SAFETY DATA SHEET

SIGMARINE 40 WHITE



Date of issue 20 December 2023

Version 20

1. Product and company identification

Product name	: SIGMARINE 40 WHITE
Product code	: 00136707
Product type	: Liquid.

Relevant identified uses of the substance or mixture and uses advised against		
Product use	fessional applications, Used by spraying.	
Use of the substance/ mixture	ating.	
Uses advised against	applicable.	
Supplier's details	G PMC Japan Co., Ltd., 8F, Shintetsu Bldg., 1-1 2-0803 Japan; Tel: +81-78-574-2777	, Daikaidori 1-chome, Kobe
Emergency telephone number	574 2777	

2. Hazards identification

Hazard statements
Signal word
<u>GHS label elements</u> Hazard pictograms
GHS Classification

2. Hazards identification

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	: 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 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
Maphtha (petroleum), hydrotreated heavy	25 - <50	64742-48-9	Not available.
titanium dioxide (excluding nanoparticle)	15 - <20	13463-67-7	1-558; 5-5225
Naphtha (petroleum), hydrodesulfurized heavy	5 - <7	64742-82-1	Not available.
Talc containing no asbestos or quartz	3 - <5	14807-96-6	Not available.
Hydrocarbons, C10-C13, n-alkanes, isoalkanes,	1 - <2	64742-48-9	Not available.
cyclics, < 2% aromatics			
n-Nonane	0.5 - <1	111-84-2	2-9
calcium bis(2-ethylhexanoate)	0.5 - <1	136-51-6	2-611
Xylene	0.5 - <1	1330-20-7	3-3; 3-60
2-ethylhexanoic acid, zirconium salt	0.2 - <0.5	22464-99-9	2-615
Butan-2-one oxime	0.2 - <0.5	96-29-7	2-546
Silica silicon dioxide containing crystalline and	0.1 - <0.2	7631-86-9	1-548
amorphous			
n-Octane	0.1 - <0.2	111-65-9	2-8
2-ethylhexanoic acid	0.1 - <0.2	149-57-5	2-608
Ethylbenzene	0.1 - <0.2	100-41-4	3-28; 3-60

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.	
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/e	
Potential acute health effec	
Eye contact	: Causes serious eye irritation.
Inhalation	: May cause respiratory irritation.
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.
Over-exposure signs/symp	<u>toms</u>
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing 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 med	ical 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 harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon oxides 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".
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.
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
₩alc containing no asbestos or quartz	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 ³ 8 hours. Form: Respirable dust (Class 1 Dust) OEL-M: 2 mg/m ³ 8 hours. Form: Total dust
n-Nonane	(Class 1 Dust) Japan Society for Occupational Health
THOUGH	(Japan, 9/2022). OEL-M: 1050 mg/m ³ 8 hours. OEL-M: 200 ppm 8 hours.
Xylene	Industrial Safety and Health Act (Japan, 6/2020). [xylene] TWA: 50 ppm 8 hours. Japan Society for Occupational Health
	Japan Page: 5/15

