# **SAFETY DATA SHEET**

Safety Data Sheet according to GB/T 16483-2008 and GB/T 17519-2013



Date of issue/Date of revision 10 March 2024

Version 1

Section 1. Chem	ical product and company identification
Product code	: 00350158
Product name	: SIGMALINE 403 HS (41) HARDENER
Product name	: SIGMALINE 403 HS (41) HARDENER
Product type	: Liquid.
Relevant identified uses o	f the substance or mixture and uses advised against
Product use	: Consumer applications, Professional applications, Used by spraying.
Use of the substance/ mixture	: Coating.
Uses advised against	: Not applicable.
Supplier's details	: PPG Coatings (Kunshan) Co., Ltd 53 Jinyang Road, Lujia Town, 215331 Kunshan City, Jiangsu Province, P.R. China Tel: 86 512 57678859 Fax: 86 512 57678857
Emergency telephone number (with hours of operation)	: 00 86 532 83889090

# Section 2. Hazards identification

Classification of the substance or mixture according to GB 13690-2009 and GB 30000-2013

Emergency overview Liquid. Colorless. Aromatic. 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. Causes serious eye damage. Harmful if inhaled. Suspected of causing cancer. Harmful to aquatic life. Prolonged or repeated contact may dry skin and cause irritation.

IF exposed or concerned: Get medical advice or attention. IF INHALED: Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. IF ON SKIN (or hair): Immediately call a POISON CENTER or doctor if you feel unwell. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Immediately call a POISON CENTER or doctor.

#### See Section 12 for environmental precautions.

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# Section 2. Hazards identification

Suitable extinguishing media	: Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
Response	: IF exposed or concerned: Get medical advice or attention. 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.
Precautionary statements Prevention	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking 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.
Hazard statements	<ul> <li>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. Causes serious eye damage. Harmful if inhaled. Suspected of causing cancer. Harmful to aquatic life.</li> </ul>
Signal word	: Danger
GHS label elements Hazard pictograms	
CHS label elements	
	toxicity: 48.5% Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 63.5% Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 66%
	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
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 1C SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2 AQUATIC HAZARD (ACUTE) - Category 3
Classification of the	ELAMMARIELIOUIDS Category 3

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# Section 2. Hazards identification

Storage	1	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.
Physical and chemical hazards	:	Flammable liquid and vapor.
Health hazards	:	May be harmful if swallowed or in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. Harmful if inhaled. Suspected of causing cancer. Prolonged or repeated contact may dry skin and cause irritation.
Symptoms related to the phy	sic	al, chemical and toxicological characteristics
Eye contact	:	Adverse symptoms may include the following: pain watering redness
Inhalation	1	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
Delayed and immediate effec	ts	and also chronic effects from short and long term exposure
Short term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	1	Not available.
Long term exposure Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Environmental hazards	:	Harmful to aquatic life.
Other hazards which do not result in classification	:	Prolonged or repeated contact may dry skin and cause irritation.

# Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

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

CAS number	: Not applicable.
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Ingredient name	%	CAS number
Epoxy Amine Resin	40 - <70	SUB127764
benzyl alcohol	10 - <25	100-51-6
Poly[oxy(methyl-1,2-ethanediyl)], $\alpha$ -(2-aminomethylethyl)- $\omega$ -	10 - <25	9046-10-0 (n = 2-6)
(2-aminomethylethoxy)-		
ethylbenzene	1 - <10	100-41-4
xylene isomers mixture	1 - <10 1 - <10	1330-20-7
2-methylpropan-1-ol	1 - <10	78-83-1
cyclohexanone	1 - <10	108-94-1

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	<ul> <li>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.</li> </ul>
Inhalation	<ul> <li>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.</li> </ul>
Skin contact	<ul> <li>Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.</li> </ul>
Ingestion	<ul> <li>If swallowed, seek medical advice immediately and show this container or label.</li> <li>Keep person warm and at rest. Do NOT induce vomiting.</li> </ul>

Most important s	symptoms/effects, acute and delaye	<u>ed</u>

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/sympto	o <u>ms</u>
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: No specific data.

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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
ndication of immediate me	dical attention and special treatment needed, if necessary
ndication of immediate me Notes to physician	<ul> <li>dical attention and special treatment needed, if necessary</li> <li>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.</li> </ul>
	: In case of inhalation of decomposition products in a fire, symptoms may be delayed

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

# Section 7. Handling and storage

**Precautions for safe** ÷. Put on appropriate personal protective equipment (see Section 8). Persons with a handling 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. 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.

