# SAFETY DATA SHEET

#### SIGMASHIELD 420 BASE BLACK



**Date of issue** 4 April 2024

**Version 2** 

# 1. Product and company identification

: SIGMASHIELD 420 BASE BLACK **Product name** 

**Product code** : 000001200004 Other means of : 00191021 identification

**Product type** : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

: Professional applications, Used by spraying, Application by non spray methods... **Product use** 

Use of the substance/

mixture

: Coating.

: Not applicable. **Uses advised against** 

Supplier's details : PPG PMC Japan Co., Ltd., 8F, Shintetsu Bldg., 1-1, Daikaidori 1-chome, Kobe

652-0803 Japan; Tel: +81-78-574-2777

**Emergency telephone** 

number

: 078 574 2777

### 2. Hazards identification

**GHS Classification** : FLAMMABLE LIQUIDS - Category 3

> SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1

GERM CELL MUTAGENICITY - Category 2

**CARCINOGENICITY - Category 1A** 

TOXIC TO REPRODUCTION - Category 1B

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 HAZARDOUS TO THE AQUATIC ENVIRONMENT - ACUTE HAZARD - Category 2

HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD -

Category 2

**GHS label elements** 

**Hazard pictograms** 









Signal word : Danger

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### 2. Hazards identification

#### **Hazard statements**

: Flammable liquid and vapor.

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation.

Suspected of causing genetic defects.

May cause cancer.

May damage fertility or the unborn child.

May cause damage to organs. (central nervous system (CNS), kidneys, liver,

respiratory organs)

May cause damage to organs through prolonged or repeated exposure. (hearing

organs, immune system, kidneys, nervous system, respiratory organs)

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. Avoid release to the environment. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

Response

: Collect spillage. IF exposed or concerned: Call a POISON CENTER or doctor. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

**Storage** 

: Store locked up.

**Disposal** 

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not result in classification

: Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation.

# 3. Composition/information on ingredients

Substance/mixture : Mixture

#### **CAS** number/other identifiers

CAS number : Not applicable.
CSCL number : Not available.

Ingredient name	%	CAS number	CSCL
fystalline silica, respirable powder (>10 microns) bis-[4-(2,3-epoxipropoxi)phenyl]propane	25 - <50 20 - <25	14808-60-7 1675-54-3	1-548 4-209; 7-1279; 7-1283
Talc containing no asbestos or quartz Xylene	7 - <10 7 - <10	14807-96-6 1330-20-7	Not available. 3-3; 3-60
crystalline silica (quartz) 4-Nonylphenol (branched) isobutyl alcohol	3 - <5 1 - <2 1 - <2	14808-60-7 84852-15-3 78-83-1	1-548 3-503 2-3049
Ethylbenzene Phenol, styrenated	1 - <2 1 - <2 0.5 - <1	100-41-4 61788-44-1	3-28; 3-60 4-198

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.

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**Product name SIGMASHIELD 420 BASE BLACK** 

# 3. Composition/information on ingredients

Occupational exposure limits, if available, are listed in Section 8.

SUB codes represent substances without registered CAS Numbers.

#### 4. First aid measures

#### **Description of necessary first aid measures**

**Eye contact**: 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 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 effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact**: May cause damage to organs following a single exposure in contact with skin.

Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.

Ingestion : Corrosive to the digestive tract. Causes burns. May cause damage to organs

following a single exposure if swallowed.

#### Over-exposure signs/symptoms

**Eye contact**: Adverse symptoms may include the following:

pain or irritation watering redness

**Inhalation** : Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

**Skin contact**: Adverse symptoms may include the following:

irritation redness dryness cracking

reduced fetal weight increase in fetal deaths skeletal malformations

**Ingestion** : Adverse symptoms may include the following:

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 : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

**Specific treatments**: No specific treatment.

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### 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)

# 5. Fire-fighting measures

#### **Extinguishing media**

Suitable extinguishing media

: Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

Unsuitable extinguishing media

: Do not use water jet.

metal oxide/oxides

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

**Special protective actions** for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

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### 6. Accidental release measures

