STPS-2014 (Mexico, 4/2016).
		[Xileno, mezcla]
		STEL: 150 ppm 15 minutes.
		TWA: 100 ppm 8 hours.
Fatty acids, C18-unsatd., dimers, reaction products with		None.
polyethylenepolyamines		
ethylbenzene		NOM-010-STPS-2014 (Mexico, 4/2016).
		TWA: 20 ppm 8 hours.
2,4,6-tris(dimethylaminomethyl)phenol		None.
3,6-diazaoctanethylenediamin		IPEL (-). Absorbed through skin.
-		TWA: 1 ppm
Key to abbreviations		
C = Ceiling Limit	STEL	 Short term exposure limit

TLV

= Threshold Limit Value TWA = Time Weighted Average

Consult local authorities for acceptable exposure limits.

= Internal Permissible Exposure Limit

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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 measure	<u>es</u>	
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	11	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.

SECTION 8: Exposure controls/personal protection

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

SECTION 9: Physical and chemical properties

<u>Appearance</u>						
Physical state	1	Liquid.				
Color	1	Not available.				
Odor	:	Amine-like.				
Odor threshold	1	Not available.				
Molecular weight	1	Not applicable.				
рН	÷	Not applicable.				
Melting point	1	Not available.				
Boiling point	1	>37.78°C (>100°F)				
Flash point	1	Closed cup: 25°C (77°F)				
Auto-ignition temperature	:	430°C (806°F)				
Decomposition temperature	1	Not available.				
Flammability	4	Not available.				
Lower and upper explosive (flammable) limits	1	Not available.				
Evaporation rate	1	Not available.				
Vapor pressure	1	Not available.				
Vapor density	1	Not available.				
Relative density	:	0.95				
Density(lbs / gal)	:	7.93				
		Media	Result			
Solubility(ies)	1	old water	Not soluble			
Solubility in water	:	Not available.				
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				
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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
-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-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
kylene	Skin - Moderate irritant	Rabbit		24 hours 500 mg	-

<u>Conclusion/Summary</u> Skin Eyes

: There are no data available on the mixture itself.

: There are no data available on the mixture itself.

Respiratory

: There are no data available on the mixture itself.

Sensitization

Mexico Page: 8/14

Product name SIGMACOVER 280 HARDENER

SECTION 11: Toxicological information

Product/ingredient name	Route of exposure	:	Species	Result			
✓atty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	skin	1	Mouse	Sensitizing			
3,6-diazaoctanethylenediamin	skin		Guinea pig	Sensitizing			
Conclusion/Summary							
Skin	: There are	e no dat	ta available on the mixture itse	lf.			
Respiratory	: There are no data available on the mixture itself.						
Mutagenicity							
Conclusion/Summary	: There are	: There are no data available on the mixture itself.					
Carcinogenicity							
Conclusion/Summary	: There are	e no dat	ta available on the mixture itse	lf.			
Classification							
Product/ingredient name	OSHA	IARC	NTP				
x ylene	-	3	-				
ethylbenzene	-	2B	-				
Carcinogen Classification	n 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
2-methylpropan-1-ol	Category 3	-	Respiratory tract irritation
xylene	Category 3 Category 3		Narcotic effects Respiratory tract
Aylone			irritation

Specific target organ toxicity (repeated exposure)

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.

Aspiration hazard

SECTION 11: Toxicological information

Name	Result
xylene	ASPIRATION HAZARD - Category 2 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	1	May be harmful in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	1	May be harmful if swallowed. Corrosive to the digestive tract. Causes burns. Can cause central nervous system (CNS) depression.
Over-exposure signs/sympto	m	<u>5</u>
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	1	Adverse symptoms may include the following: 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 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.

SECTION 11: Toxicological information

Potential delayed effects	:	There are no data available on the mixture itself.
Long term exposure		
Potential immediate effects	:	There are no data available on the mixture itself.
Potential delayed effects	:	There are no data available on the mixture itself.
Potential chronic health effe	cts	
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	1	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/l)
SIGMACOVER 280 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 Fatty acids, C18-unsatd., dimers, reaction products	Acute EC50 1100 mg/l EC50 4.11 mg/l Fresh water	Daphnia Algae	48 hours 72 hours
with polyethylenepolyamines	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
ethylbenzene	Chronic NOEC 1 mg/l Fresh water	Daphnia - <i>Ceriodaphnia dubia</i>	-
2,4,6-tris	Acute LC50 >100 mg/l	Daphnia	48 hours
(dimethylaminomethyl)phenol	Acute LC50 >100 mg/l	Fish	96 hours

Persistence and degradability

Product name SIGMACOVER 280 HARDENER

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	15 % - 28 days 79 % - Readily - 10 4 % - Not readily - 2		-	-
Product/ingredient name	Aquatic half-life		Photolysis	5	Biodegradability
Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines ethylbenzene 2,4,6-tris (dimethylaminomethyl)phenol	-		- - -		Readily Not readily Readily Not readily

Bioaccumulative potential

Product/ingredient name	LogPow	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 coefficient (Koc)

: Not available.

Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

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

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Product name SIGMACOVER 280 HARDENER

SECTION 13: Disposal considerations

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

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	Mexico Classification	IMDG	ΙΑΤΑ
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL
Transport hazard class(es)	3	3	3
Packing group	III	III	III
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.
Product RQ (lbs)	Not applicable.	Not applicable.	Not applicable.
RQ substances	Not applicable.	Not applicable.	Not applicable.

Additional information

- Mexico : None identified.
- IMDG : This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5.

IATA : None identified.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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Transport in bulk according : Not applicable. to IMO instruments

SECTION 15: Regulatory information

<u>Mexico</u>

Classification

Flammability : 3 Health : 3 Reactivity :

International regulations

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants Not listed.

Product name SIGMACOVER 280 HARDENER

SECTION 15: Regulatory information

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

SECTION 16: Other information

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

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Health : 3 * Flammability : 3 Physical hazards : 0
(*) - Chronic
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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. 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.

Date of previous issue Organization that prepared the SDS	: 12/24/2020 : 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.

Notice to reader

The information, which is based on the current knowledge of the chemical substance or mixture and applies to appropriate safety precautions for the product, is deemed correct but is not exhaustive and will be used only as a guide.

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.