SAFETY DATA SHEET

SIGMASHIELD MTC BASE REDBROWN



Date of issue 25 October 2024

Version 2.01

1. Product and company identification		
Product name	: SIGMASHIELD MTC BASE REDBROWN	
Product code	: 000001188856	
Other means of identification	: 00444804	
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
	SERIOUS EYE DAMAGE - Category 1
	SKIN SENSITIZATION - Category 1
	GERM CELL MUTAGENICITY - Category 2
	CARCINOGENICITY - Category 1A TOXIC TO REPRODUCTION - Category 1B
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 HAZARDOUS TO THE AQUATIC ENVIRONMENT - ACUTE HAZARD - Category 2 HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD - Category 2
GHS label elements	
Hazard pictograms	
Signal word	: Danger

2. Hazards identification

Hazard statements		Flammable liquid and vapor
וומבמות שומוכווולוונש	-	Flammable liquid and vapor. Causes skin irritation.
		May cause an allergic skin reaction.
		Causes serious eye damage.
		May cause drowsiness or dizziness.
		Suspected of causing genetic defects.
		May cause cancer.
		May damage fertility or the unborn child.
		Causes damage to organs. (central nervous system (CNS), kidneys, liver,
		respiratory organs)
		Causes damage to organs through prolonged or repeated exposure. (hearing
		organs, immune system, kidneys, nervous system, respiratory organs)
		Toxic to aquatic life with long lasting effects.
Precautionary statements		· · · · · · · · · · · · · · · · · · ·
Prevention	۰.	Obtain special instructions before use. Do not handle until all safety precautions
FIEVEIIUUI	1	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	۰.	Collect spillage. IF exposed or concerned: Call a POISON CENTER or doctor. IF
Response	1	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 skin irritation or rash
		occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for
		several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
		Immediately call a POISON CENTER or doctor.
Storage		Store locked up. Store in a well-ventilated place. Keep container tightly closed.
Disposal		Dispose of contents and container in accordance with all local, regional, national
usposal		and international regulations.
Other hazards which do not	۰.	Prolonged or repeated contact may dry skin and cause irritation. Contains a
result in classification		substance that may emit formaldehyde if stored beyond its shelf life and/or during
		cure at curing temperatures greater than 60C (140F).

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
Talc (containing no asbestos or quartz)	20 - <25	14807-96-6	Not available.
crystalline silica, respirable powder (>10 microns)	15 - <20	14808-60-7	1-548
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.
Xylene	10 - <12.5	1330-20-7	3-3; 3-60
Diiron trioxide	3 - <5	1309-37-1	1-357; 5-5188
Solvent naphtha (petroleum), heavy arom	3 - <5	64742-94-5	Not available.
isobutyl alcohol	3 - <5	78-83-1	2-3049
Ethyl Benzene	2 - <3	100-41-4	3-28; 3-60
Crystalline silica (quartz)	2 - <3	14808-60-7	1-548
Propylene glycol monomethyl ether	1 - <2	107-98-2	2-404; 7-97
Urea, polymer with formaldehyde, isobutylated	1 - <2	68002-18-6	Not available.
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3. Composition/information on ingredients			
Octadecanamide, N,N'-1,6-hexanediylbis [12-hydroxy-	0.5 - <1	55349-01-4	2-3055

0.2 - <0.5

91-20-3

4-311

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

Naphthalene

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	<u>effects</u>
Eye contact	: Causes serious eye damage.
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/s	<u>symptoms</u>
Eye contact	: Adverse symptoms may include the following: pain 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: pain or irritation redness dryness cracking blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations
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4. First aid measures

Ingestion : Adverse symptoms may include the following: stomach pains reduced fetal weight increase in fetal deaths skeletal malformations

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	 In case of inhalation of decomposition products in a fire, symptoms may be delayed.
Specific treatments	The exposed person may need to be kept under medical surveillance for 48 hours. 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 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 metal oxide/oxides Formaldehyde.	
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. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
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Product name SIGMASHIELD MTC BASE REDBROWN				
6. Accidental relea	6. Accidental release measures			
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 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
ralc , not containing asbestiform fibres	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 8 hours: 2 mg/m ³ . Form: Total dust (Class 1 Dust). OEL-M 8 hours: 0.5 mg/m ³ . Form: Respirable dust (Class 1 Dust).
crystalline silica, respirable powder (>10 microns)	Japan Society for Occupational Health (Japan, 5/2023) [Respirable crystalline silica]
xylene	OEL-C: 0.03 mg/m ³ . Form: Respirable dust. Japan Society for Occupational Health (Japan, 5/2023) OEL-M 8 hours: 50 ppm. OEL-M 8 hours: 217 mg/m ³ . Industrial Safety and Health Act (Japan, 6/2020) [xylene]
diiron trioxide	TWA 8 hours: 50 ppm. 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 8 hours: 1 mg/m ³ . Form: Respirable dust (Class 2 Dust). OEL-M 8 hours: 4 mg/m ³ . Form: Total dust
2-methylpropan-1-ol	(Class 2 Dust). Japan Society for Occupational Health (Japan, 5/2023) OEL-M 8 hours: 50 ppm. OEL-M 8 hours: 150 mg/m ³ . Industrial Safety and Health Act (Japan, 6/2020)
ethylbenzene	TWA 8 hours: 50 ppm. Japan Society for Occupational Health (Japan, 5/2023) Absorbed through skin. OEL-M 8 hours: 20 ppm. OEL-M 8 hours: 87 mg/m ³ . Industrial Safety and Health Act (Japan, 6/2020) TWA 8 hours: 20 ppm.
crystalline silica, respirable powder (<10 microns)	Japan Society for Occupational Health (Japan, 5/2023) [Respirable crystalline silica]
naphthalene	OEL-C: 0.03 mg/m ³ . Form: Respirable dust. Industrial Safety and Health Act (Japan, 6/2020) TWA 8 hours: 10 ppm.