#### 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.

# 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
ørystalline silica, respirable powder (>10 microns)	Japan Society for Occupational Health (Japan, 9/2022). [Respirable crystalline silica]
Talc containing no asbestos or quartz	OEL-C: 0.03 mg/m³ Form: Respirable dust Japan Society for Occupational Health (Japan, 9/2022). [Class 1 dusts (Activated charcoal, Alumina, Aluminium, Bentonite, Diatomite, Graphite, Kaolinite, Pagodite, Pyrites, Pyrite cinder, Talc)]

crystalline silica (quartz)

isobutyl alcohol

Ethylbenzene

**Xylene** 

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# 8. Exposure controls/personal protection

OEL-M: 0.5 mg/m<sup>3</sup> 8 hours. Form: Respirable dust (Class 1 Dust)

OEL-M: 2 mg/m<sup>3</sup> 8 hours. Form: Total dust

(Class 1 Dust)

Industrial Safety and Health Act (Japan,

6/2020). [xylene]

TWA: 50 ppm 8 hours.

**Japan Society for Occupational Health** 

(Japan, 9/2022).

OEL-M: 50 ppm 8 hours. OEL-M: 217 mg/m<sup>3</sup> 8 hours.

**Japan Society for Occupational Health** (Japan, 9/2022). [Respirable crystalline

OEL-C: 0.03 mg/m³ Form: Respirable dust **Japan Society for Occupational Health** 

(Japan, 9/2022).

OEL-M: 150 mg/m<sup>3</sup> 8 hours. OEL-M: 50 ppm 8 hours.

Industrial Safety and Health Act (Japan,

6/2020).

TWA: 50 ppm 8 hours.

**Japan Society for Occupational Health** (Japan, 9/2022). Absorbed through skin.

OEL-M: 87 mg/m<sup>3</sup> 8 hours. OEL-M: 20 ppm 8 hours.

Industrial Safety and Health Act (Japan, 6/2020).

TWA: 20 ppm 8 hours.

procedures

**Recommended monitoring**: 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 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 Skin protection**  : Chemical splash goggles and face shield.

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# 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.

# 9. Physical and chemical properties

**Appearance** 

Physical state : Liquid.

Color : Black.

Odor : Aromatic.

**Boiling point** : >37.78°C (>100°F)

Flash point : Closed cup: 33°C (91.4°F)

Relative density : 1.75

Solubility(ies)

MediaResultcold waterNot soluble

# 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.

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# 10. Stability and reactivity

Hazardous decomposition products

: Depending on conditions, decomposition products may include the following materials: carbon oxides metal oxide/oxides

# 11. Toxicological information

#### Information on toxicological effects

#### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
s-[4-(2,3-epoxipropoxi)	LD50 Dermal	Rabbit	23000 mg/kg	-
phenyl]propane				
	LD50 Oral	Rat	15000 mg/kg	-
Xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
4-Nonylphenol (branched)	LD50 Dermal	Rabbit	2.14 g/kg	-
	LD50 Oral	Rat	1300 mg/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	-
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	-
Phenol, styrenated	LD50 Dermal	Rabbit	>5010 mg/kg	-
	LD50 Oral	Rat	3550 mg/kg	-

#### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
s-[4-(2,3-epoxipropoxi) phenyl]propane	Eyes - Mild irritant	Rabbit	-	24 hours	-
. 31. 1	Eyes - Redness of the conjunctivae	Rabbit	0.4	24 hours	-
	Skin - Edema	Rabbit	0.5	4 hours	-
	Skin - Erythema/Eschar	Rabbit	0.8	4 hours	-
	Skin - Mild irritant	Rabbit	-	4 hours	-
Xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	
4-Nonylphenol (branched)	Skin - Erythema/Eschar	Rabbit	4	-	-

#### **Sensitization**

Product/ingredient name	Route of exposure	Species	Result
bis-[4-(2,3-epoxipropoxi) phenyl]propane	skin	Mouse	Sensitizing
Phenol, styrenated	skin	Mouse	Sensitizing

#### **Mutagenicity**

Not available.

