SAFETY DATA SHEET



Date of issue/Date of revision26 November 2024Version 1.01

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

Product code	: 000001197517
Product name	: SIGMASHIELD 880 BASE (TINTED)
Other means of identification	: 00470641
Product type	: Liquid.
Relevant identified uses of th	ne 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 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 AQUATIC HAZARD (ACUTE) - Category 3 AQUATIC HAZARD (LONG-TERM) - Category 3 Percentage of the mixture consisting of ingredient(s) of unknown hazards to the
	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 41%

GHS label elements

Section 2. Hazards identification

Hazard pictograms	
Signal word	: Warning
Hazard statements	 Flammable liquid and vapor. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause respiratory irritation. Harmful to aquatic life with long lasting effects.
Precautionary statements	
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 non sparking 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.
Response	: F INHALED: Remove person to fresh air and keep comfortable for breathing. 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. If skin irritation or rash occurs: Get medical advice or attention. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.
Storage	: Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Other hazards which do not result in classification	: Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

Substance/mixture	1	Mixture
CAS number/other identifiers		
CAS number	:	Not applicable.

Section 3. Composition/information on ingredients

Ingredient name	%	CAS number
bis-[4-(2,3-epoxipropoxi)phenyl]propane	10- <20	1675-54-3
Talc , not containing asbestiform fibres	10- <20	14807-96-6
xylene	5- <10	1330-20-7
barium sulfate	5- <10	7727-43-7
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
2-methoxy-1-methylethyl acetate	1- <3	108-65-6
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	1- <3	68609-97-2
ethylbenzene	1- <3	100-41-4
12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine	1- <3	220926-97-6

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

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	watering redness
	pain or irritation
Eye contact	: Adverse symptoms may include the following:
Over-exposure signs/sy	
Ingestion	: No known significant effects or critical hazards.
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Inhalation	: May cause respiratory irritation.
Eye contact	: Causes serious eye irritation.
Potential acute health e	ffects
Most important sympton	is/effects, acute and delayed
Ingestion	: If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
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.
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.
Eye contact	 Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
Description of necessary	<u>r first aid measures</u>

Section 4. First aid measures

Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking
Ingestion	: No specific data.
Indication of immediate me	dical 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

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.
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 sulfur 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.

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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
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 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 ingest. Avoid breathing vapor or mist. 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,

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.

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)
	TWA 8 hours: 2 mg/m ³ . Form: Respirable
	dust.
xylene	Ministry of Labor (Thailand, 8/2017)
	[xylene (o-, m-, p- isomers)]
	TWA 8 hours: 100 ppm.
barium sulfate	Ministry of Labor (Thailand, 8/2017)
	TWA 8 hours: 5 mg/m ³ . Form: Respirable
	dust.
	TWA 8 hours: 15 mg/m ³ . Form: inhalable
	dust.
2-methylpropan-1-ol	ACGIH TLV (United States, 7/2023)
	TWA 8 hours: 50 ppm.
	TWA 8 hours: 152 mg/m ³ .
ethylbenzene	Ministry of Labor (Thailand, 8/2017)
	TWA 8 hours: 100 ppm.
12-hydroxyoctadecanoic acid, reaction products with	ACGIH TLV (United States)
1,3-benzenedimethanamine and hexamethylenediamine	TWA: 10 mg/m ³ . Form: Inhalable particle.
	TWA: 3 mg/m³ (inhalable dust). Form:
	Respirable particle.
Recommended monitoring : Reference should be made to a	appropriate monitoring standards. Reference to
	or methods for the determination of hazardous
substances will also be require	d.
	tion. Use process enclosures, local exhaust

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.

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Section 8. Exposure controls/personal protection

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 measu	<u>ires</u>	
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	1	Chemical splash goggles.
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	: Liquid.
Color	: Various
Odor	: Aromatic.
Odor threshold	: Not available.
рН	: Not applicable.
Melting point	: Not available.
Boiling point	: >37.78°C (>100°F)

