SAFETY DATA SHEET



Date of issue/Date of revision28 June 2023Version 7.01

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

Product code	: 00284981
Product name	: SIGMACOVER 380 BASE REDBROWN
Other means of identification	: Not available.
Product type	: Liquid.

Relevant identified uses of the substance or mixture and uses advised against		
Product use	 Coating. Professional applications, Used by spraying. 	
Uses advised against	: Product is not intended, labelled or packaged for consumer use.	
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 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SKIN SENSITIZATION - Category 1B TOXIC TO REPRODUCTION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1

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Section 2. Hazards identification

Product name SIGMACOVER 380 BASE REDBROWN

Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 22.9%

Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 63.5%

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 59.9%

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 skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation. Suspected of damaging fertility or the unborn child. Very toxic to aquatic life with long lasting effects. **Precautionary statements Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. 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. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing vapor. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Collect spillage. IF exposed or concerned: Get medical advice or attention. IF Response INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Take off contaminated clothing and wash before reuse. 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. : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Storage Keep cool. **Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

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Section 2. Hazards identification

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

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

CAS number/other identifiers

CAS number : Not applicable.

Ingredient name	%	CAS number
✓alc , not containing asbestiform fibres	20- <25	14807-96-6
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	10- <20	25068-38-6
xylene	5- <10	1330-20-7
nonylphenol	3 - <5	25154-52-3
Epoxy Resin (700 <mw<=1100)< td=""><td>3 - <5</td><td>25036-25-3</td></mw<=1100)<>	3 - <5	25036-25-3
Phenol, methylstyrenated	3 - <5	68512-30-1
2-methylpropan-1-ol	1- <3	78-83-1
Solvent naphtha (petroleum), heavy arom.	1- <3	64742-94-5
ethylbenzene	1- <3	100-41-4
p-nonylphenol	<0.1	104-40-5

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 sympto	ms/effects, acute and delayed

Potential acute health effects

Eye contact	: Causes serious eye damage.
Inhalation	: May cause respiratory irritation.
Skin contact	 May be harmful in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: May be harmful if swallowed.
Over-exposure signs	/symptoms

Section 4. First aid measures

Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: 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
Indication of immediate me	dical attention and special treatment needed, if necessary

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

Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.

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Section 5. Fire-fighting measures

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 very toxic 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 halogenated compounds metal oxide/oxides
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protect	tive 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 Methods and materials for co	: 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. Collect spillage.
methous and materials for co	ntainment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent
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Section 6. Accidental release measures

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. 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, : including any incompatibilities	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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
✓alc , not containing asbestiform fibres	Ministry of Labor (Thailand, 8/2017). [talc containing no asbestos fibres] TWA: 2 mg/m ³ 8 hours. Form: Respirable dust
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, 1/2022). TWA: 152 mg/m ³ 8 hours. TWA: 50 ppm 8 hours.
ethylbenzene	Ministry of Labor (Thailand, 8/2017). TWA: 100 ppm 8 hours.

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Section 8. Exposure controls/personal protection

Recommended monitoring procedures	:	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 measur	es	
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	:	butyl rubber
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	1	Liquid.		
Color	:	/arious		
Odor	:	romatic.		
Odor threshold	:	Not available.		
рН	:	insoluble in water.		
Melting point	;	May start to solidify at the following temperature: -8°C (17.6°F) This is based on data for the following ingredient: nonylphenol. Weighted average: -56.77°C (-70.2°F)		
Boiling point	1	>37.78°C (>100°F)		
Flash point	:	Closed cup: 29°C (84.2°F)		
Evaporation rate	:	Highest known value: 0.84 (ethylbenzene) Weighted average: 0.51compared with butyl acetate		
Flammability (solid, gas)	:	iquid		
Lower and upper explosive (flammable) limits	:	Greatest known range: Lower: 1.7% Upper: 10.9% (2-methylpropan-1-ol)		
Vapor pressure	:	Highest known value: <1.6 kPa (<12 mm Hg) (at 20°C) (2-methylpropan-1-ol). Neighted average: 0.55 kPa (4.13 mm Hg) (at 20°C)		
Vapor density	:	Highest known value: 7.59 (Air = 1) (nonylphenol). Weighted average: 4.77 (Air = 1)		
Relative density	:	1.29		
		Media Result		
Solubility(ies)	1	old water Not soluble		
Partition coefficient: n- octanol/water	:	Not applicable.		
Auto-ignition temperature	:	Lowest known value: 220 to 250°C (428 to 482°F) (Solvent naphtha (petroleum), heavy arom.).		
Decomposition temperature	:	Stable under recommended storage and handling conditions (see Section 7).		
Viscosity	1	Kinematic (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.
Conditions to avoid	: When exposed to high temperatures may produce hazardous decomposition products.