#### **Carcinogenicity**

Not available.

#### **Reproductive toxicity**

Not available.

#### **Teratogenicity**

Not available.

#### Specific target organ toxicity (single exposure)

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# 11. Toxicological information

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
4-Nonylphenol (branched)	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
isobutyl alcohol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
Ethylbenzene	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects

#### Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Talc containing no asbestos or quartz	Category 1	-	respiratory organs
Xylene	Category 1	-	nervous system,
			respiratory organs
crystalline silica (quartz)	Category 1	-	immune system,
			kidneys,
			respiratory organs
4-Nonylphenol (branched)	Category 2	-	kidneys, liver
Ethylbenzene	Category 1	-	hearing organs,
			nervous system

#### **Aspiration hazard**

Name	Result
Xylene	ASPIRATION HAZARD - Category 1
Ethylbenzene	ASPIRATION HAZARD - Category 1

Information on the likely

routes of exposure

: Not available.

#### Potential acute health effects

**Eye contact** : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

**Skin contact** : May cause damage to organs following a single exposure in contact with skin.

Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.

: Corrosive to the digestive tract. Causes burns. May cause damage to organs Ingestion

following a single exposure if swallowed.

#### Symptoms related to the physical, chemical and toxicological characteristics

: Adverse symptoms may include the following: **Eye contact** 

pain or irritation watering redness

Inhalation : Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

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### 11. Toxicological information

**Skin contact**: Adverse symptoms may include the following:

irritation redness dryness cracking

reduced fetal weight increase in fetal deaths skeletal malformations

Ingestion : Adverse symptoms may include the following:

stomach pains reduced fetal weight increase in fetal deaths skeletal malformations

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

**Short term exposure** 

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

**Long term exposure** 

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

General: May cause damage to organs through prolonged or repeated exposure. Prolonged

or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when

subsequently exposed to very low levels.

**Carcinogenicity** : 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 420 BASE BLACK	72294.5	14388.4	N/A	92.0	N/A
bis-[4-(2,3-epoxipropoxi)phenyl]propane	15000	23000	N/A	N/A	N/A
Xylene	4300	1700	N/A	11	N/A
4-Nonylphenol (branched)	1300	2140	N/A	N/A	N/A
isobutyl alcohol	2830	2460	N/A	11	N/A
Ethylbenzene	3500	17800	N/A	17.8	N/A
Phenol, styrenated	3550	N/A	N/A	N/A	N/A

#### Other information

Causes digestive tract burns. 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.

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#### **Product name SIGMASHIELD 420 BASE BLACK**

# 12. Ecological information

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
s-[4-(2,3-epoxipropoxi) phenyl]propane	Acute LC50 1.8 mg/l Fresh water	Daphnia - daphnia magna	48 hours
	Chronic NOEC 0.3 mg/l	Daphnia	21 days
4-Nonylphenol (branched)	Acute EC50 0.044 mg/l	Crustaceans - Moina macrocopa	48 hours
	Acute LC50 0.221 mg/l	Fish	96 hours
isobutyl alcohol	Acute EC50 1100 mg/l	Daphnia	48 hours
Ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
Phenol, styrenated	Acute EC50 3.8 mg/l	Daphnia ,	48 hours

#### Persistence/degradability

Product/ingredient name	Test	Result		Result Dose			Inoculum
Thylbenzene Phenol, styrenated	- OECD 301F	79 % - Readily - 10 days 7 % - Not readily - 28 days		-		-	
Product/ingredient name	Aquatic half-life		Photolysis		Biodeg	ıradability	

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
s-[4-(2,3-epoxipropoxi)	-	-	Not readily
phenyl]propane			
Xylene	-	-	Readily
Ethylbenzene	-	-	Readily
Phenol, styrenated	-	-	Not readily

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
	3.12	7.4 to 18.5	Low
4-Nonylphenol (branched)	5.4	251.19	Low
isobutyl alcohol	1	-	Low
Ethylbenzene	3.6	79.43	Low

#### **Mobility in soil**

Soil/water partition coefficient (Koc)

: Not available.

