## SAFETY DATA SHEET



Date of issue/Date of revision 10 March 2024

Version 1

# Section 1. Identification of the substance/mixture and of the company/undertaking

Product code : 00350158

Product name : SIGMALINE 403 HS (41) HARDENER

Other means of : Not available.

identification

Product type : Liquid.

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

Product use : Coating.

Consumer applications, Professional applications, Used by spraying.

Supplier's details : PPG Coatings (Thailand) Co., Ltd.

15 Rama 9 Road, Kwaeng Huamark, Khet Bangkapi, Bangkok 10240 Thailand

T: 662-319-4190 #224 F: 662-319-4189

Emergency telephone number (with hours of

operation)

: CHEMTREC 001-800-13-203-9987 (CCN 17704)

### Section 2. Hazards identification

Classification of the substance or mixture

: FLAMMABLE LIQUIDS - Category 3
ACUTE TOXICITY (oral) - Category 5
ACUTE TOXICITY (dermal) - Category 5
ACUTE TOXICITY (inhalation) - Category 4
SKIN CORROSION/IRRITATION - Category 1

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

SKIN SENSITIZATION - Category 1B AQUATIC HAZARD (ACUTE) - Category 3 AQUATIC HAZARD (LONG-TERM) - Category 3

Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity:

48.5%

Percentage of the mixture consisting of ingredient(s) of unknown acute dermal

toxicity: 48.5%

Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation

toxicity: 63.5%

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**Product name SIGMALINE 403 HS (41) HARDENER** 

### Section 2. Hazards identification

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 66%

**GHS label elements** 

**Hazard pictograms** 







Signal word : Danger

**Hazard statements** : Flammable liquid and vapor.

May be harmful if swallowed or in contact with skin.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Harmful if inhaled.

Harmful to aquatic life with long lasting effects.

**Precautionary statements** 

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

have product container or label at hand.

**Prevention** : Wear protective gloves, protective clothing and eye or face protection. Keep away

> from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use nonsparking tools. Take action to prevent static discharges. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid release to the

environment. Avoid breathing vapor. Wash thoroughly after handling.

Response : 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. Wash contaminated clothing before reuse. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. 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. Immediately call a

POISON CENTER or doctor.

**Storage** : Store locked up. Store in a well-ventilated place. Keep cool.

**Disposal** Dispose of contents and container in accordance with all local, regional, national

and international regulations.

result in classification

Other hazards which do not : Prolonged or repeated contact may dry skin and cause irritation.

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**Product name SIGMALINE 403 HS (41) HARDENER** 

### Section 3. Composition/information on ingredients

Substance/mixture : Mixture

#### **CAS** number/other identifiers

**CAS number** : Not applicable.

Ingredient name	%	CAS number
Epoxy Amine Resin benzyl alcohol Poly[oxy(methyl-1,2-ethanediyl)], α-(2-aminomethylethyl)-ω-(2-aminomethylethoxy)-	25- <50 10- <20 10- <20	SUB127764 100-51-6 9046-10-0 (n = 2-6)
ethylbenzene xylene 2-methylpropan-1-ol cyclohexanone	5- <10 5- <10 3 - <5 1- <3	100-41-4 1330-20-7 78-83-1 108-94-1

There are no 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.

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

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

SUB codes represent substances without registered CAS Numbers.

### Section 4. First aid measures

### **Description of 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.

**Skin contact**: Causes severe burns. May be harmful in contact with skin. Defatting to the skin.

May cause an allergic skin reaction.

**Ingestion** : May be harmful if swallowed.

Over-exposure signs/symptoms

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**Product name SIGMALINE 403 HS (41) HARDENER** 

### Section 4. First aid measures

**Eye contact**: Adverse symptoms may include the following:

pain watering redness

Inhalation : No specific data.

**Skin contact**: Adverse symptoms may include the following:

pain or irritation

redness dryness cracking

blistering may occur

**Ingestion**: Adverse symptoms may include the following:

stomach pains

#### Indication of immediate 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)

### Section 5. Fire-fighting measures

#### **Extinguishing media**

Suitable extinguishing

media

: Use dry chemical, CO<sub>2</sub>, 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 nitrogen 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.