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8. Exposure controls/personal protection

procedures	national guidance documents for methods for the determination of hazardous substances will also be required.
Appropriate engineering controls	: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

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

<u>Appearance</u>			
Physical state	: Liquid.		
Color	: Brownish-red.		
Odor	: Aromatic. [Slight]		
Boiling point	: >37.78°C (>100°F)		
Flash point	: Closed cup: 28°C (32.4°F)	
Relative density	: 1.56		
Solubility(ies)	Media	Result	
Solubility(les)	. cold water	Not soluble	
Viscosity	: > 100 s (ISO 6mm)		

10. Stability and reactivity				
Reactivity	: No specific test data related to reactivity available for this product or its ingredients.			
Chemical stability	: The product is stable.			
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.			
Conditions to avoid	: When exposed to high temperatures may produce hazardous decomposition products.			
Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.			
Hazardous decomposition products	: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides Formaldehyde. metal oxide/oxides			

11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Epoxy Resin (700 <mw <=1100)</mw 	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/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	-
Solvent naphtha (petroleum),	LC50 Inhalation Dusts and mists	Rat	>5.2 mg/l	4 hours
heavy arom				
-	LD50 Oral	Rat	>5 g/kg	-
isobutyl alcohol	LC50 Inhalation Vapor	Rat	24.6 mg/l	4 hours
-	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 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	-
Propylene glycol	LC50 Inhalation Vapor	Rat	>7000 ppm	6 hours
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Product name SIGMASHIELD MIC BASE REDBROW

11. Toxicological information

monomethyl ether				
	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	5.2 g/kg	-
Urea, polymer with	LD50 Dermal	Rabbit	>5 g/kg	-
formaldehyde, isobutylated			00	
	LD50 Oral	Rat	>5 g/kg	-
Naphthalene	LD50 Dermal	Rabbit	>20 g/kg	-
-	LD50 Oral	Rat	490 mg/kg	-
	1	1	-	1

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Xylene	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
Talc (containing no asbestos or quartz)	Category 1	-	respiratory organs
Xylene	Category 1	-	central nervous
			system (CNS),
			kidneys, liver,
			respiratory organs
	Category 3		Narcotic effects
Diiron trioxide	Category 1	-	respiratory organs
Solvent naphtha (petroleum), heavy arom	Category 3	-	Respiratory tract
			irritation
	Category 3		Narcotic effects
isobutyl alcohol	Category 3	-	Respiratory tract
			irritation
	Category 3		Narcotic effects
Ethyl Benzene	Category 3	-	Respiratory tract
			irritation
	Category 3		Narcotic effects
Propylene glycol monomethyl ether	Category 3	-	Narcotic effects
Naphthalene	Category 1	-	blood, eyes,
			respiratory tract

Specific target organ toxicity (repeated exposure)

Product name SIGMASHIELD MIC BASE REDBROW

11. Toxicological information

Name	Category	Route of exposure	Target organs
Talc (containing no asbestos or quartz)	Category 1	-	respiratory organs
Xylene	Category 1	-	nervous system, respiratory organs
Diiron trioxide	Category 1	-	respiratory organs
Ethyl Benzene	Category 1	-	hearing organs, nervous system
Crystalline silica (quartz)	Category 1	-	immune system, kidneys, respiratory organs
Naphthalene	Category 1	-	blood, eyes, respiratory organs

Aspiration hazard

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

Information on the likely routes of exposure	:	Not available.
Potential acute health effect	ts	
Eye contact	1	Causes serious eye damage.
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 ph	ys	ical, chemical and toxicological characteristics
Eye contact	:	Adverse symptoms may include the following: pain 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: pain or irritation redness dryness cracking blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations

11. Toxicological information

: Adverse symptoms may include the following: stomach pains reduced fetal weight increase in fetal deaths
skeletal malformations

Delayed and immediate effect	ts	and also chronic effects from short and long term exposure
Short term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	1	Not available.
<u>Long term exposure</u>		
Potential immediate effects	:	Not available.
Potential delayed effects	1	Not available.
Potential chronic health effe	ect	<u>s</u>
General	:	Causes damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	:	May cause cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	:	Suspected of causing genetic defects.
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)
SIGMASHIELD MTC BASE REDBROWN	13775.9	4421.7	N/A	43.4	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
Xylene	4300	1700	N/A	11	N/A
Diiron trioxide	10000	N/A	N/A	N/A	N/A
isobutyl alcohol	2830	2460	N/A	11	N/A
Ethyl Benzene	3500	17800	N/A	17.8	N/A
Propylene glycol monomethyl ether	5200	13000	N/A	11	N/A
Naphthalene	490	N/A	N/A	N/A	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. Contains a substance that may emit formaldehyde if stored beyond its shelf life and/or during cure at curing temperatures greater than 60C (140F). Avoid contact with skin and clothing.

