SAFETY DATA SHEET

SIGMARINE 42



Date of issue 2 March 2022

Version 2

1. Product and company identification

Product name : SIGMARINE 42
Product code : 00445031
Product type : Liquid.

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

Product use : Professional applications, Used by spraying.

Use of the substance/

mixture

: Coating.

Uses advised against : Not applicable.

Supplier's details : PPG PMC Japan Co., Ltd.

8F, Shintetsu Bldg., 1-1, Daikaidori 1-chome, Kobe 652-0803

Tel: +81 78 574 2777 Fax: +81 78 576 0035

Emergency telephone

number

: 078 574 2777

2. Hazards identification

GHS Classification : FLAMMABLE LIQUIDS - Category 3

SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A

RESPIRATORY SENSITIZATION - Category 1

SKIN SENSITIZATION - Category 1

TOXIC TO REPRODUCTION - Category 1B

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 HAZARDOUS TO THE AQUATIC ENVIRONMENT - ACUTE HAZARD - Category 3

HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD -

Category 3

GHS label elements

Hazard pictograms







Signal word : Danger

Japan Page: 1/15

2. Hazards identification

Hazard statements

: Flammable liquid and vapor.

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause respiratory irritation.

May damage fertility or the unborn child.

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

respiratory system)

Causes damage to organs through prolonged or repeated exposure. (central

nervous system (CNS), nervous system, respiratory system)

Harmful to aquatic life with long lasting effects.

Precautionary statements Prevention

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Wear respiratory 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. Contaminated work clothing should not be allowed out of the workplace.

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

Storage Disposal

- : Store locked up. Store in a well-ventilated place. Keep container tightly closed.
- : 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. Contains a substance that may emit formaldehyde if stored beyond its shelf life and/or during cure at curing temperatures greater than 60C (140F).

3. Composition/information on ingredients

Substance/mixture : Mixture

CAS number/other identifiers

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

%	CAS number	CSCL
20 - <25	64742-48-9	Not available.
15 - <20	64742-82-1	Not available.
1 - <2	1330-20-7	3-3; 3-60
1 - <2	149-57-5	2-608
0.5 - <1	96-29-7	2-546
0.2 - < 0.5	136-52-7	2-615
0.2 - < 0.5	100-41-4	3-28; 3-60
0.2 - < 0.5	22464-99-9	2-615
0.2 - < 0.5	140-66-9	3-503
	20 - <25 15 - <20 1 - <2 1 - <2 0.5 - <1 0.2 - <0.5 0.2 - <0.5 0.2 - <0.5	20 - <25 15 - <20 1 - <2 1 - <2 1 - <2 0.5 - <1 0.2 - <0.5 0.2 - <0.5

Japan Page: 2/15

Product name SIGMARINE 42

3. Composition/information on ingredients

Dibutyltin oxide	0.1 - <0.2	818-08-6	2-2031
Solvent naphtha (petroleum), heavy arom	0.1 - <0.2	64742-94-5	Not available.

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/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : May cause respiratory irritation. May cause allergy or asthma symptoms or

breathing difficulties if inhaled.

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

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

Ingestion : May cause damage to organs following a single exposure if swallowed.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

wheezing and breathing difficulties

asthma

reduced fetal weight increase in fetal deaths skeletal malformations

Skin contact: Adverse symptoms may include the following:

irritation redness dryness cracking

reduced fetal weight increase in fetal deaths skeletal malformations

Ingestion : Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

Japan Page: 3/15

Date of issue 2 March 2022 **Version 2** Product code 00445031

Product name SIGMARINE 42

4. First aid measures

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments

No specific treatment.

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, CO₂, 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

Formaldehyde.

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".

> Japan Page: 4/15

Date of issue 2 March 2022 Version 2

Product code 00445031 **Product name SIGMARINE 42**

6. Accidental release measures

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

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 noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and storage

Precautions for safe handling

: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

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.

> Japan Page: 5/15

Version 2

8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits		
▼ylene	ISHL (Japan, 6/2020).		
	TWA: 50 ppm 8 hours.		
	Japan Society for Occupational Health		
	(Japan, 5/2020).		
	OEL-M: 50 ppm 8 hours.		
	OEL-M: 217 mg/m ³ 8 hours.		
cobalt(II) 2-ethylhexanoate	Japan Society for Occupational Health		
(··,,	(Japan, 5/2020). Skin sensitizer.		
	Inhalation sensitizer.		
	OEL-M: 0.05 mg/m³, (as Co) 8 hours.		
ethyl benzene	Japan Society for Occupational Health		
	(Japan, 5/2020).		
	OEL-M: 217 mg/m ³ 8 hours.		
	OEL-M: 50 ppm 8 hours.		
	ISHL (Japan, 6/2020).		
	TWA: 20 ppm 8 hours.		

procedures

Recommended monitoring: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye protection Skin protection

: Chemical splash goggles.

