SAFETY DATA SHEET

SIGMAZINC 109 HS BASE REDGREY



Date of issue 3 April 2024

Version 26

1. Product and company identification

Product name	: SIGMAZINC 109 HS BASE REDGREY
Product code	: 00279827
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

GHS Classification	: FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 TOXIC TO REPRODUCTION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 HAZARDOUS TO THE AQUATIC ENVIRONMENT - ACUTE HAZARD - Category 1 HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD - Category 1
	HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD - Category 1

GHS label elements Hazard pictograms



Signal word	: Danger
Hazard statements	 Flammable liquid and vapor. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May damage fertility or the unborn child. May cause damage to organs. (central nervous system (CNS), kidneys, liver, respiratory organs) May cause damage to organs through prolonged or repeated exposure. (nervous system, respiratory organs) Very toxic to aquatic life with long lasting effects.

2. Hazards identification

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. 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 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.
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
Zinc	50 - 100	7440-66-6	Not available.
bis-[4-(2,3-epoxipropoxi)phenyl]propane	5 - <7	1675-54-3	4-209; 7-1279;
			7-1283
Xylene	3 - <5	1330-20-7	3-3; 3-60
Hydrocarbons, C9, aromatics < 0.1% cumene	2 - <3	64742-95-6	Not available.
Epoxy Resin (700 <mw<=1100)< td=""><td>2 - <3</td><td>25036-25-3</td><td>Not available.</td></mw<=1100)<>	2 - <3	25036-25-3	Not available.
Talc containing no asbestos or quartz	2 - <3	14807-96-6	Not available.
Propylene glycol monomethyl ether	1 - <2	107-98-2	2-404; 7-97
Diiron trioxide	1 - <2	1309-37-1	1-357; 5-5188
Solvent naphtha (petroleum), light aromatic	1 - <2	64742-95-6	Not available.
1,2,4-Trimethylbenzene	0.5 - <1	95-63-6	3-3427; 3-7
Ethylbenzene	0.5 - <1	100-41-4	3-28; 3-60
Zinc oxide	0.5 - <1	1314-13-2	1-561
1,3,5-Trimethylbenzene	0.1 - <0.2	108-67-8	3-3427; 3-7

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 necess	ary 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/	fects, acute and delayed
Potential acute health effe	
Eye contact	: Causes serious eye irritation.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: May cause 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	: May cause damage to organs following a single exposure if swallowed.
<u>Over-exposure signs/sym</u>	<u>oms</u>
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: 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 me	cal 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.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If i is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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 co	ontainment 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

6. Accidental release measures

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
₩ylene	Industrial Safety and Health Act (Japan, 6/2020). [xylene] TWA: 50 ppm 8 hours. Japan Society for Occupational Health (Japan, 9/2022). OEL-M: 50 ppm 8 hours. OEL-M: 217 mg/m ³ 8 hours.
Talc containing no asbestos or quartz	Japan Society for Occupational Health (Japan, 9/2022). [Class 1 dusts (Activated charcoal, Alumina, Aluminium, Bentonite, Diatomite, Graphite, Kaolinite, Pagodite, Pyrites, Pyrite cinder, Talc)] 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)
Diiron trioxide	Japan Society for Occupational Health (Japan, 9/2022). [Class 2 dusts (Dusts containing less than 3% cry stalline silica, Bakelite, Carbon black, Coal, Cork dust, Cotton dust, Iron oxide, Grain dust, Joss
	Japan Page

