SAFETY DATA SHEET

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



Date of issue/Date of revision 25 October 2024

Version 1.04

Section 1. Chem	ical product and company identification
Product code	: 000001195957
Product name	: SIGMASHIELD 880 GF BASE RAL 9017
Product name	: SIGMASHIELD 880 GF BASE RAL 9017
Other means of identification	: 00468831
Product type	: Liquid.
Relevant identified uses o	f 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. Black. Aromatic. [Slight] Flammable liquid and vapor. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Suspected of causing cancer. Toxic to aquatic life. Harmful 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 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.

Section 2. Hazards identification

Classification of the substance or mixture	 FLAMMABLE LIQUIDS - Category 3 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 3 Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 54.4%
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 damage. Suspected of causing cancer. Toxic to aquatic life. Harmful 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. Avoid release to the environment. Avoid breathing vapor. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Response	: F exposed or concerned: Get medical advice or attention. 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.
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 and international regulations.
Physical and chemical hazards	: Flammable liquid and vapor.
Health hazards	: Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Suspected of causing cancer. Prolonged or repeated contact may dry skin and cause irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Section 2. Hazards identification

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 effects and also chronic effects from short and long term exposure	
Short term exposure	

Potential immediate effects	Not av	ailable.
Potential delayed effects	Not av	/ailable.
Long term exposure		
Potential immediate effects	Not av	ailable.
Potential delayed effects	Not av	vailable.
Environmental hazards	Toxic	to aquatic life. Harmful to aquatic life with long lasting effects.
Other hazards which do not result in classification	Prolor	nged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of	: 00468831
identification	

CAS number/other identifiers

CAS number : Not applicable.		
Ingredient name	%	CAS number
pís-[4-(2,3-epoxipropoxi)phenyl]propane	10 - <25	1675-54-3
Talc , not containing asbestiform fibres	10 - <25	14807-96-6
xylene isomers mixture	1 - <10	1330-20-7
barium sulfate	1 - <10	7727-43-7
Epoxy Resin (700 <mw<=1100)< td=""><td>1 - <10</td><td>25036-25-3</td></mw<=1100)<>	1 - <10	25036-25-3
Phenol, methylstyrenated	1 - <10	68512-30-1
2-methylpropan-1-ol	1 - <10	78-83-1
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	1 - <10	68609-97-2
ethylbenzene	1 - <10	100-41-4
12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine	1 - <10	220926-97-6

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Section 3. Composition/information on ingredients

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

	sary 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 effect	<u>:ts</u>	
Eye contact	:	Causes serious eye damage.
Inhalation	:	No known significant effects or critical hazards.
Skin contact	:	Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	:	No known significant effects or critical hazards.
Over-exposure signs/symp	ton	<u>15</u>
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
Indication of immediate med	lica	l attention and special treatment needed, if necessary
Notes to physician	1	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	:	No specific treatment.

Section 4. First aid measures

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)

Section 5. Fire-fighting measures

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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. This material is harmful 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 sulfur 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 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".				

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Section 6. Accidental release measures

Environmental precautions	1	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.

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 noncombustible, 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 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. 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, including any incompatibilities	:	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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name		Exposure limits
ralc , not containing asbestif	orm fibres	GBZ 2.1 (China, 11/2022) PC-TWA 8 hours: 3 mg/m ³ . Form: total dust. PC-TWA 8 hours: 1 mg/m ³ . Form:
xylene		respirable dust. GBZ 2.1 (China, 11/2022) [Xylene] PC-TWA 8 hours: 50 mg/m ³ . PC-STEL 15 minutes: 100 mg/m ³ .
barium sulfate		GBZ 2.1 (China, 11/2022) PC-TWA 8 hours: 10 mg/m ³ (as Ba).
2-methylpropan-1-ol		ACGIH TLV (United States, 7/2023) TWA 8 hours: 50 ppm. TWA 8 hours: 152 mg/m ³ .
ethylbenzene		GBZ 2.1 (China, 11/2022) PC-TWA 8 hours: 100 mg/m ³ . PC-STEL 15 minutes: 150 mg/m ³ .
12-hydroxyoctadecanoic acid 1,3-benzenedimethanamine		ACGIH TLV (United States) TWA: 10 mg/m ³ . Form: Inhalable particle. TWA: 3 mg/m ³ (inhalable dust). Form: Respirable particle.
Recommended monitoring procedures		o appropriate monitoring standards. Reference to s for methods for the determination of hazardous red.
Appropriate engineering controls	ventilation or other engineerin contaminants below any reco	lation. Use process enclosures, local exhaust ng controls to keep worker exposure to airborne ommended or statutory limits. The engineering controls or dust concentrations below any lower explosive rentilation equipment.
Environmental exposure controls	: Emissions from ventilation or they comply with the requirer cases, fume scrubbers, filters	work process equipment should be checked to ensure nents of environmental protection legislation. In some s or engineering modifications to the process to reduce emissions to acceptable levels.
ndividual protection measur	es	
Hygiene measures	: Wash hands, forearms and f eating, smoking and using th Appropriate techniques shou Contaminated work clothing	ace thoroughly after handling chemical products, before e lavatory and at the end of the working period. Id be used to remove potentially contaminated clothing should not be allowed out of the workplace. Wash e reusing. Ensure that eyewash stations and safety kstation location.
Eye protection <u>Skin protection</u>	: Chemical splash goggles and	d face shield.

