# **SAFETY DATA SHEET**

**SIGMATHERM 500** 



Date of issue 15 April 2024

Version 1

1. Product and company identification		
Product name	: SIGMATHERM 500	
Product code	: 000001201700	
Other means of identification	: 00476796; 00476797	
Product type	: Liquid.	
Relevant identified uses of the substance or mixture and uses advised against		
Product use	: Professional applications, Used by spraying.	
Use of the substance/ mixture	: Coating.	
Uses advised against	: Not applicable.	
Supplier's details	: PPG PMC Japan Co., Ltd., 8F, Shintetsu Bldg., 1-1, Daikaidori 1-chome, Kobe 652-0803 Japan; Tel: +81-78-574-2777	
Emergency telephone number	: 078 574 2777	

# 2. Hazards identification

GHS Classification	: FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2
	EYE IRRITATION - Category 2A
	CARCINOGENICITY - Category 2
	TOXIC TO REPRODUCTION - Category 1B
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 HAZARDOUS TO THE AQUATIC ENVIRONMENT - ACUTE HAZARD - Category 2 HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD -
	Category 2
GHS label elements	
Hazard pictograms	
Signal word	: Danger

Product name SIGMATHERM 500		
2. Hazards identification		
Hazard statements	: Flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of causing cancer. May damage fertility or the unborn child. Causes damage to organs. (central nervous system (CNS), kidneys, liver, respiratory organs) Causes damage to organs through prolonged or repeated exposure. (central nervous system (CNS), hearing organs, 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. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.	
Response	: Collect spillage. IF exposed or concerned: Call a POISON CENTER or doctor. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF ON SKIN: Wash with plenty of water. If skin irritation 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. Store in a well-ventilated place. Keep container tightly closed.	
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.	
Other hazards which do not result in classification	: Prolonged or repeated contact may dry skin and cause irritation.	

# 3. Composition/information on ingredients

Substance/mixture

: Mixture

# CAS number/other identifiers

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

Ingredient name	%	CAS number	CSCL
aluminium metal	25 - <50	7429-90-5	Not available.
Xylene	20 - <25	1330-20-7	3-3; 3-60
Solvent naphtha (petroleum), heavy arom	12.5 - <15	64742-94-5	Not available.
Solvent naphtha (petroleum), light aromatic	3 - <5	64742-95-6	Not available.
Ethylbenzene	3 - <5	100-41-4	3-28; 3-60
1,2,4-Trimethylbenzene	3 - <5	95-63-6	3-3427; 3-7
3-ethyltoluene	2 - <3	620-14-4	3-15
zeolites	1 - <2	1318-02-1	1-23
stearic acid	1 - <2	57-11-4	2-608
titanium dioxide (excluding nanoparticle)	0.2 - <0.5	13463-67-7	1-558; 5-5225
Toluene	0.1 - <0.2	108-88-3	3-2; 3-60

Product code 000001201700

# Product name SIGMATHERM 500

# 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.

# 4. First aid measures

# **Description of necessary first aid measures**

Eye contact	<ul> <li>Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.</li> </ul>
Inhalation	<ul> <li>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.</li> </ul>
Skin contact	<ul> <li>Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.</li> </ul>
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 delay	ed

Ingestion	<ul> <li>Causes damage to organs following a single exposure if swallowed. Can cause central nervous system (CNS) depression.</li> </ul>
ingestion	
Over-exposure signs	
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
	Japan Page: 3/15

# 4. First aid measures

Indication of immediate medical attention and special treatment needed, if necessary		
Notes to physician	<ul> <li>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</li> </ul>	
Specific treatments	: No specific treatment.	
Protection of first-aiders	<ul> <li>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.</li> </ul>	

See toxicological information (Section 11)

### 5. Fire-fighting measures Extinguishing media Suitable extinguishing : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam. media Unsuitable extinguishing : Do not use water jet. media Specific hazards arising : 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 from the chemical 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. : Decomposition products may include the following materials: **Hazardous thermal** carbon oxides decomposition products metal oxide/oxides **Special protective actions** : Promptly isolate the scene by removing all persons from the vicinity of the incident if for fire-fighters 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** : Fire-fighters should wear appropriate protective equipment and self-contained equipment for fire-fighters 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".	

# 6. Accidental release measures

**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.

# 7. Handling and storage

# Precautions for safe handling

: Put on appropriate personal protective equipment (see Section 8). 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 nonsparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be stored in purpose-built containers or in metal containers with tight-fitting, self-closing lids. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside.

