SAFETY DATA SHEET

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

Date of issue/Date of revision 30 November 2022

Version 2

Section 1. Chemical product and company identification		
Product code	: 00469219	
Product name	: SIGMATHERM 540 BLACK	
Product name	: SIGMATHERM 540 BLACK	
Product type	: Liquid.	
Relevant identified uses of	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. Characteristic. Fammable liquid and vapor. Causes mild skin irritation. Causes serious eye damage. Harmful if inhaled. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure. Harmful to aquatic life. Prolonged or repeated contact may dry skin and cause irritation.

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

See Section 12 for environmental precautions.

Product name SIGMATHERM 540 BLACK

Section 2. Hazard	Is identification
Classification of the substance or mixture	 AMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 3 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 AQUATIC HAZARD (ACUTE) - Category 3 Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 40.8% Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 62.4%
GHS label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements	 Fammable liquid and vapor. Causes mild skin irritation. Causes serious eye damage. Harmful if inhaled. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure. Harmful to aquatic life.
Precautionary statements	
Prevention	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe vapor.
Response	: IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with 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. 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	: Fammable liquid and vapor.

Product name SIGMATHERM 540 BLACK		
Section 2. Hazard	s identification	
Health hazards	: Causes mild skin irritation. Causes serious eye damage. Harmful if inhaled. Suspected of causing cancer. Prolonged or repeated contact may dry skin and cause irritation.	
Symptoms related to the phy	vsical, chemical and toxicological characteristics	
Eye contact	: Adverse symptoms may include the following: pain watering redness	
Inhalation	: No specific data.	
Skin contact	: Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur	
Ingestion	: Adverse symptoms may include the following: stomach pains	
Delayed and immediate effect	cts and also chronic effects from short and long term exposure	
Short term exposure		
Potential immediate effects	: Not available.	
Potential delayed effects	: Not available.	
Long term exposure		
Potential immediate effects	: Not available.	
Potential delayed effects	: Not available.	
Environmental hazards	: Harmful to aquatic life.	
Other hazards which do not	: Prolonged or repeated contact may dry skin and cause irritation.	

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result in classification

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Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

CAS number/other identifiers

CAS number : Not applicable.		
Ingredient name	%	CAS number
ethylbenzene	10 - <25	100-41-4
1-methoxy-2-propanol	1 - <10	107-98-2
xylene isomers mixture	1 - <10	1330-20-7
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	1 - <10	2530-83-8
crystalline silica, respirable powder (<10 microns)	1 - <10	14808-60-7
1-Butanol, titanium(4+) salt (4:1), homopolymer	1 - <10	9022-96-2
toluene	0.1 - <1	108-88-3

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Product name SIGMATHERM 540 BLACK

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

Description of necess	ary 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 effects	
Eye contact :	Causes serious eye damage.
Inhalation :	Harmful if inhaled.
Skin contact :	Causes mild skin irritation. Defatting to the skin.
Ingestion :	No known significant effects or critical hazards.
Over-exposure signs/symptor	<u>ns</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 medica	l 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.

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

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	: Fammable 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 harmful to aquatic life. 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 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".
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.

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Section 6. Accidental release measures