FIGUEL Hame SIGWARINE 40 WHITE

8. Exposure controls/personal protection

n-Octane		(Japan, 9/2022). OEL-M: 50 ppm 8 hours. OEL-M: 217 mg/m ³ 8 hours. Japan Society for Occupational Health (Japan, 9/2022). OEL-M: 300 ppm 8 hours. OEL-M: 1400 mg/m ³ 8 hours.			
Ethylbenzene		Japan Society for Occupational Health (Japan, 9/2022). 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.			
Recommended monitoring procedures	: Reference should be made to appropria national guidance documents for metho substances will also be required.				
Appropriate engineering controls	or other engineering controls to keep we below any recommended or statutory lir keep gas, vapor or dust concentrations explosion-proof ventilation equipment.				
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.				
ndividual protection measu	<u>res</u>				
Individual protection measu Hygiene measures	: Wash hands, forearms and face thorou eating, smoking and using the lavatory a Appropriate techniques should be used	to remove potentially contaminated clothing. sing. Ensure that eyewash stations and			
	: Wash hands, forearms and face thorou eating, smoking and using the lavatory a Appropriate techniques should be used Wash contaminated clothing before reu	and at the end of the working period. to remove potentially contaminated clothing. sing. Ensure that eyewash stations and			
Hygiene measures	: Wash hands, forearms and face thorous eating, smoking and using the lavatory a Appropriate techniques should be used Wash contaminated clothing before reu safety showers are close to the worksta	and at the end of the working period. to remove potentially contaminated clothing. sing. Ensure that eyewash stations and			
Hygiene measures Eye protection	 Wash hands, forearms and face thorou eating, smoking and using the lavatory a Appropriate techniques should be used Wash contaminated clothing before reu safety showers are close to the worksta Chemical-resistant, impervious gloves of be worn at all times when handling cherr this is necessary. Considering the para check during use that the gloves are still should be noted that the time to breakth 	and at the end of the working period. to remove potentially contaminated clothing. Ising. Ensure that eyewash stations and tion location. complying with an approved standard should mical products if a risk assessment indicates meters specified by the glove manufacturer, Il retaining their protective properties. It mough for any glove material may be ers. In the case of mixtures, consisting of			
Hygiene measures Eye protection <u>Skin protection</u>	 Wash hands, forearms and face thorou eating, smoking and using the lavatory a Appropriate techniques should be used Wash contaminated clothing before reu safety showers are close to the workstat. Chemical splash goggles. Chemical-resistant, impervious gloves of be worn at all times when handling cher this is necessary. Considering the para check during use that the gloves are still should be noted that the time to breakth different for different glove manufacture several substances, the protection time 	and at the end of the working period. to remove potentially contaminated clothing. sing. Ensure that eyewash stations and tion location. complying with an approved standard should mical products if a risk assessment indicates meters specified by the glove manufacturer, Il retaining their protective properties. It prough for any glove material may be ers. In the case of mixtures, consisting of of the gloves cannot be accurately			
Hygiene measures Eye protection <u>Skin protection</u> Hand protection	 Wash hands, forearms and face thorou eating, smoking and using the lavatory a Appropriate techniques should be used Wash contaminated clothing before reu safety showers are close to the workstat. Chemical splash goggles. Chemical-resistant, impervious gloves of be worn at all times when handling cher this is necessary. Considering the para check during use that the gloves are still should be noted that the time to breakth different for different glove manufacture several substances, the protection time estimated. 	and at the end of the working period. to remove potentially contaminated clothing. sing. Ensure that eyewash stations and tion location. complying with an approved standard should mical products if a risk assessment indicates meters specified by the glove manufacturer, Il retaining their protective properties. It prough for any glove material may be ers. In the case of mixtures, consisting of of the gloves cannot be accurately e the following type of gloves:			
Hygiene measures Eye protection <u>Skin protection</u> Hand protection	 Wash hands, forearms and face thorou eating, smoking and using the lavatory a Appropriate techniques should be used Wash contaminated clothing before reusafety showers are close to the workstat. Chemical splash goggles. Chemical-resistant, impervious gloves of be worn at all times when handling chert this is necessary. Considering the paracheck during use that the gloves are still should be noted that the time to breakth different for different glove manufacture several substances, the protection time estimated. For prolonged or repeated handling, use Recommended: neoprene, nitrile rubbers. 	and at the end of the working period. to remove potentially contaminated clothing. sing. Ensure that eyewash stations and tion location. complying with an approved standard should mical products if a risk assessment indicates meters specified by the glove manufacturer, Il retaining their protective properties. It mough for any glove material may be ers. In the case of mixtures, consisting of of the gloves cannot be accurately e the following type of gloves: r ody should be selected based on the task and should be approved by a specialist re is a risk of ignition from static electricity, the greatest protection from static			
Hygiene measures Eye protection <u>Skin protection</u> Hand protection	 Wash hands, forearms and face thorou eating, smoking and using the lavatory a Appropriate techniques should be used Wash contaminated clothing before reusafety showers are close to the workstat. Chemical-resistant, impervious gloves of be worn at all times when handling chert this is necessary. Considering the para check during use that the gloves are still should be noted that the time to breakth different for different glove manufacture several substances, the protection time estimated. For prolonged or repeated handling, use Recommended: neoprene, nitrile rubber Personal protective equipment for the b being performed and the risks involved before handling this product. When the wear anti-static protective clothing. For discharges, clothing should include anti- 	and at the end of the working period. to remove potentially contaminated clothing. sing. Ensure that eyewash stations and tion location. complying with an approved standard should mical products if a risk assessment indicates meters specified by the glove manufacturer, Il retaining their protective properties. It mough for any glove material may be ers. In the case of mixtures, consisting of of the gloves cannot be accurately e the following type of gloves: r ody should be selected based on the task and should be approved by a specialist ere is a risk of ignition from static electricity, the greatest protection from static -static overalls, boots and gloves. I skin protection measures should be med and the risks involved and should be			