Section 9. Physical and chemical properties

Flash point	:	Closed cup: 37°C (98.6°F)	Closed cup: 37°C (98.6°F)		
Evaporation rate	1	Not available.			
Flammability (solid, gas)	:	liquid			
Lower and upper explosive (flammable) limits	:	Not available.			
Vapor pressure	1	Not available.			
Vapor density	1	Not available.			
Relative density	:	1.58			
Solubility(ies)		Media	Result		
	1	cold water	Not soluble		
Partition coefficient: n- octanol/water	:	Not applicable.			
Auto-ignition temperature	:	Not available.			
Decomposition temperature	1	Stable under recommended storage and handling conditions (see Section 7).			
Viscosity	:	Øynamic (room temperature): Not available. Kinematic (room temperature): >400 mm²/s Kinematic (40°C): >21 mm²/s			
Viscosity	÷	> 100 s (ISO 6mm)			

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 sulfur oxides halogenated compounds metal oxide/oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Result	Species	Dose	Exposure
LD50 Dermal	Rabbit	23000 mg/kg	-
			-
			-
			-
			-
			-
LD50 Dermal			-
LD50 Oral	Rat	>2000 mg/kg	-
LD50 Dermal	Rabbit	>2000 mg/kg	-
LD50 Oral	Rat	>2000 mg/kg	-
LC50 Inhalation Vapor	Rat	24.6 mg/l	4 hours
LD50 Dermal	Rabbit	2460 mg/kg	-
LD50 Oral	Rat	2830 mg/kg	-
LC50 Inhalation Vapor	Rat		4 hours
LD50 Dermal	Rabbit		-
LD50 Oral	Rat		-
LD50 Oral	Rat		-
		0.0	
LC50 Inhalation Vapor	Rat	17.8 ma/l	4 hours
LD50 Dermal	Rabbit		-
LD50 Oral	Rat		-
			4 hours
		<u>-</u>	
LD50 Dermal	Rat	>2000 ma/ka	_
			_
	LD50 Dermal LD50 Oral LD50 Oral LD50 Dermal LD50 Dermal LD50 Oral LD50 Oral LD50 Oral LD50 Oral LD50 Oral LD50 Oral LC50 Inhalation Vapor LD50 Dermal LD50 Oral LC50 Inhalation Vapor LD50 Oral LC50 Inhalation Vapor LD50 Oral LD50 Oral LC50 Inhalation Vapor	LD50 DermalRabbitLD50 OralRatLD50 DermalRatLD50 DermalRatLD50 OralRatLD50 DermalRatLD50 OralRatLD50 DermalRatLD50 DermalRatLD50 DermalRatLD50 OralRatLD50 OralRatLD50 OralRatLD50 DermalRatLD50 DermalRatLD50 DermalRatLD50 DermalRatLD50 DermalRatLD50 DermalRatLD50 DermalRatLD50 OralRatLD50 DermalRatLD50 DermalRatLD50 DermalRatLD50 DermalRatLD50 DermalRatLD50 DermalRatLD50 DermalRatRatRat	LD50 DermalRabbit23000 mg/kgLD50 OralRat15000 mg/kgLD50 DermalRat4.3 g/kgLD50 OralRat4.3 g/kgLD50 DermalRat>2000 mg/kgLD50 OralRat>2000 mg/kgLD50 OralRat>2000 mg/kgLD50 OralRat>2000 mg/kgLD50 DermalRat>2000 mg/kgLD50 DermalRat>2000 mg/kgLD50 OralRat>2000 mg/kgLD50 DermalRat>2000 mg/kgLD50 OralRat>2000 mg/kgLD50 DermalRat>2000 mg/kgLD50 DermalRat2460 mg/kgLD50 DermalRat30 mg/lLD50 DermalRat30 mg/lLD50 DermalRat17.8 mg/lLD50 OralRat17.8 mg/lLD50 DermalRat3.5 g/kgLD50 OralRat3.56 mg/lLD50 DermalRat3.56 mg/lLD50 DermalRat3.56 mg/l

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

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
øís-[4-(2,3-epoxipropoxi) phenyl]propane	Eyes - Mild irritant	Rabbit	-	24 hours	-
	Eyes - Redness of the conjunctivae	Rabbit	0.4	24 hours	-
	Skin - Edema	Rabbit	0.5	4 hours	-
	Skin - Erythema/Eschar	Rabbit	0.8	4 hours	-
	Skin - Mild irritant	Rabbit	-	4 hours	-
xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	
Conclusion/Summary				·	
Skin :	There are no data available	e on the mixtu	re itself.		
Eyes :	There are no data available on the mixture itself.				
	Fhere are no data available on the mixture itself.				