Methods and materials for containment and cleaning up

Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling	: Put on appropriate personal protective equipment (see Section 8). 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	
ethylbenzene		GBZ 2.1 (China, 8/2019).	
		PC-STEL: 150 mg/m ³ 15 minutes.	
		PC-TWA: 100 mg/m ³ 8 hours.	
1-methoxy-2-propanol		ACGIH TLV (United States, 1/2022).	
		STEL: 369 mg/m ³ 15 minutes.	
		STEL: 100 ppm 15 minutes.	
		TWA: 184 mg/m ³ 8 hours.	
		TWA: 50 ppm 8 hours.	
xylene isomers mixture		GBZ 2.1 (China, 8/2019). [Xylene]	
		PC-STEL: 100 mg/m ³ 15 minutes.	
		PC-TWA: 50 mg/m ³ 8 hours.	
crystalline silica, respirable po	owder (<10 microns)	GBZ 2.1 (China, 8/2019).	
ci ystallille silica, respirable po		PC-TWA: 0.7 mg/m ³ 8 hours. Form:	
		respirable dust, $10\% \le \text{free SiO2} \le 50\%$	
		PC-TWA: 0.3 mg/m^3 8 hours. Form:	
		respirable dust, $50\% < \text{free SiO2} < 80\%$	
		PC-TWA: 0.2 mg/m ³ 8 hours. Form:	
		0	
		respirable dust, free SiO2>80%	
toluene		GBZ 2.1 (China, 8/2019). Absorbed	
		through skin.	
		PC-STEL: 100 mg/m ³ 15 minutes.	
		PC-TWA: 50 mg/m ³ 8 hours.	
Recommended monitoring procedures		propriate monitoring standards. Reference to methods for the determination of hazardous	
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		
	also need to keep gas, vapor or d	ust concentrations below any lower explosive	
Environmental exposure	also need to keep gas, vapor or d limits. Use explosion-proof ventil	lust concentrations below any lower explosive ation equipment.	
Environmental exposure	also need to keep gas, vapor or d limits. Use explosion-proof ventilaEmissions from ventilation or work	lust concentrations below any lower explosive ation equipment. k process equipment should be checked to ensure	
Environmental exposure controls	also need to keep gas, vapor or d limits. Use explosion-proof ventilaEmissions from ventilation or wor they comply with the requirements	lust concentrations below any lower explosive ation equipment. k process equipment should be checked to ensure s of environmental protection legislation. In some	
	 also need to keep gas, vapor or d limits. Use explosion-proof ventila Emissions from ventilation or wor they comply with the requirements cases, fume scrubbers, filters or e 	lust concentrations below any lower explosive ation equipment. k process equipment should be checked to ensur s of environmental protection legislation. In some engineering modifications to the process	
	 also need to keep gas, vapor or d limits. Use explosion-proof ventila Emissions from ventilation or wor they comply with the requirements cases, fume scrubbers, filters or e 	lust concentrations below any lower explosive ation equipment. k process equipment should be checked to ensur s of environmental protection legislation. In some	
controls	 also need to keep gas, vapor or d limits. Use explosion-proof ventila Emissions from ventilation or wor they comply with the requirements cases, fume scrubbers, filters or e equipment will be necessary to re 	lust concentrations below any lower explosive ation equipment. k process equipment should be checked to ensur s of environmental protection legislation. In some engineering modifications to the process	
controls	 also need to keep gas, vapor or d limits. Use explosion-proof ventila Emissions from ventilation or wor they comply with the requirements cases, fume scrubbers, filters or e equipment will be necessary to re 	lust concentrations below any lower explosive ation equipment. k process equipment should be checked to ensur s of environmental protection legislation. In some engineering modifications to the process duce emissions to acceptable levels.	
controls	 also need to keep gas, vapor or d limits. Use explosion-proof ventilation or work they comply with the requirements cases, fume scrubbers, filters or e equipment will be necessary to research with the requirement of the structure of th	lust concentrations below any lower explosive ation equipment. k process equipment should be checked to ensure s of environmental protection legislation. In some engineering modifications to the process duce emissions to acceptable levels. thoroughly after handling chemical products, before ratory and at the end of the working period. e used to remove potentially contaminated clothing or reusing. Ensure that eyewash stations and	
controls <u>ndividual protection measur</u> Hygiene measures	 also need to keep gas, vapor or d limits. Use explosion-proof ventilation or word they comply with the requirements cases, fume scrubbers, filters or e equipment will be necessary to react the eating, smoking and using the law Appropriate techniques should be Wash contaminated clothing before safety showers are close to the word of the eating state of the eating state of the eating before the eating showers are close to the word of the eating shower	lust concentrations below any lower explosive ation equipment. k process equipment should be checked to ensure s of environmental protection legislation. In some engineering modifications to the process duce emissions to acceptable levels. thoroughly after handling chemical products, befor ratory and at the end of the working period. e used to remove potentially contaminated clothing ore reusing. Ensure that eyewash stations and orkstation location.	
controls	 also need to keep gas, vapor or d limits. Use explosion-proof ventilation or work they comply with the requirements cases, fume scrubbers, filters or e equipment will be necessary to research in the scrubbers, for earting, smoking and using the law Appropriate techniques should be Wash contaminated clothing before 	lust concentrations below any lower explosive ation equipment. k process equipment should be checked to ensure s of environmental protection legislation. In some engineering modifications to the process duce emissions to acceptable levels. thoroughly after handling chemical products, befor ratory and at the end of the working period. e used to remove potentially contaminated clothing ore reusing. Ensure that eyewash stations and orkstation location.	

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Section 8. Exposure controls/personal protection

: Chemical-resistant, impervious gloves com be worn at all times when handling chemica this is necessary. Considering the parame check during use that the gloves are still re should be noted that the time to breakthrou different for different glove manufacturers. several substances, the protection time of t estimated.	al products if a risk assessment indicates ers specified by the glove manufacturer, taining their protective properties. It gh for any glove material may be In the case of mixtures, consisting of
: For prolonged or repeated handling, use th Not recommended: nitrile rubber Recommended: polyvinyl alcohol (PVA), bu	
: Personal protective equipment for the body being performed and the risks involved and before handling this product. When there i wear anti-static protective clothing. For the discharges, clothing should include anti-sta	should be approved by a specialist a risk of ignition from static electricity, greatest protection from static
 tion : Appropriate footwear and any additional sk selected based on the task being performe approved by a specialist before handling th 	d and the risks involved and should be
 tion : Respirator selection must be based on known hazards of the product and the safe workin workers are exposed to concentrations about appropriate, certified respirators. Use a provision respirator complying with an approved start necessary. 	g limits of the selected respirator. If ve the exposure limit, they must use operly fitted, air-purifying or air-fed
tion : Respirator selection must be based on kno hazards of the product and the safe workin workers are exposed to concentrations abo appropriate, certified respirators. Use a pro respirator complying with an approved star	wn or anticipated exposure levels, t g limits of the selected respirator. I ve the exposure limit, they must us operly fitted, air-purifying or air-fed

