SAFETY DATA SHEET

SIGMACOVER 435 HARDENER



Date of issue 17 February 2020

Version 1

1. Product and company identification

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Product name	: SIGMACOVER 435 HARDENER
Product code	: 00427560
Product type	: Liquid.
Relevant identified uses	of the substance or mixture and uses advised against
Product use	: Professional applications, Used by spraying.
Use of the substance/ mixture	: Coating.
Uses advised against	: Not applicable.
Supplier's details	: PPG PMC Japan Co., Ltd. 8F, Shintetsu Bldg., 1-1, Daikaidori 1-chome, Kobe 652-0803 Tel : +81 78 574 2777 Fax : +81 78 576 0035
Emergency telephone number	: 078 574 2777

2. Hazards identification

: 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				
TOXIC TO REPRODUCTION (Fertility) - Category 1B TOXIC TO REPRODUCTION (Unborn child) - Category 1B				
system (CNS), kidneys, liver, respiratory system) - 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) (nervous system,				
respiratory system) - Category 1				
AQUATIC HAZARD (ACUTE) - Category 2				
AQUATIC HAZARD (LONG-TERM) - Category 2				
: Danger				

2. Hazards identification

Hazard statements	 Flammable liquid and vapor. Harmful if inhaled. Causes serious eye damage. Causes skin irritation. May cause an allergic skin reaction. May damage fertility or the unborn child. Suspected of causing cancer. Causes damage to organs. (central nervous system (CNS), kidneys, liver, respiratory system) May cause respiratory irritation. May cause drowsiness or dizziness. Causes damage to organs through prolonged or repeated exposure. (nervous system, respiratory system) Toxic to aquatic life with long lasting effects.
Precautionary statements	
Prevention	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. 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 hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Response	: Collect spillage. Get medical attention if you feel unwell. IF exposed or concerned: Call a POISON CENTER or physician. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical 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 physician.
Storage	: Store locked up. Store in a well-ventilated place. Keep cool.
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 applicable.
ENCS number	1	Not available.

3. Composition/information on ingredients

Ingredient name	%	CAS number	ENCS
Isobutyl alcohol Xylene Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	25 - <50 20 - <25 20 - <25	78-83-1 1330-20-7 68410-23-1	2-3049 3-3; 3-60 7-445
Ethylbenzene 2,4,6-Tris(dimethylaminomethyl)phenol 3,6-diazaoctanethylenediamin	3 - <5 2 - <3 0.5 - <1	100-41-4 90-72-2 112-24-3	3-28; 3-60 3-714; 3-762; 3-776 2-163; 7-5

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/sympton	<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
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4. First aid measu	res
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
Ingestion	: Adverse symptoms may include the following: stomach pains reduced fetal weight increase in fetal deaths skeletal malformations
Indication of immediate me	cal 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)

5. Fire-fighting me	easures
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".
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 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.

7. Handling and storage

Precautions for safe : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and handling 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. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. 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 non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

7. Handling and storage

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
Isobutyl alcohol		Japan Society for Occupational Health (Japan, 5/2018). OEL-M: 150 mg/m ³ 8 hours. OEL-M: 50 ppm 8 hours. ISHL (Japan, 2/2019).
Xylene		TWA: 50 ppm 8 hours. ISHL (Japan, 2/2019). TWA: 50 ppm 8 hours. Japan Society for Occupational Health (Japan, 5/2018). OEL-M: 50 ppm 8 hours.
Ethylbenzene		OEL-M: 217 mg/m ³ 8 hours. Japan Society for Occupational Health (Japan, 5/2018). OEL-M: 217 mg/m ³ 8 hours. OEL-M: 50 ppm 8 hours. ISHL (Japan, 2/2019). TWA: 20 ppm 8 hours.
procedures	the ventilation or other control measure protective equipment. Reference should	ay be required to determine the effectiveness of is and/or the necessity to use respiratory Id be made to appropriate monitoring standards. ents for methods for the determination of
controls	or other engineering controls to keep w any recommended or statutory limits.	e process enclosures, local exhaust ventilation orker exposure to airborne contaminants below The engineering controls also need to keep gas, v lower explosive limits. Use explosion-proof
controls	they comply with the requirements of er	ess equipment should be checked to ensure nvironmental protection legislation. In some pering modifications to the process equipment

will be necessary to reduce emissions to acceptable levels.

Individual protection measures

8. Exposure controls/personal protection

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 protection	: Chemical splash goggles and face shield.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Gloves	: 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	: Aromatic. [Strong]
Boiling point	: >37.78°C (>100°F)
Flash point	: Closed cup: 28°C (82.4°F)
Relative density	: 0.95
Solubility	: Insoluble in the following materials: cold water.
Viscosity	: Not Applicable

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.

