SAFETY DATA SHEET

SIGMACOVER 580 HARDENER



Date of issue 28 August 2024

Version 18

1. Product and company identification

	a company identification	
Product name	: SIGMACOVER 580 HARDENER	
Product code	: 00324594	
Product type	: Liquid.	
Relevant identified uses of	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.	
Supplier's details	: ₱₱G PMC Japan Co., Ltd., 8F, Shintetsu Bldg., 1-1, Daikaidori 1-chome, Kobe 652-0803 Japan; Tel: +81-78-574-2777	
Emergency telephone number	: 078 574 2777	

2. Hazards identification

GHS Classification	: AMMABLE LIQUIDS - Category 3
	ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2
	SERIOUS EYE DAMAGE - Category 1
	SKIN SENSITIZATION - Category 1
	CARCINOGENICITY - Category 2
	TOXIC TO REPRODUCTION - Category 1B
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1
	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 1 HAZARDOUS TO THE AQUATIC ENVIRONMENT - ACUTE HAZARD - Category 2 HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD - Category 2
GHS label elements	
Hazard pictograms	
Signal word	: Danger

2.	Hazards	identific	ation
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Hazard statements	: Fammable liquid and vapor.
Hazaru Statements	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 damage fertility or the unborn child.
	Causes damage to organs. (central nervous system (CNS), kidneys, liver, respiratory organs)
	Causes damage to organs through prolonged or repeated exposure. (hearing
	organs, nervous system, respiratory organs)
	Toxic to aquatic life with long lasting effects.
Precautionary statements	
Prevention	: Øbtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Response	: Collect spillage. IF exposed or concerned: Call a POISON CENTER or doctor. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
Storage	: Store locked up. Store in a well-ventilated place. Keep container tightly closed.
Disposal	: 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.

3. Composition/information on ingredients

Substance/mixture

: Mixture

CAS number/other identifiers

CAS number: Not applicableCSCL number: Not available			
Ingredient name	%	CAS number	CSCL
sobutyl alcohol	25 - <50	78-83-1	2-3049
Xylene	20 - <25	1330-20-7	3-3; 3-60
Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	20 - <25	68410-23-1	7-445
Ethyl Benzene	3 - <5	100-41-4	3-28; 3-60
2,4,6-Tris(dimethylaminomethyl)phenol	2 - <3	90-72-2	3-714; 3-762; 3-776
3,6-diazaoctanethylenediamin	0.5 - <1	112-24-3	2-163; 7-5

3. Composition/information on ingredients

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.

SUB codes represent substances without registered CAS Numbers.

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	Causes damage to organs following a single exposure in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	Corrosive to the digestive tract. Causes burns. Causes damage to organs following a single exposure if swallowed. Can cause central nervous system (CNS) depression.
Over-exposure signs/sympto	<u>ns</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 reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations
	Japan Pago: 3/15

Product code 00324594 Date of issue 28 August 2024 Version		n 18
Product name SIGMACOVER 580 HARDENER		
4. First aid measu	S	
Ingestion	Adverse symptoms may include the following: stomach pains reduced fetal weight increase in fetal deaths skeletal malformations	
Indication of immediate me	attention and special treatment needed, if necessary	
Notes to physician	In case of inhalation of decomposition products in a fire, symptoms may be The exposed person may need to be kept under medical surveillance for 48	
Specific treatments	No specific treatment.	
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable train is suspected that fumes are still present, the rescuer should wear an appro- mask or self-contained breathing apparatus. It may be dangerous to the per providing aid to give mouth-to-mouth resuscitation. Wash contaminated clo thoroughly with water before removing it, or wear gloves.	priate erson

See toxicological information (Section 11)

5. Fire-fighting measures	
Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
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.

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".
	Japan Page: 4/15

6. Accidental release measures

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). Water polluting material. May be harmful to
	the environment if released in large quantities. Collect spillage.

Methods and materials for containment 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. : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and Large spill 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.

7. Handling and storage

Precautions for safe handling

: 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. Avoid exposure during pregnancy. 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. Avoid release to the environment. 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.

Conditions for safe storage : 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. See Section 10 for incompatible materials before handling or use.