# 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.

Product name SIGMATHERM 500

# 8. Exposure controls/personal protection

### **Control parameters**

**Occupational exposure limits** 

Ingredient name	Exposure limits	
aluminium metal	Japan Society for Occupational Health (Japan, 9/2022). [Class 1 dusts (Activated charcoal, Alumina, Aluminium, Bentonite, Diatomite, Graphite, Kaolinite, Pagodite, Pyrites, Pyrite cinder, Talc)] OEL-M: 0.5 mg/m <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)	
Xylene	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.	
Ethylbenzene	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.	
1,2,4-Trimethylbenzene	Japan Society for Occupational Health (Japan, 9/2022). OEL-M: 120 mg/m <sup>3</sup> 8 hours. OEL-M: 25 ppm 8 hours.	
Toluene	Japan Society for Occupational Health (Japan, 9/2022). Absorbed through skin. OEL-M: 188 mg/m <sup>3</sup> 8 hours. OEL-M: 50 ppm 8 hours. Industrial Safety and Health Act (Japan, 6/2020). TWA: 20 ppm 8 hours.	
procedures national guidar	led 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.	
controls or other engine below any reco keep gas, vapo	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.	
controls they comply with cases, fume so	Emissions from ventilation or work process equipment should be checked to ensure hey comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment vill be necessary to reduce emissions to acceptable levels.	

### Individual protection measures

### Product name SIGMATHERM 500 8. Exposure controls/personal protection : Wash hands, forearms and face thoroughly after handling chemical products, before **Hygiene measures** eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. Eye protection : Chemical splash goggles. **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. : For prolonged or repeated handling, use the following type of gloves: Gloves May be used: nitrile rubber Recommended: polyvinyl alcohol (PVA), Viton® **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. : Appropriate footwear and any additional skin protection measures should be **Other skin protection** selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. : Respirator selection must be based on known or anticipated exposure levels, the **Respiratory protection** hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

# 9. Physical and chemical properties

<u>Appearance</u>				
Physical state	: Liquid.			
Color	: Gray.			
Odor	: Aromatic. [Slight]			
Boiling point	: >37.78°C (>100°F)			
Flash point	: Closed cup: 35°C (95°F)			
Relative density	: 1.08			
Solubility(ies)	Media	Result		
Solubility(ies)	. cold water	Not soluble		

Japan Page: 7/15

# 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 metal oxide/oxides

# 11. Toxicological information

# Information on toxicological effects

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
aluminium metal	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours
	LD50 Oral	Rat	>15900 mg/kg	-
Xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
Solvent naphtha (petroleum),	LC50 Inhalation Dusts and mists	Rat	>5.2 mg/l	4 hours
heavy arom				
	LD50 Oral	Rat	>5 g/kg	-
Solvent naphtha (petroleum),	LD50 Dermal	Rabbit	3.48 g/kg	-
light aromatic				
	LD50 Oral	Rat	8400 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	-
1,2,4-Trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m³	4 hours
	LD50 Oral	Rat	5 g/kg	-
zeolites	LD50 Oral	Rat	>5 g/kg	-
stearic acid	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	4600 mg/kg	-
titanium dioxide (excluding nanoparticle)	LC50 Inhalation Dusts and mists	Rat	>6.82 mg/l	4 hours
,	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Toluene	LC50 Inhalation Vapor	Rat	49 g/m³	4 hours
	LD50 Dermal	Rabbit	8.39 g/kg	-
	LD50 Oral	Rat	5580 mg/kg	-

# Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-

# **Sensitization**

Not available.

# **11. Toxicological information**

## **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
aluminium metal	Category 1	-	respiratory organs
Xylene	Category 1	-	central nervous system (CNS), kidneys, liver, respiratory organs
	Category 3		Narcotic effects
Solvent naphtha (petroleum), heavy arom	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
Solvent naphtha (petroleum), light aromatic	Category 3	-	Narcotic effects
Ethylbenzene	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
1,2,4-Trimethylbenzene	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
Toluene	Category 1	-	central nervous system (CNS)
	Category 3		Respiratory tract irritation
	Category 3		Narcotic effects

### Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
aluminium metal	Category 1	-	respiratory organs
Xylene	Category 1	-	nervous system, respiratory organs
Ethylbenzene	Category 1	-	hearing organs, nervous system
1,2,4-Trimethylbenzene	Category 1	-	central nervous system (CNS), respiratory organs
zeolites	Category 1	-	respiratory organs
titanium dioxide (excluding nanoparticle)	Category 1	-	respiratory organs
Toluene	Category 1	-	central nervous system (CNS), kidneys

### **Aspiration hazard**

Japan Page: 9/15

# **11. Toxicological information**

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

Information on the likely routes of exposure	:	Not available.
Potential acute health effec	<u>ts</u>	
Eye contact	:	Causes serious eye irritation.
Inhalation	1	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
Skin contact	1	Causes damage to organs following a single exposure in contact with skin. Causes skin irritation. Defatting to the skin.
Ingestion	1	Causes damage to organs following a single exposure if swallowed. Can cause central nervous system (CNS) depression.

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

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	<ul> <li>Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations</li> </ul>
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
	fects and also chronic effects from short and long term exposure
Short term exposure Potential immediate effects	: Not available.

