SAFETY DATA SHEET

SIGMACOVER 280 BASE REDBROWN



Date of issue 14 May 2024

Version 4

1. Product and company identification

Product name	: SIGMACOVER 280 BASE REDBROWN
Product code	: 00444906
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 Japan; Tel: +81-78-574-2777
Emergency telephone number	: 078 574 2777

2. Hazards identification

	Japan	Page: 1/16
Hazard statements	: Flammable liquid and vapor. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause drowsiness or dizziness. Suspected of causing cancer. May damage fertility or the unborn child.	
Signal word	: Danger	
<u>GHS label elements</u> Hazard pictograms		
	CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Ca SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Na Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) HAZARDOUS TO THE AQUATIC ENVIRONMENT - ACUTE HAZA HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZ Category 1	rcotic effects) - - Category 1 RD - Category 1
GHS Classification	: FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1	

Product code 00444906 Product name SIGMACOVER	Date of issue 14 May 2024 Version 4 280 BASE REDBROWN	
2. Hazards identification		
	Causes damage to organs. (central nervous system (CNS), kidneys, liver, respiratory organs) Causes damage to organs through prolonged or repeated exposure. (central nervous system (CNS), hearing organs, nervous system, respiratory organs) Very 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, 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. If eye irritation persists: Get medical advice or attention.	
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	: 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.
CSCL number	: Not available.

Ingredient name	%	CAS number	CSCL
F alc (containing no asbestos or quartz)	20 - <25	14807-96-6	Not available.
Epoxy Resin (700 <mw<=1100)< td=""><td>15 - <20</td><td>25036-25-3</td><td>Not available.</td></mw<=1100)<>	15 - <20	25036-25-3	Not available.
crystalline silica, respirable powder (>10 microns)	15 - <20	14808-60-7	1-548
Ethyl Benzene	10 - <12.5	100-41-4	3-28; 3-60
Xylene	10 - <12.5	1330-20-7	3-3; 3-60
Diiron trioxide	5 - <7	1309-37-1	1-357; 5-5188
aluminium metal	3 - <5	7429-90-5	Not available.
Propylene glycol monomethyl ether	2 - <3	107-98-2	2-404; 7-97
nonylphenol	2 - <3	25154-52-3	3-503
Solvent naphtha (petroleum), medium aliph.	1 - <2	64742-88-7	Not available.
Solvent naphtha (petroleum), light aromatic	1 - <2	64742-95-6	Not available.
Octadecanamide, N,N'-1,6-hexanediylbis	0.5 - <1	55349-01-4	2-3055
[12-hydroxy-			
1-Butanol	0.5 - <1	71-36-3	2-3049
o-Xylene	0.1 - <0.2	95-47-6	3-3; 3-60

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.

Product name SIGMACOVER 280 BASE REDBROWN

3. Composition/information on ingredients

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	 Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
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 de	laved
interest and estimate and a	10, 10 0

Potential acute health ef	fects
Eye contact	: Causes serious eye irritation.
Inhalation	: Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
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	: Causes damage to organs following a single exposure if swallowed. Can cause central nervous system (CNS) depression.
Over-exposure signs/syr	nptoms
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: 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: irritation redness dryness cracking reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Indication of immediate m	edical attention and special treatment needed, if necessary
Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Product code 00444906	
Product name SIGMACOVER 280 BASE REDBROWN	

4. First aid measures	
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 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 very 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 metal oxide/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, protective 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. Avoid breathing 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 containment and cleaning up

Product code 0044	4906	Date of issue 14 May 2024	Version 4		
Product name SIGMACOVER 280 BASE REDBROWN					
6. Accidenta	I release measures				
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools a 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	explosion-proof equip sewers, water course effluent treatment pla combustible, absorbe and place in containe Dispose of via a licen	sk. Move containers from spill area. Use sponent. Approach release from upwind. Preves, basements or confined areas. Wash spill nt or proceed as follows. Contain and collect material e.g. sand, earth, vermiculite or d r for disposal according to local regulations are waste disposal contractor. Contaminate same hazard as the spilled product. Note:	vent entry into lages into an et spillage with non- iatomaceous earth (see Section 13). ed absorbent		

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). Persons with a handling 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 eves 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
✓alc (containing no asbestos or quartz)	Japan Society for Occupational Health (Japan, 5/2023). [Class 1 dusts (Activated charcoal, Alumina, Aluminium, Bentonite, Diatomite, Graphite, Kaolinite, Pagodite, Pyrites, Pyrite cinder)] OEL-M: 0.5 mg/m ³ 8 hours. Form: Respirable dust (Class 1 Dust) OEL-M: 2 mg/m ³ 8 hours. Form: Total dust (Class 1 Dust)
	Japan Page: 5/16