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Gloves

: butyl rubber

Japan Page: 6/15

Product name SIGMARINE 42

8. Exposure controls/personal protection

Body protection : Personal protective equip

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection : Appropriate footwear and any additional skin protection measures should be

selected based on the task being performed and the risks involved and should be

approved by a specialist before handling this product.

Respiratory protection: Respirator selection must be based on known or anticipated exposure levels, the

hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is

necessary.

9. Physical and chemical properties

Appearance

Physical state : Liquid.

Odor : Aromatic.

Boiling point : $>37.78^{\circ}\text{C} (>100^{\circ}\text{F})$

Flash point : Closed cup: 46°C (114.8°F)

Relative density : 0.9

Solubility : Insoluble in the following materials: cold water.

Viscosity : Not Applicable

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 Formaldehyde.

Japan Page: 7/15

11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Maphtha (petroleum),	LD50 Dermal	Rabbit	>5000 mg/kg	-
hydrotreated heavy				
	LD50 Oral	Rat	>6 g/kg	-
Naphtha (petroleum),	LD50 Oral	Rat	>5000 mg/kg	-
hydrodesulfurized heavy				
Xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
2-ethylhexanoic acid	LD50 Dermal	Rabbit	1.26 g/kg	-
	LD50 Oral	Rat	1600 mg/kg	-
A mixture of: butan-2-one	LD50 Dermal	Rabbit	1100 mg/kg	-
oxime				
	LD50 Oral	Rat	100 mg/kg	-
cobalt(II) 2-ethylhexanoate	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	3129 mg/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	-
2-ethylhexanoic acid,	LD50 Dermal	Rabbit	>5 g/kg	-
zirconium salt				
	LD50 Oral	Rat	>5 g/kg	-
4-(2,4,4-trimethylpentan-2-yl)	LD50 Dermal	Rabbit	1880 mg/kg	-
phenol				
	LD50 Oral	Rat	4600 mg/kg	-
Dibutyltin oxide	LD50 Dermal	Rabbit	>2 g/kg	-
	LD50 Oral	Rat	172 mg/kg	-
Solvent naphtha (petroleum),	LC50 Inhalation Dusts and mists	Rat	>5.2 mg/l	4 hours
heavy arom				
	LD50 Oral	Rat	>5 g/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
Dibutyltin oxide	Skin - Edema	Rabbit	2	mg -	-

Sensitization

3	Route of exposure	Species	Result
Dibutyltin oxide	skin	Guinea pig	Sensitizing

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Page: 8/15 Japan

Product name SIGMARINE 42

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
Xylene	Category 1	-	central nervous system (CNS), kidneys, liver, respiratory system
	Category 3		Narcotic effects
2-ethylhexanoic acid	Category 2	-	respiratory system
ethyl benzene	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
Dibutyltin oxide	Category 1	-	central nervous system (CNS)
	Category 3		Respiratory tract irritation
Solvent naphtha (petroleum), heavy arom	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Naphtha (petroleum), hydrodesulfurized heavy	Category 1	-	central nervous system (CNS)
Xylene	Category 1	-	nervous system, respiratory system
A mixture of: butan-2-one oxime	Category 1	-	bone marrow
ethyl benzene 4-(2,4,4-trimethylpentan-2-yl)phenol	Category 2 Category 2	-	hearing organs kidneys

Aspiration hazard

Name	Result
	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1
Xylene	ASPIRATION HAZARD - Category 1
ethyl benzene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

: Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : May cause respiratory irritation. May cause allergy or asthma symptoms or

breathing difficulties if inhaled.

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

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

Ingestion : May cause damage to organs following a single exposure if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:

pain or irritation watering redness

Japan Page: 9/15

Product name SIGMARINE 42

11. Toxicological information

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

wheezing and breathing difficulties

asthma

reduced fetal weight increase in fetal deaths skeletal malformations

Skin contact: Adverse symptoms may include the following:

irritation redness dryness cracking

reduced fetal weight increase in fetal deaths skeletal malformations

Ingestion : Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

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 :

effects

: Not available.

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. Once sensitized, a severe allergic reaction may occur when subsequently exposed

to very low levels.

Carcinogenicity : No known significant effects or critical hazards.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)
SIGMARINE 42	N/A	13720.4	N/A	45.2	N/A
Xylene	4300	1700	N/A	11	N/A
2-ethylhexanoic acid	N/A	1260	N/A	N/A	N/A
A mixture of: butan-2-one oxime	500	1100	N/A	N/A	N/A
cobalt(II) 2-ethylhexanoate	3129	N/A	N/A	N/A	N/A
ethyl benzene	3500	17800	N/A	17.8	N/A
4-(2,4,4-trimethylpentan-2-yl)phenol	4600	1880	N/A	N/A	N/A
Dibutyltin oxide	172	2500	N/A	N/A	N/A

Japan Page: 10/15

Product name SIGMARINE 42

11. Toxicological information

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. Contains a substance that may emit formaldehyde if stored beyond its shelf life and/or during cure at curing temperatures greater than 60C (140F). Avoid contact with skin and clothing.

