SAFETY DATA SHEET

SIGMARINE 48 WHITE



Date of issue 23 November 2022

Version 31

1. Product and company identification

Product name	: SIGMARINE 48 WHITE
Product code	: 00250792
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	: ₱ PG 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 CARCINOGENICITY - Category 1A TOXIC TO REPRODUCTION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1 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
Hazard statements	 Fammable liquid and vapor. May cause drowsiness or dizziness. May cause cancer. May damage fertility or the unborn child. May cause damage to organs. (central nervous system (CNS), kidneys, liver, respiratory organs) Causes damage to organs through prolonged or repeated exposure. (central nervous system (CNS), nervous system, respiratory organs) Toxic to aquatic life with long lasting effects.
Precautionary statements	

2. Hazards identification

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.
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
Maphtha (petroleum), hydrodesulfurized heavy	25 - <50	64742-82-1	Not available.
titanium dioxide (excluding nanoparticle)	12.5 - <15	13463-67-7	1-558; 5-5225
n-Nonane	3 - <5	111-84-2	2-9
1,2,4-Trimethylbenzene	3 - <5	95-63-6	3-3427; 3-7
Talc containing no asbestos or quartz	2 - <3	14807-96-6	Not available.
Xylene	1 - <2	1330-20-7	3-3; 3-60
2-ethylhexanoic acid, zirconium salt	0.5 - <1	22464-99-9	2-615
ethyl benzene	0.2 - <0.5	100-41-4	3-28; 3-60
neodecanoic acid, cobalt salt	0.1 - <0.2	27253-31-2	2-615
Ethanol	0.1 - <0.2	64-17-5	2-202
Cumene	0.1 - <0.2	98-82-8	3-22
Silica silicon dioxide containing crystalline and amorphous	0.1 - <0.2	7631-86-9	1-548
calcium bis(2-ethylhexanoate)	0.1 - <0.2	136-51-6	2-611

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	:	Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
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.

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4. First aid measures		
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 effe	<u>cts</u>	
Eye contact	: No known significant effects or critical hazards.	
Inhalation	: Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.	
Skin contact	 May cause damage to organs following a single exposure in contact with skin. Defatting to the skin. May cause skin dryness and irritation. 	
Ingestion	: May cause damage to organs following a single exposure if swallowed. Can cause central nervous system (CNS) depression.	
Over-exposure signs/sym	otoms	
Eye contact	: No specific data.	
Inhalation	: Adverse symptoms may include the following: 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 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	
Indication of immediate me	dical 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.	
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 ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is toxic to aquatic life 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 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.

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".
·	: 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 co	ntainment 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

6. Accidental release measures

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 non- sparking 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.

8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Manium dioxide (excluding nanoparticle)	Japan Society for Occupational Health (Japan, 9/2021). OEL-M: 1 mg/m ³ 8 hours. Form: Respirable dust (Class 2 Dust) OEL-M: 4 mg/m ³ 8 hours. Form: Total dust (Class 2 Dust)
n-Nonane	Japan Society for Occupational Health (Japan, 9/2021). OEL-M: 1050 mg/m ³ 8 hours. OEL-M: 200 ppm 8 hours.
1,2,4-Trimethylbenzene	Japan Society for Occupational Health (Japan, 9/2021). OEL-M: 120 mg/m ³ 8 hours. OEL-M: 25 ppm 8 hours.
Talc containing no asbestos or quartz	Japan Society for Occupational Health (Japan, 9/2021). [Class 1 dusts (Activated charcoal, Alumina, Aluminium, Bentonite,
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8. Exposure controls/personal protection