8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name		Exposure limits
sobutyl alcohol		Japan Society for Occupational Health (Japan, 5/2023). OEL-M: 150 mg/m ³ 8 hours. OEL-M: 50 ppm 8 hours. Industrial Safety and Health Act (Japan, 6/2020).
Xylene		TWA: 50 ppm 8 hours. Industrial Safety and Health Act (Japan, 6/2020). [xylene] TWA: 50 ppm 8 hours. Japan Society for Occupational Health
		(Japan, 5/2023). OEL-M: 50 ppm 8 hours. OEL-M: 217 mg/m ³ 8 hours.
Ethyl Benzene		Japan Society for Occupational Health (Japan, 5/2023). Absorbed through skin. OEL-M: 87 mg/m ³ 8 hours. OEL-M: 20 ppm 8 hours. Industrial Safety and Health Act (Japan, 6/2020). TWA: 20 ppm 8 hours.
Recommended monitoring	: Reference should be made to appropri	
procedures		ods for the determination of hazardous
Appropriate engineering controls	or other engineering controls to keep we below any recommended or statutory l	se process enclosures, local exhaust ventilation vorker exposure to airborne contaminants imits. The engineering controls also need to s below any lower explosive limits. Use
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.	
ndividual protection measu	res	
Hygiene measures	eating, smoking and using the lavatory Appropriate techniques should be used Contaminated work clothing should no	d to remove potentially contaminated clothing. t be allowed out of the workplace. Wash Ensure that eyewash stations and safety
Eve protection	: Chemical splash goggles and face shi	eld
zye protection		
Eye protection <u>Skin protection</u>		
	be worn at all times when handling che this is necessary. Considering the par- check during use that the gloves are st should be noted that the time to breakt	complying with an approved standard should emical products if a risk assessment indicates ameters specified by the glove manufacturer, till retaining their protective properties. It through for any glove material may be ers. In the case of mixtures, consisting of

8. Exposure controls/personal protection

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

9. Physical and chemical properties

Appearance		
Physical state	: Liquid.	
Odor	: Amine-like.	
Boiling point	: >37.78°C (>100°F)	
Flash point	: Closed cup: 25°C (77°F)	
Relative density	: 0.95	
	Media	Result
Solubility(ies)	. pold water	Not soluble
Auto-ignition temperature	: 430°C (806°F)	
Viscosity	: 60 - 100 s (ISO 6mm)	

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.
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

11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
sobutyl alcohol	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	-
Ethyl Benzene	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	-

Irritation/Corrosion

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

Sensitization

•••••••••••••••••••••••••••••••••••••••	Route of exposure	Species	Result
Atty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	skin	Mouse	Sensitizing
3,6-diazaoctanethylenediamin		Guinea pig	Sensitizing

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
sobutyl alcohol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
Xylene	Category 1	-	central nervous system (CNS), kidneys, liver, respiratory organs
	Category 3		Narcotic effects
Ethyl Benzene	Category 3	-	Respiratory tract irritation
	·	Ja	apan Page: 8/15

11. Toxicological information

3,6-diazaoctanethylenediamin	Category 3 Category 3 -	Narcotic effects Respiratory tract irritation
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Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
<mark></mark> ¥ylene Ethyl Benzene	Category 1 Category 1	-	nervous system, respiratory organs hearing organs,
			nervous system

Aspiration hazard

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

Information on the likely : Not available. 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 damage to organs following a single exposure in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: Corrosive to the digestive tract. Causes burns. Causes damage to organs following a single exposure if swallowed. Can cause central nervous system (CNS) depression.

Symptoms related to the physical, chemical and toxicological characteristics

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 reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations

11. Toxicological information

Ir	ŋ	es	tic	on

: Adverse symptoms may include the following: stomach pains reduced fetal weight

increase in fetal deaths skeletal malformations

Delayed and immediate effect	ts	and also chronic effects from short and long term exposure
<u>Short term exposure</u>		
Potential immediate effects	1	Not available.
Potential delayed effects	:	Not available.
<u>Long term exposure</u>		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Potential chronic health effe	ect	<u>s</u>
General	:	Causes damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	:	Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	1	No known significant effects or critical hazards.
Reproductive toxicity	:	May damage fertility or the unborn child.

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 580 HARDENER	27120.0	3007.5	N/A	12.1	N/A
isobutyl alcohol	2830	2460	N/A	11	N/A
Xylene	4300	1700	N/A	11	N/A
Ethyl Benzene	3500	17800	N/A	17.8	N/A
2,4,6-Tris(dimethylaminomethyl)phenol	1200	1280	N/A	N/A	N/A
3,6-diazaoctanethylenediamin	N/A	300	N/A	N/A	N/A

Other information

Zauses 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. Avoid contact with skin and clothing.

