SAFETY DATA SHEET

Safety Data Sheet according to GB/T 16483-2008 and GB/T 17519-2013



4 December 2024 Date of issue/Date of revision

Version 1.05

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Product name

Section 1. Chemical product and company identification			
Product code	: 00445401		
Product name	: SIGMASHIELD 420 BASE GREY 5177		

: SIGMASHIELD 420 BASE GREY 5177

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 Coatings (Kunshan) Co., Ltd 53 Jinyang Road, Lujia Town, 215331 Kunshan City, Jiangsu Province, P.R. China Tel: 86 512 57678859 Fax: 86 512 57678857		
Emergency telephone number (with hours of operation)	: 00 86 532 83889090		

Section 2. Hazards identification

Classification of the substance or mixture according to GB 13690-2009 and GB 30000-2013

Emergency overview Liquid. Gray. Characteristic.

Flammable liquid and vapor. May be harmful if swallowed or in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Harmful if inhaled. Suspected of causing cancer. Toxic to aquatic life. Very toxic to aquatic life with long lasting effects. Prolonged or repeated contact may dry skin and cause irritation.

IF exposed or concerned: Get medical advice or attention. IF INHALED: Call a POISON CENTER or doctor if you feel unwell. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Immediately call a POISON CENTER or doctor.

See Section 12 for environmental precautions.

Product name SIGMASHIELD 420 BASE GREY 5177

Section 2. Hazards identification

Classification of the substance or mixture	 FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (oral) - Category 5 ACUTE TOXICITY (dermal) - Category 5 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2 AQUATIC HAZARD (ACUTE) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 1 Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 32.3% Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 58.3% Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 82.9% Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 58.3%
GHS label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements	 Flammable liquid and vapor. May be harmful if swallowed or in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Harmful if inhaled. Suspected of causing cancer. Toxic to aquatic life. 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 explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing vapor. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Response	: Collect spillage. IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF SWALLOWED: 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: Call a POISON CENTER or doctor if you feel unwell. 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
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Section 2. Hazards identification

	call a POISON CENTER or doctor.	
Suitable extinguishing media	Use dry chemical, CO_2 , water spray (fog) or foam.	
Storage	Store locked up. Store in a well-ventilated place. Keep cool.	
Disposal	Dispose of contents and container in accordance with all local, regional, national international regulations.	onal
Physical and chemical hazards	Flammable liquid and vapor.	
Health hazards	May be harmful if swallowed or in contact with skin. Causes skin irritation. A cause an allergic skin reaction. Causes serious eye damage. Harmful if inh Suspected of causing cancer. Prolonged or repeated contact may dry skin a cause irritation.	naled.
Symptoms related to the phy	al, chemical and toxicological characteristics	
Eye contact	Adverse symptoms may include the following: pain watering redness	
Inhalation	No specific data.	
Skin contact	Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur	
Ingestion	Adverse symptoms may include the following: stomach pains	
Delayed and immediate effect	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 effects	Not available.	
Potential delayed effects	Not available.	
Environmental hazards	Toxic to aquatic life. Very toxic to aquatic life with long lasting effects.	
Other hazards which do not result in classification	Prolonged or repeated contact may dry skin and cause irritation.	

Product name SIGMASHIELD 420 BASE GREY 5177

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

CAS number/other identifiers

CAS number	: Not applicable.
Ingredient name	

Ingredient name	%	CAS number
Peaction product: bisphenol-A-(epichlorhydrin); epoxy resin	10 - <25	25068-38-6
Talc , not containing asbestiform fibres	10 - <25	14807-96-6
xylene isomers mixture	1 - <10	1330-20-7
2-methylpropan-1-ol	1 - <10	78-83-1
ethylbenzene	1 - <10	100-41-4
nonylphenol	1 - <10	25154-52-3

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.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	 Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
Inhalation	: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Skin contact	: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Ingestion	: If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important sympto	oms/effects, acute and delayed
Potential acute health	<u>effects</u>
Eye contact	: Causes serious eye damage.
Inhalation	: Harmful if inhaled.
Skin contact	: May be harmful in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: May be harmful if swallowed.
Over-exposure signs/	<u>symptoms</u>
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: No specific data.