		Diatomite, Graphite, Kaolinite, Pagodite,
		Pyrites, Pyrite cinder, Talc)]
		OEL-M: 0.5 mg/m ³ 8 hours. Form:
		Respirable dust (Class 1 Dust)
		OEL-M: 2 mg/m ³ 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, 9/2021).
		OEL-M: 50 ppm 8 hours.
		OEL-M: 217 mg/m ³ 8 hours.
ethyl benzene		Japan Society for Occupational Health
		(Japan, 9/2021). Absorbed through skin.
		OEL-M: 87 mg/m ³ 8 hours.
		OEL-M: 20 ppm 8 hours.
		Industrial Safety and Health Act (Japan,
		6/2020).
		TWA: 20 ppm 8 hours.
neodecanoic acid, cobalt sal	t	Japan Society for Occupational Health
		(Japan, 9/2021). [Cobalt and compounds]
		Skin sensitizer. Inhalation sensitizer.
		OEL-M: 0.05 mg/m³, (as Co) 8 hours.
Cumene		Japan Society for Occupational Health
		(Japan, 9/2021). Absorbed through skin.
		OEL-M: 50 mg/m ³ 8 hours.
		OEL-M: 10 ppm 8 hours.
Recommended monitoring	: Reference should be made to appro	opriate monitoring standards. Reference to
procedures		ethods for the determination of hazardous
	substances will also be required.	
Appropriate engineering	: Use only with adequate ventilation.	Use process enclosures, local exhaust ventilation
controls	or other engineering controls to kee	ep worker exposure to airborne contaminants
	below any recommended or statuto	ry limits. The engineering controls also need to
	keep gas, vapor or dust concentrati	ions below any lower explosive limits. Use
	explosion-proof ventilation equipme	ent.
Environmental exposure	: Emissions from ventilation or work	process equipment should be checked to ensure
controls		of environmental protection legislation. In some
		gineering modifications to the process equipment
	will be necessary to reduce emissic	ons to acceptable levels.
Individual protection measu	ires	
Hygiene measures	: Wash hands, forearms and face the	oroughly after handling chemical products, before
		tory and at the end of the working period.
	Appropriate techniques should be u	used to remove potentially contaminated clothing.
		e reusing. Ensure that eyewash stations and
	safety showers are close to the wor	rkstation location.
Eye protection	safety showers are close to the wor : Safety glasses with side shields.	rkstation location.
Eye protection Skin protection	•	rkstation location.

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	: For prolonged or repeated handling, use the following type of gloves:
	Recommended: polyvinyl alcohol (PVA), Viton® May be used: nitrile 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

<u>Appearance</u>			
Physical state	: Liquid.		
Color	: White.		
Odor	: Aromatic. [Slight]		
Boiling point	: >37.78°C (>100°F)		
Flash point	: Closed cup: 44°C (111.2°F)		
Relative density	: 1.02		
Solubility(ies)	Media	Result	
Solubility(les)	. cold water	Not soluble	
Viscosity	: > 100 s (ISO 6mm)		

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.			

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Naphtha (petroleum),	LD50 Oral	Rat	>5000 mg/kg	-
hydrodesulfurized heavy				
titanium dioxide (excluding nanoparticle)	LC50 Inhalation Dusts and mists	Rat	>6.82 mg/l	4 hours
nanoparticle)	LD50 Dermal	Rabbit	>5000 mg/kg	
	LD50 Oral	Rat	>5000 mg/kg	-
n-Nonane	LC50 Inhalation Gas.	Rat	3200 ppm	- 4 hours
n-nonane	LC50 Inhalation Vapor	Rat	16790 mg/m ³	4 hours
1,2,4-Trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m ³	4 hours
	LD50 Oral	Rat		4 110015
Videne			5 g/kg	-
Xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
2-ethylhexanoic acid,	LD50 Dermal	Rabbit	>5 g/kg	-
zirconium salt			_ "	
	LD50 Oral	Rat	>5 g/kg	-
ethyl benzene	LC50 Inhalation Vapor	Rat	17.8 mg/l	4 hours
	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
neodecanoic acid, cobalt salt		Rat - Female	1098 mg/kg	-
Ethanol	LC50 Inhalation Vapor	Rat	124700 mg/m ³	4 hours
	LD50 Dermal	Rat	17100 mg/kg	-
	LD50 Oral	Rat	7 g/kg	-
Cumene	LC50 Inhalation Vapor	Rat	39000 mg/m ³	4 hours
	LD50 Dermal	Rabbit	12.3 g/kg	-
	LD50 Oral	Rat	1400 mg/kg	-
Silica silicon dioxide	LD50 Dermal	Rabbit	>5000 mg/kg	-
containing crystalline and amorphous				
	LD50 Oral	Rat - Male, Female	>5000 mg/kg	-