Mobility : Not available.

Other adverse effects : No known significant effects or critical hazards.

# 13. Disposal considerations

#### **Disposal methods**

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or

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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

	UN	IMDG	IATA
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3
Packing group	III	III	III
Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	(bis-[4-(2,3-epoxipropoxi) phenyl]propane)	Not applicable.

#### **Additional information**

UN : None identified.

**IMDG** : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

**IATA** : The environmentally hazardous substance mark may appear if required by other transportation

regulations.

Special precautions for user : Transport within user's premises: always transport in closed containers that are

upright and secure. Ensure that persons transporting the product know what to do in

the event of an accident or spillage.

Transport in bulk according : Not applicable.

to IMO instruments

# 15. Regulatory information

### Fire Service Law

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

#### Pollutant Release and Transfer Registers (PRTR)

Ingredient name	%	Status	Reference number
Xylene	7.8	Class 1	80
Alkylphenol (limited to those the alkyl group is C9)	1.8	Class 1	320
Ethylbenzene	1.4	Class 1	53

#### **Industrial Safety and Health Act**

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

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# 15. Regulatory information

Ingredient name	%		Reference number
Ethyl benzene		Group-2 Substances under Supervision	3-3

#### Substance(s) requiring labelling

Ingredient name	%	Status	Reference number
<b>⊘</b> rystalline silica	≥30 - ≤40	Listed	165-2
Xylene	≤10	Listed	136
Butanol	≤10	Listed	477
Ethylbenzene	≤10	Listed	70

#### **Chemicals requiring notification**

Ingredient name	%		Reference number
Xylene Butanol	≥30 - ≤40 ≤10 ≤10 ≤10	Listed Listed Listed Listed	165-2 136 477 70

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

None of the components are listed.

#### **Mutagen**

None of the components are listed.

Corrosive liquid : Not listed

Occupational Safety and

**Health Law** 

: Inflammable

: Not listed

Regulations on the

**Prevention of Tetraalkyl** 

**Lead Poisoning** 

Harmful Substances : Not listed

Subject to Obtaining Permission for

Manufacturing

Harmful Substances, : Not listed

Prohibited for Manufacturing

ISHL Enforcement Order : Inflammable

Appendix 1 - Dangerous

**Substances** 

Lead regulation : Not listed
Organic solvents : Class 2

poisoning prevention

#### **Poisonous and Deleterious Substances**

None of the components are listed.

**Chemical Substances Control Law (CSCL)** 

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**Product name SIGMASHIELD 420 BASE BLACK** 

# 15. Regulatory information

Ingredient name	%	Status	Reference number
olycondensate of 4,4'-isopropylidenediphenol and 1-chloro-2,3-epoxypropane (liquid only)	≥20 - ≤30	Priority assessment	87
Xylene	≤10	Priority assessment	125
Ethylbenzene	≤10	Priority assessment	50
Toluene	≤10	Priority assessment	46
Benzene	≤10	Priority assessment	45
Phenol	≤10	Priority assessment	62
Epichlorohydrin	≤10	Priority assessment	22

**High Pressure Gas Control**: Not available.

Law

#### **Explosives Control Law**

None of the components are listed.

**Law concerning prevention**: Not available.

of pollution of the ocean

#### **Maritime Safety Law**

#### **Notification Regulating Transportation of Dangerous Materials by Sea**

None of the components are listed.

#### **Container class**

None of the components are listed.

JSOH Carcinogen : Group 1
List of Specially Controlled : Not listed

**Industrial Waste** 

Japan inventory : At least one component is not listed.

Road law : Not available.

### 16. Other information

**History** 

Date of issue/Date of : 4 April 2024

revision

Date of previous issue : 10/24/2023

Version : 2
Prepared by : EHS

**Key to abbreviations** : ADN = European Provisions concerning the International Carriage of Dangerous

Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of

Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

RID = The Regulations concerning the International Carriage of Dangerous Goods

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**Product name SIGMASHIELD 420 BASE BLACK** 

### 16. Other information

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.

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