SAFETY DATA SHEET

SIGMALINE 403 HS HRDENER



Date of issue 20 April 2025

Version 1

1. Product and company identification

Product name : SIGMALINE 403 HS HRDENER

 Product code
 : 000010025012

 Other means of
 : 00476840

identification

Product type : Liquid.

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

Product use : Consumer applications, Professional applications, Used by spraying.

Use of the substance/

mixture

: Hardener.

Uses advised against : Not applicable.

Supplier's details : PPG PMC Japan Co., Ltd., 8F, Shintetsu Bldg., 1-1, Daikaidori 1-chome, Kobe

652-0803 Japan; Tel: +81-78-574-2777

Emergency telephone

number

: 078 574 2777

2. Hazards identification

GHS Classification : FLAMMABLE LIQUIDS - Category 3

ACUTE TOXICITY (dermal) - Category 4
ACUTE TOXICITY (inhalation) - Category 4

SKIN CORROSION - Category 1C SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1

GERM CELL MUTAGENICITY - Category 2

CARCINOGENICITY - Category 2

TOXIC TO REPRODUCTION - Category 1B

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

Category 3

SPEČIFÍC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 HAZARDOUS TO THE AQUATIC ENVIRONMENT - ACUTE HAZARD - Category 2

HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD -

Category 3

GHS label elements

Hazard pictograms :









Signal word : Danger

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Product name SIGMALINE 403 HS HRDENER

2. Hazards identification

Hazard statements

: Flammable liquid and vapor.

Harmful in contact with skin or if inhaled.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction. May cause drowsiness or dizziness. Suspected of causing genetic defects.

Suspected of causing cancer.

May damage fertility or the unborn child.

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

respiratory organs, respiratory system)

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

nervous system (CNS), hearing organs, nervous system, respiratory organs)

Toxic to aquatic life.

Harmful to aquatic life with long lasting effects.

Precautionary statements

General

: Read label before use. Keep out of reach of children. If medical advice is needed,

have product container or label at hand.

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. Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. If skin irritation or rash occurs: Get medical advice or attention. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

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

Other hazards which do not : 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
Epoxy Amine Resin	25 - <50	SUB127764	Not available.
benzyl alcohol	12.5 - <15	100-51-6	3-1011
Poly[oxy(methyl-1,2-ethanediyl)], α-	12.5 - <15	9046-10-0 (n = 2-6)	(7)-324
(2-aminomethylethyl)-ω-(2-aminomethylethoxy)-		·	
Ethyl Benzene	7 - <10	100-41-4	3-28; 3-60
Xylene	5 - <7	1330-20-7	3-3; 3-60
isobutyl alcohol	3 - <5	78-83-1	2-3049
Cyclohexanone	2 - <3	108-94-1	3-2376

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3. Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SUB codes represent substances without registered CAS Numbers.

4. First aid measures

Description of necessary first aid measures

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with running

water for at least 15 minutes, keeping eyelids open. Seek immediate medical

attention.

Inhalation: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is

irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by

trained personnel.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and

water or use recognized skin cleanser. Do NOT use solvents or thinners.

Ingestion: If swallowed, seek medical advice immediately and show this container or label.

Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : Harmful if inhaled. Can cause central nervous system (CNS) depression. May

cause drowsiness or dizziness.

Skin contact : Causes severe burns. Harmful in contact with skin. Causes damage to organs

following a single exposure in contact with skin. Defatting to the skin. May cause

an allergic skin reaction.

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

central nervous system (CNS) depression.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

pain watering redness

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:

pain or irritation

redness dryness cracking

blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations

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4. First aid measures

Ingestion

: Adverse symptoms may include the following:

stomach pains reduced fetal weight increase in fetal deaths skeletal malformations

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

Notes to physician

: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

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.

nitrogen oxides

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. 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

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. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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6. Accidental release measures

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 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 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.

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.

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8. Exposure controls/personal protection

Control parameters

xylene

2-methylpropan-1-ol

cyclohexanone

Occupational exposure limits

Japan Society for Occupational Health benzyl alcohol

(Japan, 5/2023) Skin sensitizer.

OEL-C: 25 mg/m3.

Japan Society for Occupational Health ethylbenzene

(Japan, 5/2023) Absorbed through skin.

OEL-M 8 hours: 20 ppm. OEL-M 8 hours: 87 mg/m3.

Industrial Safety and Health Act (Japan,

6/2020)

TWA 8 hours: 20 ppm.