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Section 4. First aid measures

: Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur
: Adverse symptoms may include the following: stomach pains
dical attention and special treatment needed, if necessary
 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
: No specific treatment.
: 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)

Section 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 halogenated compounds 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.

Section 6. Accidental release measures

Personal precautions,	protective equipment and	d emergency procedures

For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused

environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

Small spill	:	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
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.

Section 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. 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.

Section 7. Handling and storage

Conditions for safe storage,	
including any	accordance with local regulations. Store in a segregated and approved area. Store
incompatibilities	in original container protected from direct sunlight in a dry, cool and well-ventilated
1	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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

dust. PC-TWA 8 hours: 1 mg/m³. Form: respirable dust. 2-methylpropan-1-ol GBZ 2.1 (China, 11/2022) [Xylene] 2-methylpropan-1-ol PC-TWA 8 hours: 50 mg/m³. ethylbenzene PC-STEL 15 minutes: 100 mg/m³. ethylbenzene GBZ 2.1 (China, 11/2022) PC-TWA 8 hours: 50 ppm. TWA 8 hours: 150 mg/m³. Recommended monitoring procedures Reference should be made to appropriate monitoring standards. Reference to 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 to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls to explosion-proof ventilation equipment. Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to e they comply with the requirements of environmental protection legislation. In s cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. ndividual protection measures : Wash hands, forearms and face thoroughly after handling chemical products, 1 Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, 1 eting,	Ingredient name		Exposure limits		
xylene GEZ 2.1 (China, 11/2022) [Xylene] 2-methylpropan-1-ol PC-TWA 8 hours: 50 mg/m³. 2-methylpropan-1-ol PC-STEL 15 minutes: 100 mg/m³. ethylbenzene GEZ 2.1 (China, 11/2022) [Xylene] ethylbenzene FC-STEL 15 minutes: 100 mg/m³. Recommended monitoring procedures Reference should be made to appropriate monitoring standards. Reference to 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 to keep user, support of ventilation equipment. Environmental exposure controls Emissions from ventilation or work process equipment should be checked to e they comply with the requirements of environmental protection legislation. In s cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. ndividual protection measures Yash hands, forearms and face thoroughly after handling chemical products, leating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clo Contaminated clothing before reusing. Ensure that eyewash stations and safe showers are close to the workstation location.	ralc , not containing asbestiform fibres		PC-TWA 8 hours: 3 mg/m ³ . Form: total dust. PC-TWA 8 hours: 1 mg/m ³ . Form:		
2-methylpropan-1-ol ACGIH TLV (United States, 7/2023) TWA 8 hours: 50 ppm. TWA 8 hours: 50 ppm. ethylbenzene TWA 8 hours: 100 mg/m³. Recommended monitoring procedures Reference should be made to appropriate monitoring standards. Reference to 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 co 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 e they comply with the requirements of environmental protection legislation. In s cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. Idividual protection measures Wash hands, forearms and face thoroughly after handling chemical products, I eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clob Contaminated clobting before reusing. Ensure that eyewash stations and safet showers are close to the workstation location.	xylene		GBZ 2.1 (China, 11/2022) [Xylene] PC-TWA 8 hours: 50 mg/m ³ .		
ethylbenzene GBZ 2.1 (China, 11/2022) PC-TWA 8 hours: 100 mg/m³. PC-STEL 15 minutes: 150 mg/m³. Recommended monitoring procedures : Reference should be made to appropriate monitoring standards. Reference to 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 co 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 e they comply with the requirements of environmental protection legislation. In s cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. ndividual protection measures : Wash hands, forearms and face thoroughly after handling chemical products, I eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clo Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safet showers are close to the workstation location.	2-methylpropan-1-ol		ACGIH TLV (United States, 7/2023) TWA 8 hours: 50 ppm.		
proceduresnational 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 co 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 e they comply with the requirements of environmental protection legislation. In s cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.Individual protection measures: Wash hands, forearms and face thoroughly after handling chemical products, I eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clo Contaminated clothing before reusing. Ensure that eyewash stations and safet showers are close to the workstation location.	ethylbenzene		GBZ 2.1 (China, 11/2022) PC-TWA 8 hours: 100 mg/m ³ .		
 controls ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering co 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 e they comply with the requirements of environmental protection legislation. In s cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. Mash hands, forearms and face thoroughly after handling chemical products, I eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clo Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safet showers are close to the workstation location. 		national guidance documents	or methods for the determination of hazardous		
 Environmental exposure controls Emissions from ventilation or work process equipment should be checked to e they comply with the requirements of environmental protection legislation. In s cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. Individual protection measures Wash hands, forearms and face thoroughly after handling chemical products, I eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clo Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safet showers are close to the workstation location. 		ventilation or other engineering contaminants below any recon also need to keep gas, vapor o	g controls to keep worker exposure to airborne nmended or statutory limits. The engineering controls or dust concentrations below any lower explosive		
Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, I eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clo Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safet showers are close to the workstation location.		: Emissions from ventilation or ventilation or ventilation or ventilation or ventilation or ventilation or ventilation of vent	vork process equipment should be checked to ensure ents of environmental protection legislation. In some or engineering modifications to the process		
eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clo Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safet showers are close to the workstation location.	ndividual protection measur	<u>es</u>			
Eve protection . Chemical splash goggles and face shield	Hygiene measures	eating, smoking and using the Appropriate techniques should Contaminated work clothing sl contaminated clothing before r	lavatory and at the end of the working period. be used to remove potentially contaminated clothing would not be allowed out of the workplace. Wash eusing. Ensure that eyewash stations and safety		
Lyo protection . Onemical spiden goggies and lace silicid.	Eye protection	: Chemical splash goggles and	ace shield.		