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**Product name SIGMALINE 403 HS (41) HARDENER** 

### Section 5. Fire-fighting measures

**Special protective** equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode

### Section 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders:

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

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

### 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.

### Section 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. 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,

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### Section 7. Handling and storage

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.

including any incompatibilities

Product code 00350158

Conditions for safe storage, : Storage temperature: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### Section 8. Exposure controls/personal protection

#### **Control parameters**

#### Occupational exposure limits

Ingredient name	Exposure limits
ethylbenzene	Ministry of Labor (Thailand, 8/2017).
	TWA: 100 ppm 8 hours.
xylene	Ministry of Labor (Thailand, 8/2017).
	[xylene (o-, m-, p- isomers)]
	TWA: 100 ppm 8 hours.
2-methylpropan-1-ol	ACGIH TLV (United States, 1/2023).
	TWA: 152 mg/m <sup>3</sup> 8 hours.
	TWA: 50 ppm 8 hours.
cyclohexanone	Ministry of Labor (Thailand, 8/2017).
•	TWA: 50 ppm 8 hours.

# 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**

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**Product name SIGMALINE 403 HS (41) HARDENER** 

### Section 8. Exposure controls/personal protection

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. **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.

### Section 9. Physical and chemical properties

**Appearance** 

Physical state : Liquid.

Color : Colorless.

Odor : Aromatic.

Odor threshold : Not available.

pH : insoluble in water.

Melting point : May start to solidify at the following temperature: -15.4°C (4.3°F) This is based on

data for the following ingredient: benzyl alcohol. Weighted average: -58.35°C (-73°F)

**Boiling point** : >37.78°C (>100°F)

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

**Evaporation rate**: Highest known value: 0.84 (ethylbenzene) Weighted average: 0.43compared with

butyl acetate

Flammability (solid, gas) : liquid

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**Product name SIGMALINE 403 HS (41) HARDENER** 

### Section 9. Physical and chemical properties

Lower and upper explosive

(flammable) limits

: Greatest known range: Lower: 1.3% Upper: 13% (benzyl alcohol)

Vapor pressure

: Highest known value: <1.6 kPa (<12 mm Hg) (at 20°C) (2-methylpropan-1-ol).

Weighted average: 0.49 kPa (3.68 mm Hg) (at 20°C)

Vapor density

: Highest known value: 3.7 (Air = 1) (benzyl alcohol). Weighted average: 3.54 (Air = 1)

Relative density

: 1

Solubility(ies)

MediaResultcold waterNot soluble

Partition coefficient: n-octanol/water

: Not applicable.

**Auto-ignition temperature** 

Lowest known value: 415°C (779°F) (2-methylpropan-1-ol).

**Decomposition temperature** 

Stable under recommended storage and handling conditions (see Section 7).

Viscosity

Kinematic (40°C): >21 mm<sup>2</sup>/s

### Section 10. Stability and reactivity

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

Chemical stability

: The product is stable.

Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid

: When exposed to high temperatures may produce hazardous decomposition

products.

Incompatible materials

: Keep away from the following materials to prevent strong exothermic reactions:

oxidizing agents, strong alkalis, strong acids.

Hazardous decomposition products

: Depending on conditions, decomposition products may include the following

materials: carbon oxides nitrogen oxides

### **Section 11. Toxicological information**

Information on toxicological effects

**Acute toxicity** 

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**Product name SIGMALINE 403 HS (41) HARDENER** 

### **Section 11. Toxicological information**

Product/ingredient name	Result	Species	Dose	Exposure
benzyl alcohol	LC50 Inhalation Dusts and mists	Rat	>4178 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	1.23 g/kg	-
Poly[oxy(methyl-1,2-ethanediyl)], α- (2-aminomethylethyl)-ω- (2-aminomethylethoxy)-	LD50 Dermal	Rat	2980 mg/kg	-
(2 difficulty local exy)	LD50 Oral	Rat	2885 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	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
2-methylpropan-1-ol	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	-

**Conclusion/Summary** 

: There are no data available on the mixture itself.