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10. Stability and r	eactivity
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	: Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Information on toxicological effects

Product/ingredient name	Result	Species	Dose	Exposure
Isobutyl 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	-
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	Rabbit	1.28 g/kg	-
(dimethylaminomethyl)				
phenol				
	LD50 Dermal	Rat	1280 mg/kg	-
	LD50 Oral	Rat	1200 mg/kg	-
3,6-diazaoctanethylenediamin	LD50 Dermal	Rabbit	805 mg/kg	-
-	LD50 Oral	Rat	2500 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Xylene 2,4,6-Tris	Skin - Moderate irritant Skin - Visible necrosis	Rabbit Rabbit	-	24 hours 500 mg 4 hours	- 7 davs
(dimethylaminomethyl) phenol		Nabbil	-		1 uays

Sensitization

Product/ingredient name	Route of exposure	Species	Result
Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	skin	Mouse	Sensitizing
2,4,6-Tris (dimethylaminomethyl) phenol	skin	Guinea pig	Sensitizing
3,6-diazaoctanethylenediamin	skin	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
Isobutyl alcohol	Category 3	Not applicable.	Narcotic effects
	Category 3	Not applicable.	Respiratory tract irritation
Xylene	Category 1	Not determined	central nervous system (CNS), kidneys, liver and respiratory system
	Category 3	Not applicable.	Narcotic effects
Ethylbenzene	Category 3	Not applicable.	Narcotic effects
	Category 3	Not applicable.	Respiratory tract irritation
3,6-diazaoctanethylenediamin	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Xylene	Category 1		nervous system and respiratory system
Ethylbenzene	Category 2	Not determined	hearing organs

Aspiration hazard Result Name Result Xylene ASPIRATION HAZARD - Category 1 Ethylbenzene ASPIRATION HAZARD - Category 1

Information on the likely	: Not available.
routes of exposure	

Potential acute health effect		
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.	3
Ingestion	Corrosive to the digestive tract. Causes burns. Causes damage to organs followin a single exposure if swallowed. Can cause central nervous system (CNS) depression.	g
Symptoms related to the phy	ical, chemical and toxicological characteristics	

Eye contact	: Adverse symptoms may include the following: pain watering redness

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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
Ingestion	: Adverse symptoms may include the following: stomach pains reduced fetal weight increase in fetal deaths skeletal malformations
Delayed and immediate effect	cts and also chronic effects from short and long term exposure

Short term exposure	
Potential immediate effects	: 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 eff	ects
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	: No known significant effects or critical hazards.
Teratogenicity	: May damage the unborn child.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: May damage fertility.

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 435 HARDENER	27120	2348.4	N/A	12.1	N/A
Isobutyl alcohol	2830	2460	N/A	11	N/A
Xylene	4300	1100	N/A	11	N/A
Ethylbenzene	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	2500	805	N/A	N/A	N/A

Other information

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.

12. Ecological information

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Toxicity

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
Ethylbenzene	Acute LC50 150 to 200 mg/l Fresh water	Fish	96 hours
2,4,6-Tris (dimethylaminomethyl)phenol	Acute LC50 175 mg/l	Fish	96 hours

Persistence/degradability

Product/ingredient name	Test	Result		Dose		Inoculum
Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	-	15 % - 28 d	ays	-		-
Product/ingredient name	Aquatic half-life		Photolysis		Biodeg	radability
Xylene Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines Ethylbenzene	-				Readily Not rea	dily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Isobutyl alcohol Xylene	0.76 3.16	- 7.4 to 18.5	low low
Ethylbenzene	3.15	79.43	low
3,6-diazaoctanethylenediamin	-1.66 to -1.4	-	low

Mobility in soil

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Soil/water partition coefficient (Koc)	: Not available.
Mobility	: Not available.
Other adverse effects	: 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	IATA
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
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.

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.

Product code 00427560 Product name SIGMACOVER 435 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	%		Reference number
xylene	22.95	Class 1	80
ethylbenzene	4.05		53
Triethylenetetramine	1		278

<u>ISHL</u>

Use of specified chemical substances

Ingredient name	%		Reference number
Ethyl benzene		Group-2 Substances under Supervision	3-3

Label requirements

Ingredient name	%		Reference number
Xylene	≥25 - ≤31	Listed	477
	≥10 - ≤25	Listed	136
	≤4.8	Listed	70

Chemicals requiring notification

Ingredient name	%		Reference number
Butanol	≥25 - ≤31	Listed	477
Xylene	≥10 - ≤25	Listed	136
Ethylbenzene	≤4.8	Listed	70

Carcinogen

None of the components are listed.

Mutagen

None of the components are listed.

Corrosive liquid	: Not listed
Occupational Safety and Health Law	: Flammable liquid Class 3
Prevention of Tetraalkyl Lead Poisoning	: Not listed
Harmful Substances Subject to Obtaining Permission for Manufacturing	: Not listed
Harmful Substances, Prohibited for Manufacturing	: Not listed

15. Regulatory information

Dangerous Substances : Inflammable

Lead regulation	: Not listed	I
Organic solvents	: Class 2	
poisoning prevention		

Poisonous and Deleterious Substances

None of the components are listed.

Chemical Substances Control Law (CSCL)

Ingredient name	%		Reference number
Xylene	22.95	Priority assessment	125
Ethylbenzene	4.05	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 and Maritime Disaster

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

<u>History</u>	
Date of issue/Date of revision	: 17 February 2020
Date of previous issue	: No previous validation
Version	: 1
Prepared by	: EHS
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

16. Other information

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

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.