Japan Society for Occupational Health

(Japan, 5/2023)

OEL-M 8 hours: 50 ppm. OEL-M 8 hours: 217 mg/m³.

Industrial Safety and Health Act (Japan,

6/2020) [xylene]

TWA 8 hours: 50 ppm.

Japan Society for Occupational Health

(Japan, 5/2023)

OEL-M 8 hours: 50 ppm. OEL-M 8 hours: 150 mg/m³.

Industrial Safety and Health Act (Japan,

6/2020)

TWA 8 hours: 50 ppm.

Japan Society for Occupational Health

(Japan, 5/2023)

OEL-M 8 hours: 25 ppm. OEL-M 8 hours: 100 mg/m3.

Industrial Safety and Health Act (Japan,

6/2020)

TWA 8 hours: 20 ppm.

procedures

Recommended monitoring: Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

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

: Chemical splash goggles and face shield.

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8. Exposure controls/personal protection

Skin protection

Hand protection

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

Gloves

: nitrile neoprene

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

Appearance

Physical state : Liquid.

Color : Colorless.

Odor : Aromatic.

Boiling point : >37.78°C (>100°F)

Flash point : Closed cup: 34°C (93.2°F)

Relative density : 1

Solubility(ies) : Media

cold water Not soluble

10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Result

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.

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10. Stability and reactivity

Hazardous decomposition products

: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides

11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
benzyl alcohol	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours
-	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	1200 mg/kg	-
Poly[oxy(methyl- 1,2-ethanediyl)], α- (2-aminomethylethyl)-ω- (2-aminomethylethoxy)-	LD50 Dermal	Rat	2980 mg/kg	-
(2-aminometryletrioxy)-	LD50 Oral	Rat	2885 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	-
Xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
isobutyl alcohol	LC50 Inhalation Vapor	Rat	24.6 mg/l	4 hours
	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 mg/kg	-
Cyclohexanone	LC50 Inhalation Gas.	Rat	8000 ppm	4 hours
· ·	LD50 Dermal	Rabbit	1100 mg/kg	-
	LD50 Oral	Rat	1800 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Xylene	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)

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11. Toxicological information

Name	Category	Route of exposure	Target organs
benzyl alcohol	Category 1	-	central nervous system (CNS), kidneys
-	Category 3	-	Narcotic effects
Ethyl Benzene	Category 3	-	Respiratory tract irritation
-	Category 3	-	Narcotic effects
Xylene	Category 1	-	central nervous system (CNS), kidneys, liver, respiratory organs
-	Category 3	-	Narcotic effects
isobutyl alcohol	Category 3	-	Respiratory tract irritation
-	Category 3	-	Narcotic effects
Cyclohexanone	Category 1	-	respiratory system
-	Category 2	-	central nervous system (CNS)
-	Category 3	-	Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
benzyl alcohol	Category 1	-	central nervous system (CNS)
Ethyl Benzene	Category 1	-	hearing organs, nervous system
Xylene	Category 1	-	nervous system, respiratory organs
Cyclohexanone	Category 1	-	bones, central nervous system (CNS)

Aspiration hazard

Name	Result
Ethyl Benzene	ASPIRATION HAZARD - Category 1
Xylene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

: Not available.

Potential acute health effects

Eye contact

: Causes serious eye damage.

Inhalation

: Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

Skin contact

: Causes severe burns. Harmful in contact with skin. Causes damage to organs following a single exposure in contact with skin. Defatting to the skin. May cause

an allergic skin reaction.

Ingestion

: Causes damage to organs following a single exposure if swallowed. Can cause

central nervous system (CNS) depression.

Symptoms related to the physical, chemical and toxicological characteristics

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11. Toxicological information

Eye contact : Adverse symptoms may include the following:

pain watering redness

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:

pain or irritation

redness dryness cracking

blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations

Ingestion : Adverse symptoms may include the following:

stomach pains 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.

: Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate

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

to very low levels.

Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of

exposure.

Mutagenicity : Suspected of causing genetic defects.

Reproductive toxicity : May damage fertility or the unborn child.