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Section 8. Exposure controls/personal protection

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.

Section 9. Physical and chemical properties

Appearance	
Physical state	: Liquid.
Color	: Gray.
Odor	: Characteristic.
Boiling point	: >37.78°C (>100°F)
Flash point	: Closed cup: 25°C (77°F)
Lower and upper explosive (flammable) limits	plosive : Not available.
Relative density	: 1.36
Solubility(ies)	Media Result
Solubility(les)	cold water Not soluble
Viscosity	 Øynamic (room temperature): Not available. Kinematic (room temperature): Not available. Kinematic (40°C): >21 mm²/s

Section 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 halogenated compounds metal oxide/oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
eaction product: bisphenol-A- (epichlorhydrin); epoxy resin	LD50 Dermal	Rabbit	>2 g/kg	-
	LD50 Oral	Rat	>2 g/kg	-
xylene isomers mixture	LD50 Dermal	Rabbit	1.7 g/kg	-
-	LD50 Oral	Rat	4.3 g/kg	-
2-methylpropan-1-ol	LC50 Inhalation Vapor	Rat	24.6 mg/l	4 hours
	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 mg/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	-
nonylphenol	LD50 Dermal	Rabbit	2.14 g/kg	-
	LD50 Oral	Rat	580 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
A-(epichlorhydrin); epoxy resin	Eyes - Mild irritant	Rabbit	-	100 mg	-
	Eyes - Moderate irritant	Rabbit	_	-	-
	Skin - Moderate irritant	Rabbit	-	-	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 Ul	-
	Skin - Severe irritant	Rabbit	-	24 hours 2 mg	-
xylene isomers mixture	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-

Sensitization

Section 11. Toxicological information

Product/ingredient name	Route of exposure	Species	Result
Peaction product: bisphenol- A-(epichlorhydrin); epoxy resin	skin	Mouse	Sensitizing