8. Exposure controls/personal protection

crystalline silica, respirable powder (>10 microns)	Japan Society for Occupational Health (Japan, 5/2023). [Respirable crystalline
	silica]
	OEL-C: 0.03 mg/m ³ Form: Respirable dust
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.
Xylene	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.
Diiron trioxide	Japan Society for Occupational Health
	(Japan, 5/2023). [Class 2 dusts (Bakelite
	(asbestos-free, technical grade), Carbon
	black, Coal, Cork dust, Cotton dust, Iron oxide, Grain dust, Joss stick material
	dust, Marble, Portland cement, Zinc
	oxide)]
	OEL-M: 1 mg/m ³ 8 hours. Form: Respirable
	dust (Class 2 Dust)
	OEL-M: 4 mg/m ³ 8 hours. Form: Total dust
	(Class 2 Dust)
aluminium metal	Japan Society for Occupational Health
	(Japan, 5/2023). [Class 1 dusts (Activated
	charcoal, Alumina, Aluminium, Bentonite,
	Diatomite, Graphite, Kaolinite, Pagodite, Pyrites, Pyrite cinder)]
	OEL-M: 0.5 mg/m ³ 8 hours. Form:
	Respirable dust (Class 1 Dust)
	OEL-M: 2 mg/m ³ 8 hours. Form: Total dust
	(Class 1 Dust)
1-Butanol	Japan Society for Occupational Health
	(Japan, 5/2023). Absorbed through skin.
	OEL-C: 150 mg/m ³
	OEL-C: 50 ppm
	Industrial Safety and Health Act (Japan,
	6/2020).
o-Xylene	TWA: 25 ppm 8 hours. Japan Society for Occupational Health
บ- ก уเอเเอ	(Japan, 5/2023). [Xylene]
	OEL-M: 217 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.

substances will also be required.

Product name Sigmacover 280 Base Rebbrown

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 meas	<u>ures</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 protection	: Chemical splash goggles.
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	: Characteristic.			
Boiling point	: >37.78°C (>100°F)			
Flash point	: Closed cup: 28.8°C	C (83.8°F)		
Relative density	: 1.2			
Solubility(ics)	Media	Result		
Solubility(ies)	: cold water	Not soluble		
			Japan	Page: 7/16

9. Physical and chemical properties

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 metal oxide/oxides

11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
₽́poxy Resin (700 <mw <=1100)</mw 	LD50 Dermal	Rat	>2000 mg/kg	-
,	LD50 Oral	Rat	>2000 mg/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	-
Xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
-	LD50 Oral	Rat	4.3 g/kg	-
Diiron trioxide	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours
	LD50 Oral	Rat	10 g/kg	-
aluminium metal	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours
	LD50 Oral	Rat	>15900 mg/kg	-
Propylene glycol	LC50 Inhalation Vapor	Rat	>7000 ppm	6 hours
monomethyl ether				
	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	5.2 g/kg	-
nonylphenol	LD50 Dermal	Rabbit	2.14 g/kg	-
	LD50 Oral	Rat	580 mg/kg	-
Solvent naphtha (petroleum), medium aliph.	LD50 Dermal	Rabbit	>3000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Solvent naphtha (petroleum), light aromatic	LD50 Dermal	Rabbit	3.48 g/kg	-
-	LD50 Oral	Rat	8400 mg/kg	-
1-Butanol	LC50 Inhalation Vapor	Rat	24000 mg/m ³	4 hours
	LD50 Dermal	Rabbit	3400 mg/kg	-
	LD50 Oral	Rat	790 mg/kg	-
o-Xylene	LC50 Inhalation Vapor	Rat	27124 mg/m ³	4 hours
-	LD50 Dermal	Rabbit	12126 mg/kg	-
	LD50 Oral	Rat	3523 mg/kg	-

Product name SIGMACOVER 280 BASE REDBROWN

11. Toxicological information

Irritation/Corrosion

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

Sensitization

Not available.