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Section 10. Stability and reactivity

Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions:
	oxidizing agents, strong alkalis, strong acids.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
reaction product: bisphenol-A-	LD50 Dermal	Rabbit	>2 g/kg	-
(epichlorhydrin); epoxy resin				
	LD50 Oral	Rat	>2 g/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
nonylphenol	LD50 Dermal	Rabbit	2.14 g/kg	-
	LD50 Oral	Rat	580 mg/kg	-
Epoxy Resin (700 <mw<=1100)< td=""><td>LD50 Dermal</td><td>Rat</td><td>>2000 mg/kg</td><td>-</td></mw<=1100)<>	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
Phenol, methylstyrenated	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/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	-
Solvent naphtha (petroleum), heavy	LC50 Inhalation Dusts and mists	Rat	>5.2 mg/l	4 hours
arom.				
	LD50 Oral	Rat	>5 g/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	-
p-nonylphenol	LD50 Oral	Rat	1620 mg/kg	-

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

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
A-(epichlorhydrin); epoxy resin	Eyes - Mild irritant	Rabbit	-	100 mg	-
	Eyes - Moderate irritant	Rabbit	-	-	-
	Skin - Moderate irritant	Rabbit	-	-	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 Ul	-
	Skin - Severe irritant	Rabbit	-	24 hours 2	-
xylene	Skin - Moderate irritant	Rabbit	-	mg 24 hours 500 mg	-

Conclusion/Summary

Skin

: There are no data available on the mixture itself.

Hazardous decomposition
 : Depending on conditions, decomposition products may include the following materials: carbon oxides halogenated compounds metal oxide/oxides

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Section 11. Toxicological information

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

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

Product/ingredient name	Route of exposure	Species	Result		
A-(epichlorhydrin); epoxy resin	skin	Mouse	Sensitizing		
Conclusion/Summary	·	·	•		
Skin :	There are no data	here are no data available on the mixture itself.			
Respiratory :	There are no data	here are no data available on the mixture itself.			
<u>Mutagenicity</u>					
Conclusion/Summary :	There are no data	here are no data available on the mixture itself.			
Carcinogenicity					
Conclusion/Summary :	There are no data	here 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 toxicit	v (single exposure	9)			

<u>Specific target organ toxicity (single exposure)</u> Route of Name Category

Name	Category	Route of exposure	Target organs
Talc , not containing asbestiform fibres	Category 3	-	Respiratory tract irritation
xylene	Category 3	-	Respiratory tract irritation
2-methylpropan-1-ol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
Solvent naphtha (petroleum), heavy arom.	Category 3	-	Narcotic effects

Specific target organ toxicity (repeated exposure)

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

Aspiration hazard

Name	Result
xylene	ASPIRATION HAZARD - Category 1
2-methylpropan-1-ol	ASPIRATION HAZARD - Category 2
Solvent naphtha (petroleum), heavy arom.	ASPIRATION HAZARD - Category 1
ethylbenzene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

: Not available.

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Section 11. Toxicological information

Potential acute health effects

Eye contact	1	Causes serious eye damage.
Inhalation	1	May cause respiratory irritation.
Skin contact	:	May be harmful in contact with skin. Causes skin irritation. 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	: Adverse symptoms may include the following: respiratory tract irritation coughing reduced fetal weight increase in fetal deaths skeletal malformations	
Skin contact	: Adverse symptoms may include the following: 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. effects Potential delayed effects Potential delayed effects : Not available.