# Section 7. Handling and storage

Conditions for safe storage,	: Storage temperature: 0 to 35°C (32 to 95°F). Store in accordance with local
including any	regulations. Store in a segregated and approved area. Store in original container
incompatibilities	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			GBZ 2.1 (China, 11/2022).			
			PC-STEL: 150 mg/m <sup>3</sup> 15 minutes.			
			PC-TWA: 100 mg/m <sup>3</sup> 8 hours.			
xylene isomers mixture			GBZ 2.1 (China, 11/2022). [Xylene (all			
			isomers)] PC-STEL: 100 mg/m <sup>3</sup> 15 minutes.			
			PC-TWA: 50 mg/m <sup>3</sup> 8 hours.			
2-methylpropan-1-ol			ACGIH TLV (United States, 1/2023).			
51 1			TWA: 152 mg/m <sup>3</sup> 8 hours.			
			TWA: 50 ppm 8 hours.			
cyclohexanone			GBZ 2.1 (China, 11/2022). Absorbed			
			through skin.			
			PC-TWA: 50 mg/m <sup>3</sup> 8 hours.			
Recommended monitoring	:		iate monitoring standards. Reference to			
procedures		substances will also be required.	nods for the determination of hazardous			
		substances will also be required.				
Appropriate engineering		Use only with adequate ventilation. U	so process onclosures, local exhaust			
controls	1					
		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	1		pcess equipment should be checked to ensure			
controls			environmental protection legislation. In some			
		cases, fume scrubbers, filters or engir equipment will be necessary to reduce				
		equipment will be necessary to reduce				
ndividual protection measu	res					
Hygiene measures		Wash hands forearms and face thore	ughly after handling chemical products, before			
nygiene measures			y and at the end of the working period.			
			d to remove potentially contaminated clothing.			
			ot be allowed out of the workplace. Wash			
			Ensure that eyewash stations and safety			
		showers are close to the workstation I				
Eye protection	1	Chemical splash goggles and face shi	leid.			
Skin protection						
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			China Page: 7/1			

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# Section 8. Exposure controls/personal protection

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

<u>Appearance</u>					
Physical state	quid.				
Color	olorless.				
Odor	romatic.				
Boiling point	37.78°C (>100°F)				
Flash point	losed cup: 34°C (93.2°F)				
Lower and upper explosive (flammable) limits	Greatest known range: Lower: 1.3% Upper: 13% (benzyl alcohol)				
Relative density					
Solubility/ico)	ledia Result				
Solubility(ies)	old water Not soluble				
Viscosity	inematic (40°C): >21 mm²/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.

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# Section 10. Stability and reactivity

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

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

#### Irritation/Corrosion

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

#### **Sensitization**

Not available.

#### **Mutagenicity**

Not available.

#### **Carcinogenicity**

Not available.

#### **Reproductive toxicity**

Not available.

#### **Teratogenicity**

Not available.

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# Section 11. Toxicological information

Name		Category		Route of exposure	Target organs
2-methylpropan-1-ol		Category 3		-	Respiratory tract
		Category 3			Narcotic effects
Specific target organ toxici	ty (repeated exposure)				
Name		Category		Route of exposure	Target organs
ethylbenzene Categor				-	-
Aspiration hazard		·			
Name			Resu	lt	
benzyl alcohol ethylbenzene					RD - Category 2 RD - Category 1
nformation on the likely outes of exposure	: Not available.				
Potential acute health effects	<u>s</u>				
Eye contact	: Causes serious eye darr	nage.			
Inhalation	: Harmful if inhaled.				
Skin contact	: Causes severe burns. N May cause an allergic sk		in con	itact with skin.	Defatting to the skin.
La sur e Olivia					
Ingestion	: May be harmful if swallo	wed.			
Ingestion Symptoms related to the phy			<u>:teristi</u>	i <u>cs</u>	
-		logical charac			
Symptoms related to the phy	ysical, chemical and toxico : Adverse symptoms may pain watering	logical charac			
Symptoms related to the phy Eye contact	ysical, chemical and toxico : Adverse symptoms may pain watering redness	logical charac	lowing	:	
Symptoms related to the phy Eye contact Inhalation	<ul> <li>ysical, chemical and toxico</li> <li>Adverse symptoms may pain watering redness</li> <li>No specific data.</li> <li>Adverse symptoms may pain or irritation redness dryness cracking</li> </ul>	logical charaction include the fol	lowing	:	
Symptoms related to the phy Eye contact Inhalation Skin contact	<ul> <li>ysical, chemical and toxico</li> <li>Adverse symptoms may pain watering redness</li> <li>No specific data.</li> <li>Adverse symptoms may pain or irritation redness dryness cracking blistering may occur</li> <li>Adverse symptoms may stomach pains</li> </ul>	logical charaction include the fol	lowing lowing lowing	:	ПG
Symptoms related to the phy Eye contact Inhalation Skin contact Ingestion Delayed and immediate effect	<ul> <li>ysical, chemical and toxico</li> <li>Adverse symptoms may pain watering redness</li> <li>No specific data.</li> <li>Adverse symptoms may pain or irritation redness dryness cracking blistering may occur</li> <li>Adverse symptoms may stomach pains</li> </ul>	logical charaction include the fol	lowing lowing lowing	:	ль
Symptoms related to the phy Eye contact Inhalation Skin contact Ingestion	<ul> <li>ysical, chemical and toxico</li> <li>Adverse symptoms may pain watering redness</li> <li>No specific data.</li> <li>Adverse symptoms may pain or irritation redness dryness cracking blistering may occur</li> <li>Adverse symptoms may stomach pains</li> </ul>	logical charaction include the fol	lowing lowing lowing	:	ле
Symptoms related to the phy Eye contact Inhalation Skin contact Ingestion Delayed and immediate effect Short term exposure Potential immediate	<ul> <li>ysical, chemical and toxico</li> <li>Adverse symptoms may pain watering redness</li> <li>No specific data.</li> <li>Adverse symptoms may pain or irritation redness dryness cracking blistering may occur</li> <li>Adverse symptoms may stomach pains</li> </ul>	logical charaction include the fol	lowing lowing lowing	:	ПБ