Section 9. Physical and chemical properties

<u>Appearance</u>			
Physical state	1	Liquid.	
Color	1	Black.	
Odor	1	Characteristic.	
Boiling point	1	>37.78°C (>100	°F)
Flash point	:	Closed cup: 36°	C (96.8°F)
Lower and upper explosive (flammable) limits	:	Greatest known	range: Lower: 1.48% Upper: 13.74% (1-methoxy-2-propanol)
Relative density	:	1.38	
Solubility(ies)		Media	Result
Solubility(les)	1	cold water	Not soluble
Viscosity	:	Kinematic (40°C	c): >21 mm²/s

Section 10. Stability and reactivity

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

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
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-methoxy-2-propanol	LC50 Inhalation Vapor	Rat	>7000 ppm	6 hours
	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	5.2 g/kg	-
xylene isomers mixture	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
[3-(2,3-epoxypropoxy)propyl]	LC50 Inhalation Dusts	Rat	>5300 mg/m ³	4 hours
trimethoxysilane	and mists		-	
	LD50 Dermal	Rabbit	4.3 g/kg	-
	LD50 Oral	Rat	7.01 g/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 isomers mixture	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
[3-(2,3-epoxypropoxy)propyl] trimethoxysilane	Eyes - Cornea opacity	Rabbit	11.8	1 minutes	24 hours

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Section 11. Toxicological information

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
1-methoxy-2-propanol 1-Butanol, titanium(4+) salt (4:1), homopolymer	Category 3 Category 3	-	Narcotic effects Respiratory tract irritation
toluene	Category 3 Category 3	-	Narcotic effects Narcotic effects

Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
ethylbenzene	Category 2	-	-
crystalline silica, respirable powder (<10 microns)	Category 1	inhalation	-
toluene	Category 2	-	-

Aspiration hazard

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

Information on the likely routes of exposure	: Not available.
Potential acute health effects	
Eye contact	: Causes serious eye damage.
Inhalation	: Harmful if inhaled.
Skin contact	: Causes mild skin irritation. Defatting to the skin.
Ingestion	: No known significant effects or critical hazards.
Eye contact	 sical, chemical and toxicological characteristics 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

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Section 11. Toxicological information

Ingestion

: Adverse symptoms may include the following: stomach pains

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

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
SIGMATHERM 540 BLACK	6808.7	10242.3	N/A	41.9	4.3
ethylbenzene	3500	17800	N/A	17.8	1.5
1-methoxy-2-propanol	5200	13000	N/A	N/A	N/A
xylene isomers mixture	4300	1700	N/A	11	1.5
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	7010	4300	N/A	N/A	N/A
1-Butanol, titanium(4+) salt (4:1), homopolymer	500	N/A	N/A	N/A	N/A
toluene	5580	8390	N/A	49	N/A

Other information

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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. Trimethoxysilanes are capable of forming methanol if hydrolyzed or ingested. If swallowed, methanol may be harmful or fatal or cause blindness. Avoid contact with skin and clothing.

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Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
1-methoxy-2-propanol	Acute LC50 23300 mg/l	Daphnia	48 hours
	Acute LC50 >4500 mg/l Fresh water	Fish	96 hours
[3-(2,3-epoxypropoxy)propyl] trimethoxysilane	Acute LC50 324 mg/l	Daphnia	48 hours
Inmethoxyshane			

Persistence/degradability

Product/ingredient name	Test	Result		Dose		Inoculum
ethylbenzene	-	79 % - Readily - 10 days		-		-
Product/ingredient name	Aquatic half-life		Photolysis		Biodeg	radability
ethylbenzene xylene isomers mixture toluene	- - -		- -		Readily Readily Readily	,

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
ethylbenzene	3.6	79.43	low
1-methoxy-2-propanol	<1	-	low
xylene isomers mixture	3.12	7.4 to 18.5	low
toluene	2.73	8.32	low

Mobility in soil

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

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. 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.

Product code 00469219 **Product name SIGMATHERM 540 BLACK**

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	W	W	W	M
Environmental hazards	No.	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	Not applicable.

Additional information

CN	: None identified.
UN	: None identified.
IMDG	: None identified.
ΙΑΤΑ	: None identified.

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

Transport in bulk according : Not applicable. to IMO instruments

Section 15. Regulatory information

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

Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 30 November 2022
Date of previous issue	: 11/28/2022
Version	: 2 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.