Irritation/Corrosion

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

Sensitization

••••••	Route of exposure	Species	Result
neodecanoic acid, cobalt salt	skin	Mouse	Sensitizing

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Naphtha (petroleum), hydrodesulfurized heavy	Category 3	-	Narcotic effects
n-Nonane	Category 2	-	central nervous system (CNS)
	Category 3		Respiratory tract irritation
	Category 3		Narcotic effects
1,2,4-Trimethylbenzene	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
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
ethyl benzene	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
Ethanol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
Cumene	Category 1	-	central nervous
			system (CNS),
			kidneys, liver
	Category 3		Respiratory tract irritation
	Category 3		Narcotic effects
Silica silicon dioxide containing crystalline and amorphous		-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Maphtha (petroleum), hydrodesulfurized heavy	Category 1	-	central nervous system (CNS)
titanium dioxide (excluding nanoparticle)	Category 1	-	respiratory organs
1,2,4-Trimethylbenzene	Category 2	-	central nervous system (CNS), lungs
Talc containing no asbestos or quartz	Category 1	-	respiratory organs
Xylene	Category 1	-	nervous system, respiratory organs
ethyl benzene	Category 2	-	hearing organs
neodecanoic acid, cobalt salt	Category 1	oral	gastrointestinal
		Ja	apan Page: 9/16

			tract
Ethanol	Category 1	-	liver
	Category 2		central nervous
			system (CNS)
Silica silicon dioxide containing crystalline and amorphous	Category 1	-	immune system,
			kidneys,
			respiratory organs

Aspiration hazard

Name	Result
Naphtha (petroleum), hydrodesulfurized heavy	ASPIRATION HAZARD - Category 1
n-Nonane	ASPIRATION HAZARD - Category 1
1,2,4-Trimethylbenzene	ASPIRATION HAZARD - Category 1
Xylene	ASPIRATION HAZARD - Category 1
ethyl benzene	ASPIRATION HAZARD - Category 1
Cumene	ASPIRATION HAZARD - Category 1

Information on the likely	: Not available.
routes of exposure	

Potential	acute	health	effects

Eye contact	: No known significant effects or critical hazards.	
Inhalation	: Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.	
Skin contact	 May cause damage to organs following a single exposure in contact with skin. Defatting to the skin. May cause skin dryness and irritation. 	
Ingestion	 May cause damage to organs following a single exposure if swallowed. Can cau central nervous system (CNS) depression. 	

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact Inhalation		No specific data. Adverse symptoms may include the following: 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 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

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

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Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health eff	ects
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	: May cause 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)
GMARINE 48 WHITE	N/A	22098.8	N/A	51.5	N/A
n-Nonane	N/A	N/A	N/A	16.79	N/A
1,2,4-Trimethylbenzene	5000	N/A	N/A	18	N/A
Xylene	4300	1700	N/A	11	N/A
ethyl benzene	3500	17800	N/A	17.8	N/A
neodecanoic acid, cobalt salt	1098	N/A	N/A	N/A	N/A
Ethanol	7000	17100	N/A	124.7	N/A
Cumene	N/A	12300	N/A	3	N/A

Other information

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

12. Ecological information

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Toxicity

Product/ingredient name	Result	Species	Exposure
Manium dioxide (excluding nanoparticle)	Acute LC50 >100 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
2-ethylhexanoic acid, zirconium salt	Acute LC50 >100 mg/l	Fish	96 hours
ethyl benzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
2	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
Ethanol	Acute EC50 7640 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
Silica silicon dioxide	Acute EC50 2.2 g/L Fresh water	Daphnia - Daphnia magna -	48 hours
containing crystalline and amorphous		Neonate	
·	Acute LC50 >10000 mg/l	Fish	96 hours
	Chronic NOEC 12.5 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	21 days
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Persistence/degradability