8. Exposure controls/personal protection

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	: Various		
Odor	: Characteristic.		
Boiling point	: >37.78°C (>100°F)		
Flash point	: Closed cup: 41.9°C	(107.4°F)	
Relative density	: 1.2		
Solubility(ies)	Media	Result	
Solubility(les)	cold water	Not soluble	
Auto-ignition temperature	: 232°C (449.6°F)		
Viscosity	. ,		

10. Stability and reactivity

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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

11. Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
Maphtha (petroleum), hydrotreated heavy	LD50 Dermal Rabbit		>5000 mg/kg	-
	LD50 Oral	Rat	>6 g/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	-
Naphtha (petroleum), hydrodesulfurized heavy	LD50 Oral	Rat	>5000 mg/kg	-
Hydrocarbons, C10-C13, n-	LD50 Dermal	Rabbit	>5000 mg/kg	-
alkanes, isoalkanes, cyclics,			5. 5	
< 2% aromatics				
	LD50 Oral	Rat	>6 g/kg	-
n-Nonane	LC50 Inhalation Gas.	Rat	3200 ppm	4 hours
	LC50 Inhalation Vapor	Rat	16790 mg/m ³	4 hours
Xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
2	LD50 Oral	Rat	4.3 g/kg	-
2-ethylhexanoic acid,	LD50 Dermal	Rabbit	>5 g/kg	-
zirconium salt				
	LD50 Oral	Rat	>5 g/kg	-
Butan-2-one oxime	LD50 Dermal	Rabbit	1100 mg/kg	-
	LD50 Oral	Rat	100 mg/kg	-
Silica silicon dioxide	LD50 Dermal	Rabbit	>5000 mg/kg	-
containing crystalline and				
amorphous				
·	LD50 Oral	Rat - Male,	>5000 mg/kg	-
		Female		
n-Octane	LC50 Inhalation Gas.	Rat	25260 ppm	4 hours
	LC50 Inhalation Vapor	Rat	118000 mg/m ³	4 hours
2-ethylhexanoic acid	LD50 Dermal	Rat	>2000 mg/kg	-
2	LD50 Oral	Rat	3640 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	-

Irritation/Corrosion

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

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

11. Toxicological information

Name	Category	Route of exposure	Target organs
Naphtha (petroleum), hydrotreated heavy	Category 3	-	Respiratory tract irritation
Naphtha (petroleum), hydrodesulfurized heavy	Category 3	-	Narcotic effects
Talc containing no asbestos or quartz	Category 1	-	respiratory organs
n-Nonane	Category 2	-	central nervous system (CNS)
	Category 3		Respiratory tract irritation
	Category 3		Narcotic effects
Xylene	Category 1	-	central nervous system (CNS), kidneys, liver,
	Category 3		respiratory organs Narcotic effects
Silica silicon dioxide containing crystalline and amorphous	Category 3	-	Respiratory tract irritation
n-Octane	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
2-ethylhexanoic acid	Category 2	-	respiratory system
Ethylbenzene	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
titanium dioxide (excluding nanoparticle)	Category 1	-	respiratory organs
Naphtha (petroleum), hydrodesulfurized heavy	Category 1	-	central nervous system (CNS)
Talc containing no asbestos or quartz	Category 1	-	respiratory organs
Xylene	Category 1	-	nervous system, respiratory organs
Butan-2-one oxime	Category 1	-	haematopoietic system
Silica silicon dioxide containing crystalline and amorphous	Category 1	-	immune system, kidneys,
Ethylbenzene	Category 1	-	respiratory organs hearing organs, nervous system

Aspiration hazard

Name	Result
Naphtha (petroleum), hydrotreated heavy Naphtha (petroleum), hydrodesulfurized heavy Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1
n-Nonane Xylene n-Octane Ethylbenzene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely : Not available. routes of exposure