12. Ecological information

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Toxicity

12. Ecological information

Product/ingredient name	Result	Species	Exposure
isobutyl alcohol	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
Ethyl Benzene	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	Acute LC50 >100 mg/l	Daphnia	48 hours
(dimethylaminomethyl)phenol			
	Acute LC50 >100 mg/l	Fish	96 hours
(Fish	96 hour

Persistence/degradability

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

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
isobutyl alcohol	1	-	Low
Xylene	3.12	7.4 to 18.5	Low
Ethyl Benzene	3.6	79.43	Low
2,4,6-Tris	0.219	-	Low
(dimethylaminomethyl)phenol			
3,6-diazaoctanethylenediamin	-1.66 to -1.4	-	Low

<u>Mobility in soil</u>	
Soil/water partition coefficient (Koc)	: Not available.
Mobility	: Not available.
Other adverse effects	: No known significant ef

: No known significant effects or critical hazards.

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.

14. Transport information

	UN	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
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

Additional information

UN	This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5.1.
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

Product code 00324594

Product name SIGMACOVER 580 HARDENER

15. Regulatory information

Fire Service Law

Category	Substance name/Type	Danger category	Signal word	Designated quantity
Category IV	Class II petroleums	III	Flammable - Keep Fire Away	1000 L

Pollutant Release and Transfer Registers (PRTR)

Ingredient name	%	Status	Reference number
X ylene	23	Class 1	80
Ethylbenzene	4.1	Class 1	53
Triethylenetetramine	1.0	Class 2	278

Industrial Safety and Health Act

Ordinance on the Prevention of the Hazard due to Specified Chemical Substances

Ingredient name	%		Reference number
ethyl benzene	≤10	Special Organic Solvents	3-3

Substance(s) requiring labelling

Ingredient name	%		Reference number
	≥20 - ≤30	Listed	477
	≥20 - ≤30	Listed	136
Ethylbenzene	≤10	Listed	70

Chemicals requiring notification

Ingredient name	%		Reference number
Butanol	≥20 - ≤30	Listed	477
Xylene	≥20 - ≤30	Listed	136
Ethylbenzene	≤10	Listed	70

Carcinogens based on Article 577-2 of the Ordinance on ISH

None of the components are listed.

Mutagen

None of the components are listed.

Corrosive liquid	: Not listed
Occupational Safety and Health Law	: Inflammable
Regulations on the Prevention of Tetraalkyl Lead Poisoning	: Not listed
Harmful Substances Subject to Obtaining Permission for Manufacturing	: Not listed

15. Regulatory information

Harmful Substances, Prohibited for	: Not listed
Manufacturing	
ISHL Enforcement Order Appendix 1 - Dangerous Substances	: Inflammable
Lead regulation	: Not listed
Organic solvents poisoning prevention	: Class 2

Poisonous and Deleterious Substances

None of the components are listed.

Chemical Substances Control Law (CSCL)

Ingredient name	%		Reference number
K ylene	≥20 - ≤30	Priority assessment	125
Ethylbenzene	≤10	Priority assessment	50

High Pressure Gas Control : Not available.

Law

Explosives Control Law

None of the components are listed.

Law concerning prevention : Not available. of pollution of the ocean

Maritime Safety Law

Notification Regulating Transportation of Dangerous Materials by Sea

None of the components are listed.

Container class

None of the components are listed.

JSOH Carcinogen	: Group 2B
List of Specially Controlled Industrial Waste	: Not listed
Japan inventory	: All components are listed or exempted.
Road law	: Not available.

16. Other information

History	
Date of issue/Date of revision	: 28 August 2024
Date of previous issue	: 1/16/2020
Version	: 18
Prepared by	: EHS

16. Other information

Key to abbreviations	: ADN = European Provisions concerning the International Carriage of Dangerous
	Goods by Inland Waterway
	ADR = The European Agreement concerning the International Carriage of
	Dangerous Goods by Road
	ATE = Acute Toxicity Estimate
	BCF = Bioconcentration Factor
	GHS = Globally Harmonized System of Classification and Labelling of Chemicals
	IATA = International Air Transport Association
	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)
	RID = The Regulations concerning the International Carriage of Dangerous Goods
	by Rail
	UN = United Nations
	hat has also word from wherein the isoland consist.

V Indicates information that has changed from previously issued version.

Notice to reader

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.