SAFETY DATA SHEET

Date of issue/Date of revision 2 October 2024

Version1.02

Section 1. Identification

Product code	: 00268364
Product name	: SIGMACOVER 350 LT HARDENER
CAS number	: Not applicable.
EC number	: Mixture.
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 Yung Chi Coatings Co. Ltd Lot 219, Amata Street, Long Binh IZ Bien Hoa City, Dong Nai Province Vietnam Tel : +84 61 3936121/22
Emergency telephone number (with hours of operation)	: CHEMTREC +(84)-444581938 (CCN 17704)

Section 2. Hazards identification

Classification of the	: FLAMMABLE LIQUIDS - Category 3
substance or mixture	ACUTE TOXICITY (oral) - Category 4
substance of mixture	ACUTE TOXICITY (dermal) - Category 5
	ACUTE TOXICITY (inhalation) - Category 4
	SKIN CORROSION - Category 1C
	SERIOUS EYE DAMAGE - Category 1
	SKIN SENSITIZATION - Category 1
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract
	irritation) - Category 3
	AQUATIC TOXICITY (ACUTE) - Category 2
	AQUATIC TOXICITY (CHRONIC) - Category 2
	Percentage of the mixture consisting of ingredient(s) of unknown acute dermal
	toxicity: 4.1%
	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation
	toxicity: 55.1%
	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the
	aquatic environment: 12.1%
GHS label elements	
Hazard pictograms	
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Product name SIGMACOVER 350 LT HARDENER

Section 2. Hazards identification

Signal word	÷	Danger
Hazard statements	:	Flammable liquid and vapor. Harmful if swallowed or if inhaled. May be harmful in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation. Toxic 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 only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Response	:	Collect spillage. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. If skin irritation or rash occurs: Get medical advice or attention. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
Storage	:	Store locked up. Store in a well-ventilated place. Keep container tightly closed.
Disposal	:	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Routes of entry		Not available.
Other hazards which do not result in classification	:	Causes digestive tract burns. 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.
EC number	: Mixture.

Ingredient name	CAS number	Chemical formula	%
Atty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and	68082-29-1	(C6H18N4. Unspecified.	≥25 - ≤37
triethylenetetramine xylene	1330-20-7	Unspecified)x C8-H10	≥10 - ≤17
2-methylpropan-1-ol	78-83-1	C4-H10-O	≥10 - ≤16
benzyl alcohol	100-51-6	C7-H8-O	≤13
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	25068-38-6	(C15-H16-O2. C3-H5-Cl-O)x	≤10
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2	C15-H27-N3-O	≤5.8
Formaldehyde, polymer with N,N-dimethyl-	445498-00-0	(C6H6O.C5H14N2.	≤5
1,3-propanediamine and phenol		CH2O)x	
3,6-diazaoctanethylenediamin	112-24-3	C6-H18-N4	≤4.1
ethylbenzene	100-41-4	C8-H10	≤3

Product name SIGMACOVER 350 LT HARDENER

Section 3. Composition/information on ingredients

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.

SUB codes represent substances without registered CAS Numbers.

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

Section 4. First aid measures

Description of necess	ary first aid measures
Eye contact	 Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
Inhalation	 Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Skin contact	 Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Ingestion	 If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effects	
Eye contact	: Causes serious eye damage.
Inhalation	: Harmful if inhaled. May cause respiratory irritation.
Skin contact	: Causes severe burns. May be harmful in contact with skin. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: Harmful if swallowed. Corrosive to the digestive tract. Causes burns.
Over-exposure signs/sympto	o <u>ms</u>
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur
Ingestion	: Adverse symptoms may include the following: stomach pains
Indication of immediate media	al 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.

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Section 4. First aid measures

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.
		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

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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 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 nitrogen oxides halogenated compounds
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, protective equipment and emergency procedures

For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

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Section 6. Accidental release measures

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	L	
Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, 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.
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
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

<u>Control parameters</u> <u>Occupational exposure limits</u>

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Section 8. Exposure controls/personal protection