12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure	
ethyl benzene	Acute EC50 1.8 mg/l Fresh water Chronic NOEC 1 mg/l Fresh water	Daphnia Daphnia - Ceriodaphnia dubia	48 hours	
2-ethylhexanoic acid, zirconium salt	Acute LC50 >100 mg/l	Fish	96 hours	
4-(2,4,4-trimethylpentan-2-yl) phenol	Acute LC50 370 μg/l Fresh water	Fish - Danio rerio	96 hours	
	Chronic NOEC 12 µg/l Fresh water	Fish - Danio rerio - Egg	78 days	
Dibutyltin oxide	Acute EC50 >1.6 mg/l	Algae	72 hours	
-	Acute EC50 2 mg/l	Daphnia	48 hours	
Solvent naphtha (petroleum), heavy arom	NOEL 0.48 mg/l Fresh water	Daphnia	21 days	

Persistence/degradability

Product/ingredient name	Test	Result		Result Dose			Inoculum
ethyl benzene	-	79 % - Readily - 10 days		79 % - Readily - 10 days -			-
Product/ingredient name	Aquatic half-life		Photolysis		Biodeg	radability	
Kylene ethyl benzene	-		-		Readily Readily		

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
X ylene	3.12	7.4 to 18.5	low
2-ethylhexanoic acid	2.7	-	low
A mixture of: butan-2-one oxime	0.63	5.01	low
ethyl benzene	3.6	79.43	low
4-(2,4,4-trimethylpentan-2-yl) phenol	4.8	288.4	low
Solvent naphtha (petroleum), heavy arom	2.8 to 6.5	-	high

Mobility in soil

Soil/water partition coefficient (K_{oc})

: Not available.

Mobility : Not available.

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

Japan Page: 11/15

Product name SIGMARINE 42

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	IATA
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3
Packing group	III	III	III
Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	(Naphtha (petroleum), hydrodesulfurized heavy)	Not applicable.

Additional information

UN : None identified.

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

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

regulations.

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

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

the event of an accident or spillage.

Transport in bulk according: Not applicable.

to IMO instruments

Japan Page: 12/15

Date of issue 2 March 2022 Version 2

Product code 00445031 **Product name SIGMARINE 42**

15. Regulatory information

Fire Service Law

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

Pollutant Release and Transfer Registers (PRTR)

Ingredient name	%	Status	Reference number
▼ylene	≤10	Class 1	80
2-Ethylhexanoic acid	≤10	Class 1	51

<u>ISHL</u>

Ordinance on the prevention of the hazard due to specified chemical substances

None of the components are listed.

Substances requiring labelling

Ingredient name	%	Status	Reference number
F etroleum naphtha	≥10 - ≤20	Listed	330
Xylene	≤10	Listed	136
2-Ethylhexanoic acid	≤10	Listed	69
Cobalt and its compounds	≤10	Listed	172
Ethylbenzene	≤10	Listed	70

Chemicals requiring notification

Ingredient name	%	Status	Reference number
P etroleum naphtha	≥10 - ≤20	Listed	330
Xylene	≤10	Listed	136
2-Ethylhexanoic acid	≤10	Listed	69
Cobalt and its compounds	≤10	Listed	172
Ethylbenzene	≤10	Listed	70
Tin and its compounds	≤10	Listed	322

Carcinogen

Ingredient name	%	Status	Reference number
e thylbenzene	≤10	Listed	-

Mutagen

None of the components are listed.

Corrosive liquid Occupational Safety and

Health Law

: Not listed : Inflammable

Regulations on the **Prevention of Tetraalkyl**

Lead Poisoning

: Not listed

Japan Page: 13/15

Product name SIGMARINE 42

15. Regulatory information

Harmful Substances

Subject to Obtaining Permission for Manufacturing

Harmful Substances,

Prohibited for Manufacturing : Not listed

: Not listed

Dangerous Substances Lead regulation

: Inflammable : 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	1.5295	Priority assessment	125
1,2,4-Trimethylbenzene	0.74638	Priority assessment	49
Ethylbenzene	0.26103	Priority assessment	50
4-(1,1,3,3-Tetramethylbutyl)phenol	0.20281	Priority assessment	157
1,3,5-Trimethylbenzene	0.1866	Priority assessment	201
Methyl ethyl ketone; Ethyl methyl ketone	0.007	Priority assessment	115
Toluene	0.005468	Priority assessment	46
Benzene	0.00020505	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 2B **List of Specially Controlled**

: Not listed

Industrial Waste

Japan inventory : Not determined. **Road law** : Not available.

Japan Page: 14/15

Product name SIGMARINE 42

16. Other information

History

Date of issue/Date of

revision

: 2 March 2022

Date of previous issue : 7/20/2021

Version : 2
Prepared by : EHS

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

Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of

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

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

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

LogPow = logarithm of the octanol/water partition coefficient

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

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

RID = The Regulations concerning the International Carriage of Dangerous Goods

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.

Japan Page: 15/15