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Talc , not containing asbestiform fibres	Category 3	-	Respiratory tract irritation
2-methylpropan-1-ol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	•••	Route of exposure	Target organs
ethylbenzene	Category 2	-	-

Aspiration hazard

Name	Result
ethylbenzene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure	:	Not available.
Potential acute health effects		
Eye contact	:	Causes serious eye damage.
Inhalation	:	Harmful if inhaled.
Skin contact	:	May be harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction.
Ingestion	;	May be harmful if swallowed.
Symptoms related to the phys	sic	al, chemical and toxicological characteristics
Eye contact	:	Adverse symptoms may include the following: pain watering redness

Defatting to the skin.

Section 11. Toxicological information

Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur
Ingestion	: Adverse symptoms may include the following: stomach pains

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	:	Not available.
Long term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Potential chronic health effe	ect	<u>s</u>
General	:	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	1	Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	:	No known significant effects or critical hazards.
Reproductive toxicity	:	No known significant effects or critical hazards.

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)
GMASHIELD 420 BASE GREY 5177 reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	4588.7 2500	2685.5 2500	N/A N/A	20.1 N/A	2.6 N/A
xylene isomers mixture 2-methylpropan-1-ol ethylbenzene nonylphenol	4300 2830 3500 580	1700 2460 17800 2140	N/A N/A N/A N/A	11 24.6 17.8 N/A	1.5 N/A 1.5 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.

Product name SIGMASHIELD 420 BASE GREY 5177

Section 11. Toxicological information

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
A-(epichlorhydrin); epoxy resin	Chronic NOEC 0.3 mg/l	Daphnia	21 days
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
,	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
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

Persistence/degradability

Product/ingredient name	Test	Result		Dose		Inoculum
reaction product: bisphenol- A-(epichlorhydrin); epoxy resin	OECD 301F	5 % - 28 da	ays	-		-
ethylbenzene	-	79 % - Rea	dily - 10 days	-		-
Product/ingredient name	Aquatic half-life		Photolysis		Biodeg	radability
reaction product: bisphenol- A-(epichlorhydrin); epoxy resin	-		-		Not rea	adily
xylene isomers mixture ethylbenzene	-		-		Readily Readily	

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Peaction product: bisphenol- A-(epichlorhydrin); epoxy resin	2.64 to 3.78	31	Low
xylene isomers mixture 2-methylpropan-1-ol ethylbenzene nonylphenol	3.12 1 3.6 3.28	7.4 to 18.5 - 79.43 154.88	Low Low Low Low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Product name SIGMASHIELD 420 BASE GREY 5177

Section 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.

Section 14. Transport information

	China	UN	IMDG	IATA
UN number	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3	3
Packing group	III	Ш	III	Ш
Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	Not applicable.	<pre></pre>	Not applicable.

Additional information

CN	: None identified.
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 precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not applicable. to IMO instruments

Product name SIGMASHIELD 420 BASE GREY 5177

Section 15. Regulatory information

China inventory (IECSC)	: All components are listed or exempted.
References	 Production Safety Law of the People's Republic of China Code of Occupational Disease Prevention of the People's Republic of China Environmental Protection Law of the People's Republic of China Fire Control Law of the People's Republic of China Regulations on the Control over Safety of Dangerous Chemicals Occupational exposure limits for hazardous agents in the workplace chemical hazardous agents (GBZ2.1) General rule for classification and hazard communication of chemicals (GB13690) Safety data sheet for chemical products - Content and order of sections (GB/ T16483) Guidance on the compilation of safety data sheet for chemical products (GB/ T17519) General rule for preparation of precautionary label for chemicals (GB15258) Safety rules for classification, precautionary labeling and precautionary statements of chemicals (GB30000.2-29)

Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 4 December 2024
Date of previous issue	: 9/26/2024
Version	: 1.05
	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
Indicatos information that	t has changed from previously 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.