<u>Long term exposure</u>			
Potential immediate effects	1	Not available.	
Potential delayed effects	:	Not available.	
Potential chronic health effects			

Section 11. Toxicological information

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	: Suspected of damaging fertility or the unborn child.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	4046.26 mg/kg
Dermal	2437.19 mg/kg
Inhalation (vapors)	45.02 mg/l
Inhalation (dusts and mists)	5.78 mg/l

Other information

Prolonged or repeated contact may dry skin and cause irritation. Sanding and grinding dusts may be harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing.

Section 12. Ecological information

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Toxicity

Product/ingredient name	Result	Species	Exposure
eaction product: bisphenol- A-(epichlorhydrin); epoxy resin	Chronic NOEC 0.3 mg/l	Daphnia	21 days
nonylphenol	Acute EC50 0.056 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Chronic EC10 0.003 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Chronic NOEC 1 µg/l Fresh water	Daphnia - <i>Daphnia magna</i>	21 days
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
Solvent naphtha (petroleum), heavy arom.	NOEL 0.48 mg/l Fresh water	Daphnia	21 days
ethylbenzene	Acute EC50 1.8 mg/l Fresh water Chronic NOEC 1 mg/l Fresh water	Daphnia Daphnia - <i>Ceriodaphnia dubia</i>	48 hours -
p-nonylphenol	Acute EC50 134.1 µg/l Marine water	Algae - <i>Phaeodactylum</i> <i>tricornutum</i> - Exponential growth phase	72 hours
	Chronic EC10 73.8 μg/l Marine water	Algae - <i>Phaeodactylum</i> <i>tricornutum</i> - Exponential growth phase	72 hours

Conclusion/Summary

: There are no data available on the mixture itself.

Section 12. Ecological information

Persistence/degradability

Product/ingredient name	Test	Result		Dose	Inoculum
Reaction product: bisphenol- A-(epichlorhydrin); epoxy resin	OECD 301F	5 % - 28 days		-	-
ethylbenzene	-	79 % - Readily - 10) days	-	-
Conclusion/Summary	: There are no	o data available on the	mixture itse	elf.	
Product/ingredient name	Aquatic half-lit	ie	Photolys	is	Biodegradability
A-(epichlorhydrin); epoxy resin	-		-		Not readily
xylene ethylbenzene	-		-		Readily Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	2.64 to 3.78	31	Low
xylene	3.12	7.4 to 18.5	Low
nonylphenol	3.28	154.88	Low
Phenol, methylstyrenated	3.627	-	Low
2-methylpropan-1-ol	1	-	Low
Solvent naphtha (petroleum), heavy arom.	2.8 to 6.5	-	High
ethylbenzene	3.6	79.43	Low
p-nonylphenol	5.76	380.19	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
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Section 13. Disposal considerations

dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	UN	IMDG	ΙΑΤΑ			
UN number	UN1263	UN1263	UN1263			
UN proper shipping name	PAINT	PAINT	PAINT			
Transport hazard class(es)	3	3	3			
Packing group	III	III	III			
Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.			
Marine pollutant substances	Not applicable.	(reaction product: bisphenol-A- (epichlorhydrin); epoxy resin, nonylphenol)	Not applicable.			

Additional info	prmation
UN	: None identified.
IMDG	: The marine pollutant mark is not required when transported in sizes of $\leq 5 \text{ L}$ or $\leq 5 \text{ kg}$.
ΙΑΤΑ	: The environmentally hazardous substance mark may appear if required by other transportation regulations.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not applicable. to IMO instruments

Section 15. Regulatory information

Harmful	Chemicals List	
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: Listed
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Safety, health and environmental regulations specific for the product

: 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

Section 15. Regulatory information

Not listed.

Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 28 June 2023
Date of previous issue	: 11/8/2021
Version	: 7.01
Prepared by	: EHS
Key to abbreviations	 ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail UN = United Nations

✓ Indicates information that has changed from previously issued version.

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