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Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health effe	<u>ects</u>
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	: Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: No known significant effects or critical hazards.

#### 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)
SIGMALINE 403 HS (41) HARDENER benzyl alcohol Poly[oxy(methyl-1,2-ethanediyl)], α- (2-aminomethylethyl)-ω-(2-aminomethylethoxy)-	2126.6 1230 2885	2610.1 2000 2980	117142.7 N/A N/A	36.6 N/A N/A	1.9 1.5 N/A
ethylbenzene xylene isomers mixture 2-methylpropan-1-ol cyclohexanone	3500 4300 2830 1800	17800 1700 2460 1100	N/A N/A N/A 8000	17.8 11 24.6 N/A	1.5 1.5 N/A N/A

#### Other information

**Toxicity** 

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

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	Acute EC50 1.8 mg/l Fresh water Chronic NOEC 1 mg/l Fresh water	Daphnia Daphnia - <i>Ceriodaphnia dubia</i>	48 hours -
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours

#### Persistence/degradability

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### Section 12. Ecological information

Product/ingredient name	Test	Result		Dose		Inoculum
ethylbenzene	-	79 % - Rea	idily - 10 days	-		-
Product/ingredient name	Aquatic half	-life	Photolysis		Biodeg	Iradability
benzyl alcohol Poly[oxy(methyl- 1,2-ethanediyl)], α- (2-aminomethylethyl)-ω- (2-aminomethylethoxy)- ethylbenzene	-		-		Readily Not rea	adily
xylene isomers mixture	-		-		Readily	

#### **Bioaccumulative potential**

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

<u>Mobility in soil</u>	
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. 2 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.

Product name SIGMALINE 403 HS (41) HARDENER

# Section 14. Transport information

	China	UN	IMDG	IATA
UN number	UN3469	UN3469	UN3469	UN3469
UN proper shipping name	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE	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)	3 (8)
Packing group	111	Ш	Ш	Ш
Environmental hazards	No.	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	Not applicable.

#### Additional information

CN	: None identified.
UN	: None identified.
IMDG	: None identified.
ΙΑΤΑ	: 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

China inventory (IECSC)	: All components are listed or exempted.
References	<ul> <li>Production Safety Law of the People's Republic of China Code of Occupational Disease Prevention of the People's Republic of China Environmental Protection Law of the People's Republic of China Fire Control Law of the People's Republic of China Regulations on the Control over Safety of Dangerous Chemicals Occupational exposure limits for hazardous agents in the workplace chemical hazardous agents (GBZ2.1) General rule for classification and hazard communication of chemicals (GB13690) Safety data sheet for chemical products - Content and order of sections (GB/ T16483) Guidance on the compilation of safety data sheet for chemical products (GB/ T17519) General rule for preparation of precautionary label for chemicals (GB15258) Safety rules for classification, precautionary labeling and precautionary statements of chemicals (GB30000.2-29)</li> </ul>

# Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 10 March 2024
Date of previous issue	: No previous validation
Version	: 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.