Product/ingredient name	Test	Result		Dose		Inoculum
ethyl benzene	-	79 % - Readily - 10 days		-		-
Product/ingredient name	Aquatic half-life		Photolysis		Biodegradability	
₩ylene ethyl benzene Ethanol	- - -		-		Readily Readily Readily	/

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
n -Nonane	5.65	-	high
1,2,4-Trimethylbenzene	3.63	120.23	low
Xylene	3.12	7.4 to 18.5	low
ethyl benzene	3.6	79.43	low
Ethanol	-0.35	-	low
Cumene	3.55	35.48	low

<u>Mobility in soil</u>	
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. 1 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.

14. Transport information

	UN	IMDG	ΙΑΤΑ
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3
Packing group		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.	(Naphtha (petroleum), hydrodesulfurized heavy, nonane)	Not applicable.

Additional information

UN	 This class 3 viscous liquid that is also environmentally hazardous is not subject to regulation in packagings up to 5 L, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 according to 2.3.2.5.2.
IMDG	 This class 3 viscous liquid that is also environmentally hazardous is not subject to regulation in packagings up to 5 L, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 according to 2.3.2.5.
ΙΑΤΑ	: The environmentally hazardous substance mark may appear if required by other transportation regulations.
Creation area	v

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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.
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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	%		Reference number
1,2,4-Trimethylbenzene	≤10	Class 1	296
Xylene	≤10	Class 1	80

Industrial Safety and Health Act

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

None of the components are listed.

Substance(s) requiring labelling

15. Regulatory information

Ingredient name	%	Status	Reference number
₽etroleum naphtha	≥30 - ≤40	Listed	330
Titanium(IV) oxide	≥10 - ≤20	Listed	191
Nonane	≤10	Listed	432
Trimethylbenzene	≤10	Listed	404
Xylene	≤10	Listed	136
Ethylbenzene	≤10	Listed	70
Cobalt and its compounds	≤10	Listed	172
Ethanol	≤10	Listed	61
Crystalline silica	≤10	Listed	165-2

Chemicals requiring notification

Ingredient name	%	Status	Reference number
Petroleum naphtha	≥30 - ≤40	Listed	330
Titanium(IV) oxide	≥10 - ≤20	Listed	191
Nonane	≤10	Listed	432
Trimethylbenzene	≤10	Listed	404
Xylene	≤10	Listed	136
Ethylbenzene	≤10	Listed	70
Cobalt and its compounds	≤10	Listed	172
Ethanol	≤10	Listed	61
Crystalline silica	≤10	Listed	165-2
Cumene	≤10	Listed	138

Carcinogen

Ingredient name	%		Reference number
ethylbenzene	≤10	Listed	-

Mutagen

None of the components are listed.

Corrosive liquid Occupational Safety and Health Law	: Not listed : Mflammable
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
Lead regulation Organic solvents poisoning prevention	: Not listed : Not applicable.

15. Regulatory information

Poisonous and Deleterious Substances

Product name SIGMARINE 48 WHITE

None of the components are listed.

Chemical Substances Control Law (CSCL)

Ingredient name	%	Status	Reference number
7,2,4-Trimethylbenzene	3.0395	Priority assessment	49
Xylene	1.5466	Priority assessment	125
1,3,5-Trimethylbenzene	0.65549	Priority assessment	201
Ethylbenzene	0.26117	Priority assessment	50
Cumene	0.167	Priority assessment	126
Butan-2-one oxime	0.09863	Priority assessment	262
Toluene	0.004535	Priority assessment	46
2-Butoxyethanol	0.002772	Priority assessment	109
Isopropyl alcohol	0.0024	Priority assessment	102
Benzene	0.00018582	Priority assessment	45

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 Industrial Waste	: Not listed
Japan inventory	: At least one component is not listed.
Road law	: Not available.

16. Other information

History

Date of issue/Date of revision	: 23 November 2022
Date of previous issue	: 2/8/2022
Version	: 31
Prepared by	: EHS

16. Other information

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.