8. Exposure controls/personal protection

		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)	
1,2,4-Trimethylbenzene		Japan Society for Occupational Health (Japan, 9/2022).	
		OEL-M: 120 mg/m ³ 8 hours.	
		OEL-M: 25 ppm 8 hours.	
Ethylbenzene		Japan Society for Occupational Health	
		(Japan, 9/2022). 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.	
1,3,5-Trimethylbenzene		Japan Society for Occupational Health	
		(Japan, 9/2022).	
		OEL-M: 120 mg/m ³ 8 hours.	
		OEL-M: 25 ppm 8 hours.	
		riate monitoring standards. Reference to	
procedures	substances will also be required.	nods for the determination of hazardous	
Appropriate engineering controls	or other engineering controls to keep below any recommended or statutory	se process enclosures, local exhaust ventilation worker exposure to airborne contaminants limits. The engineering controls also need to	
	keep gas, vapor or dust concentration explosion-proof ventilation equipment.	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		bughly after handling chemical products, before y and at the end of the working period.	
	Appropriate techniques should be use	d to remove potentially contaminated clothing. of be allowed out of the workplace. Wash	
	showers are close to the workstation I		
Eve protection			
	showers are close to the workstation I : Chemical splash goggles.		
Skin protection	: Chemical splash goggles.	ocation.	
	 Chemical splash goggles. Chemical-resistant, impervious gloves be worn at all times when handling chi this is necessary. Considering the par check during use that the gloves are s should be noted that the time to break 	ocation. complying with an approved standard should emical products if a risk assessment indicates rameters specified by the glove manufacturer, still retaining their protective properties. It through for any glove material may be rers. In the case of mixtures, consisting of	
Eye protection Skin protection Hand protection Gloves	 Chemical splash goggles. Chemical-resistant, impervious gloves be worn at all times when handling ch this is necessary. Considering the par check during use that the gloves are s should be noted that the time to break different for different glove manufactur several substances, the protection time 	ocation. complying with an approved standard should emical products if a risk assessment indicates rameters specified by the glove manufacturer, still retaining their protective properties. It through for any glove material may be rers. In the case of mixtures, consisting of	

8 Exposure controls/personal protection

o. Exposure cor	in ois/personal protection
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.		
Color	: Various		
Odor	: Aromatic.		
Boiling point	: >37.78°C (>100°F)		
Flash point	: Closed cup: 33°C (9	1.4°F)	
Relative density	: 3.22		
Solubility(ies)	Media	Result	
Solubility(les)	. cold water	Not soluble	
Viscosity	: 60 - 100 s (ISO 6mn	n)	

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	: Evolves hydrogen on contact with water. 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
zinc	LC50 Inhalation Dusts and mists	Rat	>5.4 mg/l	4 hours
	LD50 Oral	Rat	>2000 mg/kg	-
bis-[4-(2,3-epoxipropoxi)	LD50 Dermal	Rabbit	23000 mg/kg	-
ohenyl]propane				
	LD50 Oral	Rat	15000 mg/kg	-
Kylene	LD50 Dermal	Rabbit	1.7 g/kg	-
-	LD50 Oral	Rat	4.3 g/kg	-
Hydrocarbons, C9,	LD50 Dermal	Rabbit - Male,	>2000 mg/kg	-
aromatics < 0.1% cumene		Female		
	LD50 Oral	Rat	8400 mg/kg	-
Epoxy Resin (700 <mw< td=""><td>LD50 Dermal</td><td>Rat</td><td>>2000 mg/kg</td><td>-</td></mw<>	LD50 Dermal	Rat	>2000 mg/kg	-
<=1100)				
	LD50 Oral	Rat	>2000 mg/kg	-
Propylene glycol	LC50 Inhalation Vapor	Rat	>7000 ppm	6 hours
nonomethyl ether				
-	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	5.2 g/kg	-
Diiron trioxide	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours
	LD50 Oral	Rat	10 g/kg	-
Solvent naphtha (petroleum),	LD50 Dermal	Rabbit	3.48 g/kg	-
ight aromatic				
	LD50 Oral	Rat	8400 mg/kg	-
I,2,4-Trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m ³	4 hours
-	LD50 Oral	Rat	5 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	-
Zinc oxide	LC50 Inhalation Dusts and mists	Rat	>5700 mg/m ³	4 hours
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
1,3,5-Trimethylbenzene	LC50 Inhalation Vapor	Rat	24000 mg/m ³	4 hours
-	LD50 Oral	Rat	5000 mg/kg	-
	1	1		1

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
s-[4-(2,3-epoxipropoxi) phenyl]propane	Eyes - Mild irritant	Rabbit	-	24 hours	-
	Eyes - Redness of the conjunctivae	Rabbit	0.4	24 hours	-
	Skin - Edema	Rabbit	0.5	4 hours	-
	Skin - Erythema/Eschar	Rabbit	0.8	4 hours	-
	Skin - Mild irritant	Rabbit	-	4 hours	-
Xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-

Sensitization

•	Route of exposure	Species	Result
bis-[4-(2,3-epoxipropoxi) phenyl]propane	skin	Mouse	Sensitizing

Mutagenicity

Not available.