12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Diiron trioxide	Acute EC50 >100 mg/l	Daphnia	48 hours
Solvent naphtha (petroleum),	NOEL 0.48 mg/l Fresh water	Daphnia	21 days
heavy arom			
isobutyl alcohol	Acute EC50 1100 mg/l	Daphnia	48 hours
Ethyl Benzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
-	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
Propylene glycol	Acute LC50 23300 mg/l	Daphnia	48 hours
monomethyl ether			
-	Acute LC50 >4500 mg/l Fresh water	Fish	96 hours

Persistence/degradability

Product/ingredient name	Test	Result		Dose		Inoculum
Ethyl Benzene	-	79 % - Rea	dily - 10 days	-		-
Product/ingredient name	Aquatic half-life		Photolysis		Biodeg	radability
Xylene Ethyl Benzene	-		-		Readily Readily	

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Xylene	3.12	7.4 to 18.5	Low
Solvent naphtha (petroleum),	2.8 to 6.5	-	High
heavy arom			-
isobutyl alcohol	1	-	Low
Ethyl Benzene	3.6	79.43	Low
Propylene glycol monomethyl ether	<1	-	Low
Naphthalene	3.4	85.11	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. з. 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

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13. Disposal considerations

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

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	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	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

Additional information

UN	 This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5.1.
IMDG	 This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5.
ΙΑΤΑ	: None identified.

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

Transport in bulk according : Not applicable. to IMO instruments

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		
Xylene	12	80
Ethylbenzene	2.2	53

Industrial Safety and Health Act

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

Product name SIGMASHIELD MTC BASE REDBROWN

15. Regulatory information

Ingredient name	%	Status	Reference number
ethyl benzene Naphthalene	≤10	Special Organic Solvents Group-2 Substances under Supervision	3-3 -

Substance(s) requiring labelling

Ingredient name	%	Status	Reference number
Crystalline silica	≥20 - ≤30	Listed	165-2
Xylene	≥10 - ≤20	Listed	136
Iron oxide	≤10	Listed	192
Petroleum naphtha	≤10	Listed	330
Butanol	≤10	Listed	477
Ethylbenzene	≤10	Listed	70
Propylene glycol monomethyl ether	≤10	Listed	496

Chemicals requiring notification

Ingredient name	%	Status	Reference number
Crystalline silica	≥20 - ≤30	Listed	165-2
Xylene	≥10 - ≤20	Listed	136
Iron oxide	≤10	Listed	192
Petroleum naphtha	≤10	Listed	330
Butanol	≤10	Listed	477
Ethylbenzene	≤10	Listed	70
Propylene glycol monomethyl ether	≤10	Listed	496
Naphthalene	≤10	Listed	408

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

Ingredient name	%	Status	Reference number
quartz quartz		Listed Listed	-

<u>Mutagen</u>

None of the components are listed.

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

15. Regulatory information

Lead regulation Organic solvents

: Not listed

Organic solvents : Class 2 poisoning prevention

Poisonous and Deleterious Substances

None of the components are listed.

Chemical Substances Control Law (CSCL)

Ingredient name	%	Status	Reference number
Xylene	≥10 - ≤20	Priority assessment	125
Ethylbenzene	≤10	Priority assessment	50
Naphthalene	≤10	Priority assessment	76
1,2,4-Trimethylbenzene	≤10	Priority assessment	49
Toluene	≤10	Priority assessment	46
1,3,5-Trimethylbenzene	≤10	Priority assessment	201
Cumene	≤10	Priority assessment	126
Benzene	≤10	Priority assessment	45
4,4'-(Propane-2,2-diyl)diphenol	≤10	Priority assessment	75

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

16. Other information

: 25 October 2024
: 6/27/2024
: 2.01
: EHS

16. Other information

Key to abbreviations	: ADN = European Provisions concerning the International Carriage of Dangerous
	Goods by Inland Waterway
	ADR = The European Agreement concerning the International Carriage of
	Dangerous Goods by Road
	ATE = Acute Toxicity Estimate
	BCF = Bioconcentration Factor
	GHS = Globally Harmonized System of Classification and Labelling of Chemicals
	IATA = International Air Transport Association
	IMDG = International Maritime Dangerous Goods
	LogPow = logarithm of the octanol/water partition coefficient
	MARPOL = International Convention for the Prevention of Pollution From Ships,
	1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
	RID = The Regulations concerning the International Carriage of Dangerous Goods
	by Rail
	UN = United Nations
Indicates information the	bat has changed from proviously issued version

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.