Potential acute health effects

Japan

11. Toxicological information **Eve contact** : Causes serious eye irritation. Inhalation : May cause respiratory irritation. **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. Symptoms related to the physical, chemical and toxicological characteristics : Adverse symptoms may include the following: Eye contact pain or irritation watering redness Inhalation : Adverse symptoms may include the following: respiratory tract irritation coughing 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 Potential immediate : Not available. effects **Potential delayed effects** : Not available. Long term exposure **Potential immediate** : Not available. effects **Potential delayed effects** : Not available. Potential chronic health effects General : 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

11. Toxicological information

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
n-Nonane	N/A	N/A	N/A	16.79	N/A
Xylene	4300	1700	N/A	11	N/A
Butan-2-one oxime	500	1100	N/A	N/A	N/A
n-Octane	N/A	N/A	25260	118	N/A
2-ethylhexanoic acid	3640	1100	N/A	N/A	N/A
Ethylbenzene	3500	17800	N/A	17.8	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

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Toxicity

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

Persistence/degradability

Product/ingredient name	Test	Result		Dose		Inoculum
Ethylbenzene	-	79 % - Readily - 10 days		-		-
Product/ingredient name	Aquatic half-life		Photolysis		Biodeg	radability
<mark></mark>	-		-		Readily Readily	

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
n -Nonane	5.65	-	High
Xylene	3.12	7.4 to 18.5	Low
Butan-2-one oxime	0.63	5.01	Low
n-Octane	5.18	-	High
2-ethylhexanoic acid	2.7	-	Low
Ethylbenzene	3.6	79.43	Low

Mobility in soil

Japan	Page: 11/15

12. Ecological information

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Soil/water partition coefficient (Koc)	: Not available.
Mobility	: Not available.
Other adverse effects	: No known significant effects or critical hazards.

13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or 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	III	111
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

Additional information

UN : This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5.1.
 IMDG : This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5.

IATA : None identified.

Special 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.

14. Transport information

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)

None of the components are listed.

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

Ingredient name	%	Status	Reference number
Titanium(IV) oxide	≥10 - ≤20	Listed	191
Petroleum naphtha	≤10	Listed	330
Xylene	≤10	Listed	136
Crystalline silica	≤10	Listed	165-2
Ethylbenzene	≤10	Listed	70

Chemicals requiring notification

Ingredient name	%	Status	Reference number
Titanium(IV) oxide	≥10 - ≤20	Listed	191
Petroleum naphtha	≤10	Listed	330
Xylene	≤10	Listed	136
Crystalline silica	≤10	Listed	165-2
2-Ethylhexanoic acid	≤10	Listed	69
Ethylbenzene	≤10	Listed	70

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

None of the components are listed.

Mutagen

None of the components are listed.

Corrosive liquid	: Not listed
Occupational Safety and Health Law	: Inflammable
Regulations on the Prevention of Tetraalkyl Lead Poisoning	: Not listed
Harmful Substances Subject to Obtaining Permission for Manufacturing	: Not listed

15. Regulatory information

Harmful Substances, Prohibited for Manufacturing	:	Not listed
ISHL Enforcement Order Appendix 1 - Dangerous Substances	:	Inflammable
Lead regulation	:	Not listed
Organic solvents poisoning prevention	:	Not applicable.

Poisonous and Deleterious Substances

None of the components are listed.

Chemical Substances Control Law (CSCL)

Ingredient name	%	Status	Reference number
X ylene	≤10	Priority assessment	125
1,2,4-Trimethylbenzene	≤10	Priority assessment	49
Butan-2-one oxime	≤10	Priority assessment	262
Ethylbenzene	≤10	Priority assessment	50
1,3,5-Trimethylbenzene	≤10	Priority assessment	201
n-Hexane	≤10	Priority assessment	3
Cumene	≤10	Priority assessment	126
Benzene	≤10	Priority assessment	45
Toluene	≤10	Priority assessment	46
2,6-Di-tert-butyl-4-methylphenol	≤10	Priority assessment	64

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	: 🔀roup 2B
List of Specially Controlled Industrial Waste	: Not listed
Japan inventory	: At least one component is not listed.
Road law	: Not available.

16. Other information

<u>History</u>	
Date of issue/Date of revision	: 20 December 2023
Date of previous issue	: 9/11/2023
Version	: 20
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.

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