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Section 11. Toxicological information

Sensitization

Product/ingredient name	Route of	Species	Result	
øis-[4-(2,3-epoxipropoxi) phenyl]propane	skin	Mouse	Sensitizing	
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	skin	Guinea pig	Sensitizing	
Conclusion/Summary	·	·		
Skin :	There are no data	available on the mixture itself.		
Respiratory :	There are no data	There are no data available on the mixture itself.		
<u>Mutagenicity</u>				
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 toxicit	y (single exposure	<u>e)</u>		

Route of Target organs Name Category exposure Talc , not containing asbestiform fibres Category 3 Respiratory tract irritation xylene Category 3 _ Respiratory tract irritation Respiratory tract irritation Category 3 _ 2-methylpropan-1-ol Narcotic effects Category 3 Category 3 Narcotic effects 2-methoxy-1-methylethyl acetate

Specific target organ toxicity (repeated exposure)

Name	• •	Route of exposure	Target organs
ethylbenzene 12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine	Category 2 Category 2	- inhalation	hearing organs lungs

Aspiration hazard

Name	Result
2-methylpropan-1-ol	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 2 ASPIRATION HAZARD - Category 1

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Section 11. Toxicological information

Information on the likely routes of exposure

: Not available.

Potential acute health effects

Eye contact	: Causes serious eye irritation.
Inhalation	: May cause respiratory irritation.
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking
Ingestion	: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

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

Section 11. Toxicological information

Acute toxicity estimates

Route	ATE value	
Øral	16134.27 mg/kg	
Dermal	7993.07 mg/kg	
Inhalation (vapors)	85.78 mg/l	
Inhalation (dusts and mists)	10.37 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

	<u>oxicity</u>	
F	Product/ingredient	

Product/ingredient name	Result	Species	Exposure
s-[4-(2,3-epoxipropoxi)	Acute LC50 1.8 mg/l Fresh water	Daphnia - <i>daphnia magna</i>	48 hours
	Chronic NOEC 0.3 mg/l	Daphnia	21 days
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
2-methoxy-1-methylethyl acetate	Acute LC50 134 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	LC50 >100 mg/l	Fish	96 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 -
12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine	Acute EC50 >100 mg/l	Algae - Pseudokirchneriella subcapitata (microalgae)	72 hours
,	Acute EC50 >100 mg/l	Daphnia - <i>Daphnia magna</i> (Water flea)	48 hours
	Acute LC50 >100 mg/l	Fish - Oncorhynchus mykiss (rainbow trout)	96 hours
	Chronic NOEC 100 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
	Chronic NOEC ≥50 mg/l	Daphnia - <i>Daphnia magna</i> (Water flea)	21 days

Conclusion/Summary

: There are no data available on the mixture itself.

Persistence/degradability

Section 12. Ecological information

Product/ingredient name	Test	Result		Dose	Inoculum
-methoxy-1-methylethyl acetate	-	83 % - Readily - 28	days	-	-
ethylbenzene	-	79 % - Readily - 10	days	-	-
12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine	OECD 301D Ready Biodegradability - Closed Bottle Test	9 % - Not readily - 2	9 days	-	-
Conclusion/Summary	: There are no d	lata available on the	mixture itse	elf.	
Product/ingredient name	Aquatic half-life		Photolysi	S	Biodegradability
bis-[4-(2,3-epoxipropoxi) phenyl]propane	-		-		Not readily
xylene	-		-		Readily
2-methoxy-1-methylethyl acetate	-		-		Readily
ethylbenzene	-		-		Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
x ylene	3.12	7.4 to 18.5	Low
Phenol, methylstyrenated	3.627	-	Low
2-methylpropan-1-ol	1	-	Low
2-methoxy-1-methylethyl acetate	1.2	-	Low
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	3.77	-	Low
ethylbenzene	3.6	79.43	Low
12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine	>6	-	High

Mobility in soil

Soil/water partition coefficient (K _{oc})	: Not available.
Other adverse effects	: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation a any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed untreated to the sewer unless fully compliant with the requirements of all authoritie 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	aste disposal legislation and irplus and non-recyclable te should not be disposed of quirements of all authorities Incineration or landfill . This material and its Ild be taken when handling I out. Empty containers or
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Section 13. Disposal considerations

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.

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	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

Additional information

UN	: This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5.1.
IMDG	 2.3.2.3.1. This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5.
ΙΑΤΑ	: None identified.
Special pred	cautions 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	1	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

Section 15. Regulatory information

Not listed.

Section 16. Other information

<u>History</u>	
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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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