Numerical measures of toxicity

Acute toxicity estimates

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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)
SIGMALINE 403 HS HRDENER	2699.8	1711.8	N/A	16.3	N/A
benzyl alcohol	1200	1100	N/A	N/A	N/A
Poly[oxy(methyl-1,2-ethanediyl)], α-	2885	2980	N/A	N/A	N/A
(2-aminomethylethyl)-ω-(2-aminomethylethoxy)-					
Ethyl Benzene	3500	17800	N/A	17.8	N/A
Xylene	4300	1700	N/A	11	N/A
isobutyl alcohol	2830	2460	N/A	11	N/A
Cyclohexanone	1800	300	N/A	3	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

Toxicity

Product/ingredient name	Result	Species	Exposure
Poly[oxy(methyl- 1,2-ethanediyl)], α- (2-aminomethylethyl)-ω- (2-aminomethylethoxy)-	EC50 15 mg/l	Algae	72 hours
Ethyl Benzene isobutyl alcohol	Acute EC50 1.8 mg/l Fresh water Chronic NOEC 1 mg/l Fresh water Acute EC50 1100 mg/l	Daphnia Daphnia - <i>Ceriodaphnia dubia</i> Daphnia	48 hours - 48 hours

Persistence/degradability

Product/ingredient name	Test	Result	Result			Inoculum		
Ethyl Benzene	-	79 % - Re	79 % - Readily - 10 days		79 % - Readily - 10 days			-
Product/ingredient name	Aquatic h	alf-life	Photolysis	•	Biodeg	radability		
benzyl alcohol Poly[oxy(methyl- 1,2-ethanediyl)], α- (2-aminomethylethyl)-ω- (2-aminomethylethoxy)-	-		-		Readily Not rea	,		
Ethyl Benzene Xylene	-		-		Readily Readily	,		

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
benzyl alcohol	0.87	-	Low
Ethyl Benzene	3.6	79.43	Low
Xylene	3.12	7.4 to 18.5	Low
isobutyl alcohol	1	-	Low
Cyclohexanone	0.86	-	Low

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12. Ecological information

Mobility in soil

Soil/Water partition

coefficient

: 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	IATA
UN number	UN3469	UN3469	UN3469
UN proper shipping name	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE
Transport hazard class(es)	3 (8)	3 (8)	3 (8)
Packing group	III	III	III
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

Additional information

: None identified. UN : None identified. **IMDG** : None identified. IATA

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.

to IMO instruments

Transport in bulk according: Not applicable.

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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			
	9.2	Class 1	53
Xylene	5.3	Class 1	80

Industrial Safety and Health Act

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

Ingredient name	%		Reference number
ethyl benzene	≤10	Special Organic Solvents	3-3

Substance(s) requiring labelling

Ingredient name	%	Status	Reference number
Benzyl alcohol	≥10 - ≤20	Listed	530-4, 2-1899 (2025-04)
Ethylbenzene	≤10	Listed	70, 2-247 (2025-04)
Xylene	≤10	Listed	136, 2-426 (2025-04)
Butanol, (Butanol (Includes isomers of alkyl groups.) (2025-04))	≤10	Listed	477, 2-1705 (2025-04)
Cyclohexanone	≤10	Listed	231, 2-748 (2025-04)

Chemicals requiring notification

Ingredient name	%	Status	Reference number
Benzyl alcohol	≥10 - ≤20	Listed	530-4, 2-1899 (2025-04)
Ethylbenzene	≤10	Listed	70, 2-247 (2025-04)
Xylene	≤10	Listed	136, 2-426 (2025-04)
Butanol, (Butanol (Includes isomers of alkyl groups.) (2025-04))	≤10	Listed	477, 2-1705 (2025-04)
Cyclohexanone	≤10	Listed	231, 2-748 (2025-04)

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

None of the components are listed.

Mutagen

None of the components are listed.

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15. Regulatory information

Corrosive liquid : Not listed

Occupational Safety and : Inflammable

Health Law

Regulations on the : Not listed

Prevention of Tetraalkyl

Lead Poisoning

Harmful Substances : Not listed

Subject to Obtaining Permission for Manufacturing

Harmful Substances, : Not listed

Prohibited for Manufacturing

ISHL Enforcement Order : Inflammable

Appendix 1 - Dangerous

Substances

Lead regulation : Not listed
Organic solvents : Class 2

poisoning prevention

Poisonous and Deleterious Substances

None of the components are listed.

Chemical Substances Control Law (CSCL)

Ingredient name	%	Status	Reference number
Ethylbenzene Xylene	≤10 ≤10	Priority assessment	50 125
Cyclohexanone	≤10 ≤10	Priority assessment Priority assessment	131
Formic acid	≤10	Priority assessment	117

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 : At least one component is not listed.

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Product name SIGMALINE 403 HS HRDENER

15. Regulatory information

Road law : Not available.

16. Other information

History

Date of issue/Date of

revision

: 20 April 2025

Date of previous issue

: No previous validation

Version
Prepared by

: 1 : 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.

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