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
▼alc (containing no asbestos or quartz)	Category 1	-	respiratory organs
Ethyl Benzene	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
Xylene	Category 1	-	central nervous system (CNS), kidneys, liver, respiratory organs
	Category 3		Narcotic effects
Diiron trioxide	Category 1	_	respiratory organs
aluminium metal	Category 1	-	respiratory organs
Propylene glycol monomethyl ether	Category 3	-	Narcotic effects
nonylphenol	Category 3	-	Respiratory tract irritation
Solvent naphtha (petroleum), medium aliph.	Category 3	-	Narcotic effects
Solvent naphtha (petroleum), light aromatic	Category 3	-	Narcotic effects
1-Butanol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
o-Xylene	Category 1	-	central nervous system (CNS)
	Category 3		Respiratory tract irritation
	Category 3		Narcotic effects

Specific target organ toxicity (repeated exposure)

Product name SIGMACOVER 280 BASE REDBROWN 11. Toxicological information

News	Octoward	Deute of	Townstowns
Name	Category	Route of exposure	Target organs
✓alc (containing no asbestos or quartz)	Category 1	-	respiratory organs
Ethyl Benzene	Category 1	-	hearing organs,
			nervous system
Xylene	Category 1	-	nervous system,
			respiratory organs
Diiron trioxide	Category 1	-	respiratory organs
aluminium metal	Category 1	-	respiratory organs
nonylphenol	Category 2	-	bladder, kidneys
Solvent naphtha (petroleum), medium aliph.	Category 1	-	central nervous
			system (CNS)
1-Butanol	Category 1	-	central nervous
			system (CNS),
			hearing organs

Aspiration hazard

Name	Result
Ethyl Benzene	ASPIRATION HAZARD - Category 1
Xylene	ASPIRATION HAZARD - Category 1
Solvent naphtha (petroleum), medium aliph.	ASPIRATION HAZARD - Category 1
Solvent naphtha (petroleum), light aromatic	ASPIRATION HAZARD - Category 1
o-Xylene	ASPIRATION HAZARD - Category 1

Information on the likely : Not available. routes of exposure

Potential acute health effects

Potential acute health	enects
Eye contact	: Causes serious eye irritation.
Inhalation	 Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
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	: Causes damage to organs following a single exposure if swallowed. Can cause central nervous system (CNS) depression.
Symptoms related to the	ne physical, chemical and toxicological characteristics
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations

Product code 00444906		Date of issue 14 May 2024	Version 4
Product name SIGMACOVER	280 BASE REDBROWN		
11. Toxicological i	information		
Skin contact	: Adverse symptoms may inc irritation redness dryness cracking reduced fetal weight increase in fetal deaths skeletal malformations	lude the following:	
Ingestion	: Adverse symptoms may inc reduced fetal weight increase in fetal deaths skeletal malformations	lude the following:	
Delayed and immediate effect	cts and also chronic effects fr	om short and long term exposure	
<u>Short term exposure</u>			
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 effe	<u>ects</u>		
General	repeated contact can defat	through prolonged or repeated exposite the skin and lead to irritation, crackin allergic reaction may occur when sub	g and/or dermatitis.
Carcinogenicity	: Suspected of causing cancer exposure.	er. Risk of cancer depends on durati	on and level of
Mutagenicity	: No known significant effects	s 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 280 BASE REDBROWN	8994.5	4506.1	N/A	39.4	N/A
Epoxy Resin (700 <mw<=1100)< td=""><td>2500</td><td>2500</td><td>N/A</td><td>N/A</td><td>N/A</td></mw<=1100)<>	2500	2500	N/A	N/A	N/A
Ethyl Benzene	3500	17800	N/A	17.8	N/A
Xylene	4300	1700	N/A	11	N/A
Diiron trioxide	10000	N/A	N/A	N/A	N/A
Propylene glycol monomethyl ether	5200	13000	N/A	11	N/A
nonylphenol	580	2140	N/A	N/A	N/A
Solvent naphtha (petroleum), medium aliph.	N/A	2500	N/A	N/A	N/A
Solvent naphtha (petroleum), light aromatic	8400	3480	N/A	N/A	N/A
1-Butanol	N/A	3400	N/A	24	N/A
o-Xylene	3523	12126	N/A	11	N/A

Other information

1

Product code 00444906

Product name SIGMACOVER 280 BASE REDBROWN

11. Toxicological information

Prolonged or repeated contact may dry skin and cause irritation. Sanding and grinding dusts may be harmful if inhaled. 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

<u>Toxicity</u>

Product/ingredient name	Result	Species	Exposure
Ethyl Benzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
Diiron trioxide	Acute EC50 >100 mg/l	Daphnia	48 hours
Propylene glycol monomethyl ether	Acute LC50 23300 mg/l	Daphnia	48 hours
-	Acute LC50 >4500 mg/l Fresh water	Fish	96 hours
nonylphenol	Acute EC50 0.056 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Chronic EC10 0.003 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Chronic NOEC 1 µg/l Fresh water	Daphnia - <i>Daphnia magna</i>	21 days
Solvent naphtha (petroleum), light aromatic	Acute LC50 8.2 mg/l	Fish	96 hours
1-Butanol	Acute LC50 1376 mg/l	Fish	96 hours