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Section 8. Exposure controls/personal 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

<u>Appearance</u>			
Physical state	1	Liquid.	
Color	1	Black.	
Odor	1	Aromatic. [Slight]	
Boiling point	1	>37.78°C (>100°F)	
Flash point	:	Closed cup: 37°C (98.6°F	=)
Lower and upper explosive (flammable) limits	:	Not available.	
Relative density	:	1.53	
Solubility(ies)	1	Media	Result
Colubility(ICS)		cold water	Not soluble
Viscosity	:	ynamic (room temperat	
		Kinematic (room tempera Kinematic (40°C): >21 m	

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 nitrogen oxides sulfur oxides halogenated compounds metal oxide/oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
øís-[4-(2,3-epoxipropoxi)phenyl] propane	LD50 Dermal	Rabbit	23000 mg/kg	-
	LD50 Oral	Rat	15000 mg/kg	-
xylene isomers mixture	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
barium sulfate	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Epoxy Resin (700 <mw<=1100)< td=""><td>LD50 Dermal</td><td>Rat</td><td>>2000 mg/kg</td><td>-</td></mw<=1100)<>	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
Phenol, methylstyrenated	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/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	-
oxirane, mono[(C12-14-alkyloxy) methyl] derivs.	LD50 Oral	Rat	17100 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	-
12-hydroxyoctadecanoic acid,	LC50 Inhalation Dusts	Rat	3.56 mg/l	4 hours
reaction products with	and mists		-	
1,3-benzenedimethanamine				
and hexamethylenediamine				
-	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-

Irritation/Corrosion

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Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
bis-[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 isomers mixture	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-

Sensitization

Product/ingredient name	Route of exposure	Species	Result
bis-[4-(2,3-epoxipropoxi) phenyl]propane oxirane, mono[(212.14 elludoun)methyl]	skin skin	Mouse Guinea pig	Sensitizing Sensitizing
(C12-14-alkyloxy)methyl] derivs.			

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
	Category 2	-	-
	Category 2	inhalation	lungs

Aspiration hazard

Name	Result
ethylbenzene	ASPIRATION HAZARD - Category 1

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Section 11. Toxicological information				
Information on the likely routes of exposure	: Not available.			
Potential acute health effect	t <u>s</u>			
Eye contact	: Causes serious eye damage.			
Inhalation	: No known significant effects or critical hazards.			
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction			
Ingestion	: No known significant effects or critical hazards.			
Symptoms related to the pl	nysical, 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:			

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Skin contact	: Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur
	blistening may occur
Ingestion	: Adverse symptoms may include the following: stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

<u>Short term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
<u>Long term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health eff	<u>ects</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	: 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

Section 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)
GMASHIELD 880 GF BASE RAL 9017	13704.9	6021.4	N/A	69.0	8.4
bis-[4-(2,3-epoxipropoxi)phenyl]propane	15000	23000	N/A	N/A	N/A
xylene isomers mixture	4300	1700	N/A	11	1.5
barium sulfate	N/A	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
Phenol, methylstyrenated	2500	2500	N/A	N/A	N/A
2-methylpropan-1-ol	2830	2460	N/A	24.6	N/A
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	17100	N/A	N/A	N/A	N/A
ethylbenzene	3500	17800	N/A	17.8	1.5
12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine	2500	2500	N/A	N/A	3.56

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.

Section 12. Ecological information

<u>Toxicity</u>	

Product/ingredient name	Result	Species	Exposure
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
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
oxirane, mono[LC50 >100 mg/l	Fish	96 hours
(C12-14-alkyloxy)methyl] derivs.			
ethylbenzene	Acute EC50 1.8 mg/I Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine	Acute EC50 >100 mg/l	Algae - Pseudokirchneriella subcapitata (microalgae)	72 hours
	Acute EC50 >100 mg/l	Daphnia - <i>Daphnia magna</i> (Water flea)	48 hours
	Acute LC50 >100 mg/l	Fish - Oncorhynchus mykiss (rainbow trout)	96 hours
	Chronic NOEC 100 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
	Chronic NOEC ≥50 mg/l	Daphnia - <i>Daphnia magna</i> (Water flea)	21 days

Persistence/degradability

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Section 12. Ecological information

Product/ingredient name	Test	Result		Dose		Inoculum
ethylbenzene 12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine	- OECD 301D Ready Biodegradability - Closed Bottle Test		adily - 10 days eadily - 29 days	-		-
Product/ingredient name	Aquatic half-life		Photolysis		Biode	gradability
bis-[4-(2,3-epoxipropoxi) phenyl]propane xylene isomers mixture ethylbenzene	-		-		Not rea Readil Readil	y

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
vilene isomers mixture	3.12	7.4 to 18.5	Low
Phenol, methylstyrenated	3.627	-	Low
2-methylpropan-1-ol	1	-	Low
oxirane, mono[3.77	-	Low
(C12-14-alkyloxy)methyl]			
derivs.			
ethylbenzene	3.6	79.43	Low
12-hydroxyoctadecanoic	>6	-	High
acid, reaction products with			_
1,3-benzenedimethanamine and hexamethylenediamine			

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods The generation of waste should be avoided or minimized wherever possible. 2 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.

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Section 13. Disposal considerations

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		111	111	
Environmental hazards	No.	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	Not applicable.

Additional information

CN	: None identified.
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.
IATA	: None identified.
Special prec	autions 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

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)

Product name SIGMASHIELD 880 GF BASE RAL 9017

Section 15. Regulatory information

Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 25 October 2024
Date of previous issue	: 4/22/2024
Version	: 1.04
	EHS
Key to abbreviations	: ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
	ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
	ATE = Acute Toxicity Estimate
	BCF = Bioconcentration Factor
	GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association
	IMDG = International Maritime Dangerous Goods
	LogPow = logarithm of the octanol/water partition coefficient
	MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
	RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
	UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.