11. Toxicological information

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Kylene	Category 1	-	central nervous system (CNS), kidneys, liver, respiratory organs
	Category 3		Narcotic effects
Talc containing no asbestos or quartz	Category 1	-	respiratory organs
Propylene glycol monomethyl ether	Category 3	-	Narcotic effects
Diiron trioxide	Category 1	-	respiratory organs
Solvent naphtha (petroleum), light aromatic	Category 3	-	Narcotic effects
1,2,4-Trimethylbenzene	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
Ethylbenzene	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
Zinc oxide	Category 1	-	respiratory organs, systemic toxicity
1,3,5-Trimethylbenzene	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Xylene	Category 1	-	nervous system, respiratory organs
Talc containing no asbestos or quartz	Category 1	-	respiratory organs
Diiron trioxide	Category 1	-	respiratory organs
1,2,4-Trimethylbenzene	Category 1	-	central nervous system (CNS), respiratory organs
Ethylbenzene	Category 1	-	hearing organs, nervous system
1,3,5-Trimethylbenzene	Category 1	-	central nervous system (CNS), respiratory organs

Aspiration hazard

Name	Result
Xylene	ASPIRATION HAZARD - Category 1
Solvent naphtha (petroleum), light aromatic	ASPIRATION HAZARD - Category 1
1,2,4-Trimethylbenzene	ASPIRATION HAZARD - Category 1
Ethylbenzene	ASPIRATION HAZARD - Category 1
1,3,5-Trimethylbenzene	ASPIRATION HAZARD - Category 1

11. Toxicological		
Information on the likely routes of exposure	:	Not available.
Potential acute health effect	<u>ts</u>	
Eye contact	1	Causes serious eye irritation.
Inhalation	:	No known significant effects or critical hazards.
Skin contact	:	May cause 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	:	May cause damage to organs following a single exposure if swallowed.
Symptoms related to the pl	<u>ıys</u>	ical, chemical and toxicological characteristics
Eye contact	:	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	:	Adverse symptoms may include the following: 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
Delayed and immediate effe	<u>cts</u>	and also chronic effects from short and long term exposure
Short term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Long term exposure		

Potential immediate : Not available. effects

Potential delayed	effects	1	Not available

Potential chronic health effects

General	: May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.

Reproductive toxicity : May damage fertility or the unborn child.

Numerical measures of toxicity

Acute toxicity estimates

11. Toxicological information

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
SIGMAZINC 109 HS BASE REDGREY	87730.9	5208.8	N/A	186.0	N/A
bis-[4-(2,3-epoxipropoxi)phenyl]propane	15000	23000	N/A	N/A	N/A
Xylene	4300	1700	N/A	11	N/A
Hydrocarbons, C9, aromatics < 0.1% cumene	8400	2500	N/A	N/A	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
Propylene glycol monomethyl ether	5200	13000	N/A	11	N/A
Diiron trioxide	10000	N/A	N/A	N/A	N/A
Solvent naphtha (petroleum), light aromatic	8400	3480	N/A	N/A	N/A
1,2,4-Trimethylbenzene	5000	N/A	N/A	18	N/A
Ethylbenzene	3500	17800	N/A	17.8	N/A
Zinc oxide	N/A	2500	N/A	N/A	N/A
1,3,5-Trimethylbenzene	5000	N/A	N/A	24	N/A

Other 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

Toxicity

Product/ingredient name	Result	Species	Exposure
zinc	Acute EC50 0.106 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Chronic EC10 6.3 µg/l	Daphnia - <i>Daphnia magna</i> - Neonate	21 days
bis-[4-(2,3-epoxipropoxi) phenyl]propane	Acute LC50 1.8 mg/l Fresh water	Daphnia - <i>daphnia magna</i>	48 hours
	Chronic NOEC 0.3 mg/l	Daphnia	21 days
Hydrocarbons, C9, aromatics < 0.1% cumene	LC50 9.2 mg/l	Fish	96 hours
Propylene glycol monomethyl ether	Acute LC50 23300 mg/l	Daphnia	48 hours
	Acute LC50 >4500 mg/l Fresh water	Fish	96 hours
Diiron trioxide	Acute EC50 >100 mg/l	Daphnia	48 hours
Solvent naphtha (petroleum), light aromatic	Acute LC50 8.2 mg/l	Fish	96 hours
Ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
,	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
Zinc oxide	Acute EC50 0.17 mg/l	Algae	72 hours
	Acute EC50 0.481 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Neonate	48 hours
	Chronic NOEC 0.017 mg/l Fresh water	Algae	72 hours

Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoc	culum
✓ydrocarbons, C9, aromatics < 0.1% cumene	-	78 % - 28 days	-	-	
Ethylbenzene	-	79 % - Readily - 10 days	-	-	
				Japan	Page: 11/16

12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
s-[4-(2,3-epoxipropoxi)	-	-	Not readily
Xylene Hydrocarbons, C9,	-	-	Readily Readily
aromatics < 0.1% cumene Ethylbenzene	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
X ylene	3.12	7.4 to 18.5	Low
Hydrocarbons, C9, aromatics < 0.1% cumene	3.7 to 4.5	10 to 2500	High
Propylene glycol monomethyl ether	<1	-	Low
1,2,4-Trimethylbenzene	3.63	120.23	Low
Ethylbenzene	3.6	79.43	Low
1,3,5-Trimethylbenzene	3.42	186.21	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

14. Transport information

-			
	UN	IMDG	ΙΑΤΑ
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3
Packing group		III	III
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.	(Zinc powder - zinc dust (stabilized))	Not applicable.

Additional information

- UN : None identified.
 - : The marine pollutant mark is not required when transported in sizes of ≤ 5 L or ≤ 5 kg.

IMDG ΙΑΤΑ

: The environmentally hazardous substance mark may appear if required by other transportation regulations.

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

15. Regulatory information

Fire Service Law

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

Pollutant Release and Transfer Registers (PRTR)

Ingredient name	%	Status	Reference number
Xylene	3.9		80
Trimethylbenzene	1.0		691

Industrial Safety and Health Act

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

None of the components are listed.

Substance(s) requiring labelling

15. Regulatory information

Ingredient name	%	Status	Reference number
Xylene	≤10	Listed	136
Petroleum naphtha	≤10	Listed	330
Propylene glycol monomethyl ether	≤10	Listed	496
Iron oxide	≤10	Listed	192
Ethylbenzene	≤10	Listed	70

Chemicals requiring notification

Ingredient name	%	Status	Reference number
Xylene Petroleum naphtha	≤10 ≤10	Listed Listed	136 330
Propylene glycol monomethyl ether	≤10 ≤10	Listed	496
Iron oxide Ethylbenzene	≤10 ≤10	Listed Listed	192 70
Zinc oxide	≤10 ≤10	Listed	188

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

None of the components are listed.

<u>Mutagen</u>

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	: Not applicable.

Poisonous and Deleterious Substances

None of the components are listed.

Chemical Substances Control Law (CSCL)

15. Regulatory information

Ingredient name	%	Status	Reference number
Polycondensate of 4,4'-isopropylidenediphenol and 1-chloro-2,3-epoxypropane (liquid only)	≤10	Priority assessment	87
Xylene	≤10	Priority assessment	125
1,2,4-Trimethylbenzene	≤10	Priority assessment	49
Ethylbenzene	≤10	Priority assessment	50
1,3,5-Trimethylbenzene	≤10	Priority assessment	201
Toluene	≤10	Priority assessment	46
Benzene	≤10	Priority assessment	45
Cumene	≤10	Priority assessment	126
4,4'-(Propane-2,2-diyl)diphenol	≤10	Priority assessment	75
Epichlorohydrin	≤10	Priority assessment	22

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	: 🔀roup 2B
List of Specially Controlled Industrial Waste	: Not listed
Japan inventory	: At least one component is not listed.
Road law	: Not available.

16. Other information

<u>History</u>	
Date of issue/Date of revision	: 3 April 2024
Date of previous issue	: 8/30/2023
Version	: 26
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
	Jonen Deres 45/

Japan

16. Other information

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

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.