Persistence/degradability

Product/ingredient name	Test	Result		It Dose		Inoculum
Ethyl Benzene o-Xylene	- OECD 301F	79 % - Readily - 10 days - 94 % - Readily - 28 days -				-
Product/ingredient name	Aquatic half-life		Photolysis		Biodegradability	
Ethyl Benzene Xylene o-Xylene	- - -		- -		Readily Readily Readily	/

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Ethyl Benzene	3.6	79.43	Low
Xylene	3.12	7.4 to 18.5	Low
Propylene glycol monomethyl ether	<1	-	Low
nonylphenol	3.28	154.88	Low
1-Butanol	1	-	Low
o-Xylene	3.12	14.13	Low

<u>Mobility in soil</u>	
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	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	(nonylphenol)	Not applicable.

Additional info	prmation
UN	: None identified.
IMDG	: The marine pollutant mark is not required when transported in sizes of \leq 5 L or \leq 5 kg.
ΙΑΤΑ	: The environmentally hazardous substance mark may appear if required by other transportation regulations.
Special precau	utions 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 00444906

Product name SIGMACOVER 280 BASE REDBROWN

15. Regulatory information

Fire Service Law

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

Pollutant Release and Transfer Registers (PRTR)

Ingredient name	%	Status	Reference number
Ethylbenzene	12	Class 1	53
Xylene Alkylphenol (limited to those the alkyl group is C9)	12 2.2	Class 1 Class 1	80 320

Industrial Safety and Health Act

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

Ingredient name	%		Reference number
ethyl benzene	≥10 - ≤20	Special Organic Solvents	3-3

Substance(s) requiring labelling

Ingredient name	%	Status	Reference number
Crystalline silica	≥10 - ≤20	Listed	165-2
Ethylbenzene	≥10 - ≤20	Listed	70
Xylene	≥10 - ≤20	Listed	136
Iron oxide	≤10	Listed	192
Propylene glycol monomethyl ether	≤10	Listed	496
Petroleum benzine	≤10	Listed	331
Mineral spirit (including mineral thinner, petroleum spirit, white spirit and mineral terpene)	≤10	Listed	551
Petroleum naphtha	≤10	Listed	330

Chemicals requiring notification

Ingredient name	%	Status	Reference number
Crystalline silica	≥10 - ≤20	Listed	165-2
Ethylbenzene	≥10 - ≤20	Listed	70
Xylene	≥10 - ≤20	Listed	136
Iron oxide	≤10	Listed	192
Aluminium and its water-soluble salts	≤10	Listed	37
Propylene glycol monomethyl ether	≤10	Listed	496
Mineral spirit (including mineral thinner, petroleum spirit, white spirit and mineral terpene)	≤10	Listed	551
Petroleum benzine	≤10	Listed	331
Petroleum naphtha	≤10	Listed	330
Butanol	≤10	Listed	477

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

Ingredient name	%		Reference number
g uartz	≥10 - ≤20	Listed	-

<u>Mutagen</u>

15. Regulatory information

None of the components are listed.

Corrosive liquid	: Not listed
Occupational Safety and Health Law	: Inflammable, Combustible
Regulations on the Prevention of Tetraalkyl Lead Poisoning	: Not listed
Harmful Substances Subject to Obtaining Permission for Manufacturing	: Not listed
Harmful Substances, Prohibited for Manufacturing	: Not listed
ISHL Enforcement Order Appendix 1 - Dangerous Substances	: Inflammable, Combustible
Lead regulation	: Not listed
Organic solvents poisoning prevention	: Class 2

Poisonous and Deleterious Substances

Ingredient name	%	Status	Reference number
nonylphenol	2.2376	Deleterious	2-1-78-2

Chemical Substances Control Law (CSCL)

Ingredient name	%	Status	Reference number
Ethylbenzene	≥10 - ≤20	Priority assessment	50
Xylene	≥10 - ≤20	Priority assessment	125
1-Butanol	≤10	Priority assessment	124
Xylene	≤10	Priority assessment	125
Formaldehyde	≤10	Priority assessment	25

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 1

16. Other information

<u>History</u>	
Date of issue/Date of revision	: 14 May 2024
Date of previous issue	: 10/24/2023
Version	: 4
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 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.