#### **Irritation/Corrosion**

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

**Conclusion/Summary** 

Skin
 Eyes
 There are no data available on the mixture itself.
 Respiratory
 There are no data available on the mixture itself.
 There are no data available on the mixture itself.

**Sensitization** 

**Conclusion/Summary** 

Skin : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

**Mutagenicity** 

**Conclusion/Summary**: There are no data available on the mixture itself.

**Carcinogenicity** 

**Conclusion/Summary**: There are no data available on the mixture itself.

Reproductive toxicity

**Conclusion/Summary**: There are no data available on the mixture itself.

**Teratogenicity** 

**Conclusion/Summary**: There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

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**Product name SIGMALINE 403 HS (41) HARDENER** 

### **Section 11. Toxicological information**

Name	Category	Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation
2-methylpropan-1-ol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
cyclohexanone	Category 3	-	Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
ethylbenzene	Category 2	-	hearing organs

#### **Aspiration hazard**

Name	Result
benzyl alcohol	ASPIRATION HAZARD - Category 2
ethylbenzene	ASPIRATION HAZARD - Category 1
xylene	ASPIRATION HAZARD - Category 1
2-methylpropan-1-ol	ASPIRATION HAZARD - Category 2

Information on the likely routes of exposure

: Not available.

Potential acute health effects

**Eye contact** : Causes serious eye damage.

Inhalation : Harmful if inhaled.

Skin contact : Causes severe burns. May be harmful in contact with skin. Defatting to the skin.

May cause an allergic skin reaction.

**Ingestion**: May be harmful if swallowed.

#### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact**: Adverse symptoms may include the following:

pain watering redness

**Inhalation** : No specific data.

**Skin contact**: Adverse symptoms may include the following:

pain or irritation

redness dryness cracking

blistering may occur

**Ingestion**: Adverse symptoms may include the following:

stomach pains

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**Product name SIGMALINE 403 HS (41) HARDENER** 

### **Section 11. Toxicological information**

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: 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 : No known significant effects or critical hazards.

#### **Numerical measures of toxicity**

### **Acute toxicity estimates**

Route	ATE value
Oral	2126.55 mg/kg
Dermal	2610.13 mg/kg
Inhalation (gases)	117142.74 ppm
Inhalation (vapors)	36.64 mg/l
Inhalation (dusts and mists)	1.86 mg/l

#### 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.

### Section 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
ethylbenzene  2-methylpropan-1-ol	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

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**Product name SIGMALINE 403 HS (41) HARDENER** 

### Section 12. Ecological information

**Conclusion/Summary** 

: There are no data available on the mixture itself.

#### Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
ethylbenzene	-	79 % - Readily - 10 days	-	-

**Conclusion/Summary**: There are no data available on the mixture itself.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
benzyl alcohol	-	-	Readily
Poly[oxy(methyl-	-	-	Not readily
1,2-ethanediyl)], α-			
(2-aminomethylethyl)-ω-			
(2-aminomethylethoxy)-			
ethylbenzene	-	-	Readily
xylene	-	-	Readily

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
benzyl alcohol	0.87	-	Low
ethylbenzene	3.6	79.43	Low
xylene	3.12	7.4 to 18.5	Low
2-methylpropan-1-ol	1	-	Low
cyclohexanone	0.86	-	Low

#### **Mobility in soil**

Soil/water partition coefficient (Koc)

: Not available.

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

# Section 13. Disposal considerations

#### **Disposal methods**

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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**Product name SIGMALINE 403 HS (41) HARDENER** 

### **Section 14. Transport information**

	UN	IMDG	IATA
UN number	UN3469	UN3469	UN3469
UN proper shipping name	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE	PAINT RELATED MATERIAL, 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**

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

Transport in bulk according : Not applicable.

to IMO instruments

### Section 15. Regulatory information

**Harmful Chemicals List** 

Safety, health and environmental regulations specific for the product

: Listed

: No known specific national and/or regional regulations applicable to this product (including its ingredients).

**International regulations** 

**Montreal Protocol** 

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

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**Product name SIGMALINE 403 HS (41) HARDENER** 

### Section 16. Other information

**History** 

Date of issue/Date of : 10 March 2024

revision

Date of previous issue : No previous validation

Version : 1
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.

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