# Potential delayed effects : Not available.

# 11. Toxicological information

Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Potential chronic health effe	ect	<u>s</u>
General	:	Causes damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
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	:	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)
SIGMATHERM 500	295725.4	3335.1	N/A	29.6	N/A
Xylene	4300	1700	N/A	11	N/A
Solvent naphtha (petroleum), light aromatic	8400	3480	N/A	N/A	N/A
Ethylbenzene	3500	17800	N/A	17.8	N/A
1,2,4-Trimethylbenzene	5000	N/A	N/A	18	N/A
stearic acid	4600	N/A	N/A	N/A	N/A
Toluene	5580	8390	N/A	11	N/A

### Other information

Prolonged or repeated contact may dry skin and cause irritation. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing.

# **12. Ecological information**

т	oxi	C	itv
_	-	-	

Product/ingredient name	Result	Species	Exposure
Solvent naphtha (petroleum), heavy arom	NOEL 0.48 mg/l Fresh water	Daphnia	21 days
Solvent naphtha (petroleum), light aromatic	Acute LC50 8.2 mg/l	Fish	96 hours
Ethylbenzene	Acute EC50 1.8 mg/l Fresh water Chronic NOEC 1 mg/l Fresh water	Daphnia Daphnia - Ceriodaphnia dubia	48 hours -
zeolites	Acute LC50 >680 mg/l	Fish	96 hours
titanium dioxide (excluding nanoparticle)	Acute LC50 >100 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours

## Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Ethylbenzene	-	79 % - Readily - 10 days	-	-

# **12. Ecological information**

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Xvlene	-	-	Readily
Ethylbenzene	-	-	Readily
Toluene	-	-	Readily

### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
Xylene	3.12	7.4 to 18.5	Low
Solvent naphtha (petroleum),	2.8 to 6.5	-	High
heavy arom			Ũ
Ethylbenzene	3.6	79.43	Low
1,2,4-Trimethylbenzene	3.63	120.23	Low
3-ethyltoluene	3.98	-	Low
stearic acid	8.23	-	High
Toluene	2.73	8.32	Low

### Mobility in soil

Soil/water partition	4	Not available.
coefficient (Koc)		
Mobility	:	Not available.

Other adverse effects

**Packing group** 

: No known significant effects or critical hazards.

# 13. Disposal considerations

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

Ш

# **14. Transport information** UN IMDG UN number UN1263 UN proper shipping name PAINT Transport hazard class(es) 3

Ш

Japan Page: 12/15

ΙΑΤΑ

UN1263

PAINT

3

Ш

Product code 000001201700 Product name SIGMATHERM 500		Date of issue 15 Ap	ril 2024 Version 1
14. Transpo	ort information		
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

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

: None identified.

# **15. Regulatory information**

### **Fire Service Law**

ΙΑΤΑ

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	23	Class 1	80
Trimethylbenzene	4.1	Class 1	691
Ethylbenzene	4.0	Class 1	53

## **Industrial Safety and Health Act**

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

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

### Substance(s) requiring labelling

Ingredient name	%		Reference number
Petroleum naphtha	≥20 - ≤30	Listed	330
Xylene	≥20 - ≤30	Listed	136
Ethylbenzene	≤10	Listed	70

**Chemicals requiring notification** 

Version 1

# 15. Regulatory information

Ingredient name	%	Status	Reference number
Aluminium and its water-soluble salts	≥20 - ≤30	Listed	37
Petroleum naphtha	≥20 - ≤30	Listed	330
Xylene	≥20 - ≤30	Listed	136
Ethylbenzene	≤10	Listed	70
Titanium(IV) oxide	≤10	Listed	191
Toluene	≤10	Listed	407

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

None of the components are listed.

### <u>Mutagen</u>

None of the components are listed.

Corrosive liquid	: Not listed
Occupational Safety and Health Law	: Inflammable, Combustible
Regulations on the Prevention of Tetraalkyl Lead Poisoning	: Not listed
Harmful Substances Subject to Obtaining Permission for Manufacturing	: Not listed
Harmful Substances, Prohibited for Manufacturing	: Not listed
ISHL Enforcement Order Appendix 1 - Dangerous Substances	: Inflammable, Combustible
Lead regulation	: Not listed
Organic solvents poisoning prevention	: Class 2

### Poisonous and Deleterious Substances

None of the components are listed.

### **Chemical Substances Control Law (CSCL)**

Ingredient name	%	Status	Reference number
Xylene	≥20 - ≤30	Priority assessment	125
Ethylbenzene	≤10	Priority assessment	50
1,2,4-Trimethylbenzene	≤10	Priority assessment	49
1,3,5-Trimethylbenzene	≤10	Priority assessment	201
Toluene	≤10	Priority assessment	46
Benzene	≤10	Priority assessment	45
Cumene	≤10	Priority assessment	126

# High Pressure Gas Control : Not available.

Law

# Explosives Control Law

None of the components are listed.

Japan Page: 14/15

# 15. Regulatory information

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 2B
List of Specially Controlled Industrial Waste	: Not listed
Japan inventory	: All components are listed or exempted.
Road law	: Not available.

# **16. Other information**

<u>History</u>	
Date of issue/Date of revision	: 15 April 2024
Date of previous issue	: No previous validation
Version	: 1
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 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.