Ingredient name		Exposure limits		
₩ylene 2-methylpropan-1-ol		Ministry of Health (Viet Nam, 6/2019) [xylene] TWA 8 hours: 100 mg/m ³ . STEL 15 minutes: 300 mg/m ³ . Ministry of Health (Viet Nam, 6/2019) [butanols] TWA 8 hours: 150 mg/m ³ .		
ethylbenzene		STEL 15 minutes: 250 mg/m ³ . ACGIH TLV (United States, 7/2023) Ototoxicant. TWA 8 hours: 20 ppm.		
Recommended monitoring procedures	national guida	ould be made to appropriate monitoring standards. Reference to nce documents for methods for the determination of hazardous II also be required.		
Appropriate engineering controls	ventilation or o contaminants also need to k	adequate ventilation. Use process enclosures, local exhaust other engineering controls to keep worker exposure to airborne below any recommended or statutory limits. The engineering controls eep gas, vapor or dust concentrations below any lower explosive plosion-proof ventilation equipment.		
Environmental exposure controls	they comply w cases, fume s	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.		
ndividual protection measur	es			
Hygiene measures	eating, smokir Appropriate te Contaminated contaminated	forearms and face thoroughly after handling chemical products, before ng and using the lavatory and at the end of the working period. chniques should be used to remove potentially contaminated clothing work clothing should not be allowed out of the workplace. Wash clothing before reusing. Ensure that eyewash stations and safety lose to the workstation location.		
Eye/face protection	: Chemical spla	sh goggles and face shield.		
Skin protection				
Hand protection	be worn at all this is necess check during t should be not different for di	stant, impervious gloves complying with an approved standard should times when handling chemical products if a risk assessment indicates ary. Considering the parameters specified by the glove manufacturer, use that the gloves are still retaining their protective properties. It ed that the time to breakthrough for any glove material may be fferent glove manufacturers. In the case of mixtures, consisting of ances, the protection time of the gloves cannot be accurately		
Gloves	: nitrile neopre	ne		
Body protection	being perform before handlir wear anti-stati	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	selected base	otwear and any additional skin protection measures should be d on the task being performed and the risks involved and should be specialist before handling this product.		
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Section 8. Exposure controls/personal protection

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	1	Liquid.		
Color	1	Not available.		
Odor	:	Characteristic.		
Odor threshold	:	Not available.		
рН	:	ot applicable.		
Melting point	:	Not available.		
Boiling point	:	>37.78°C (>100°F)		
Flash point	:	Closed cup: 26°C (78.8°F)		
Evaporation rate	:	Not available.		
Flammability (solid, gas)	:	Not available.		
Lower and upper explosive (flammable) limits	1	Not available.		
Vapor pressure	:	Not available.		
Vapor density	:	Not available.		
Relative density	1	0.95		
Solubility(ies)		Media Resu	lt	
		cold water Not so	oluble	
Partition coefficient: n- octanol/water	:	Not applicable.		
Auto-ignition temperature	:	Not available.		
Decomposition temperature	:	Not available.		
Viscosity	:			

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.
- Hazardous decomposition
products: Depending on conditions, decomposition products may include the following
materials: carbon oxides nitrogen oxides halogenated compounds

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Fatty acids, C18-unsatd., dimers, oligomeric reaction	LD50 Dermal	Rat	>2000 mg/kg	-
products with tall-oil fatty				
acids and				
triethylenetetramine		Dut		
	LD50 Oral	Rat	>2000 mg/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
2-methylpropan-1-ol	LC50 Inhalation Vapor	Rat	24.6 mg/l	4 hours
	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 mg/kg	-
benzyl alcohol	LC50 Inhalation Dusts and mists	Rat	>4178 mg/m³	4 hours
	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	1.23 g/kg	-
reaction product: bisphenol-	LD50 Dermal	Rabbit	>2 g/kg	-
A-(epichlorhydrin); epoxy resin				
	LD50 Oral	Rat	>2 g/kg	-
2,4,6-tris	LD50 Dermal	Rat	1280 mg/kg	-
(dimethylaminomethyl)				
phenol				
	LD50 Oral	Rat	1200 mg/kg	-
3,6-diazaoctanethylenediamin	LD50 Dermal	Rabbit	1465 mg/kg	-
-, ,,,,,	LD50 Oral	Rat	1716 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	-
.				

Conclusion/Summary

: There are no data available on the mixture itself.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Atty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Eyes - Severe irritant	Rabbit	-	-	-
,	Skin - Irritant	Human	-	-	-
xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
reaction product: bisphenol- A-(epichlorhydrin); epoxy resin	Eyes - Mild irritant	Rabbit	-	100 mg	-
	Eyes - Moderate irritant	Rabbit	_	_	-
	Skin - Moderate irritant	Rabbit	-	-	-
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Section 11. Toxicological information

Skin - Moderate irritant	Rabbit	-	24 hours 500 UI	-
Skin - Severe irritant	Rabbit	-	24 hours 2	-
			mg	

Conclusion/Summary

: There are no data available on the mixture itself.

Skin Eyes

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

Sensitization

Product/ingredient name	Route of exposure	Species	Result
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	skin	Mouse	Sensitizing
reaction product: bisphenol- A-(epichlorhydrin); epoxy resin	skin	Mouse	Sensitizing
3,6-diazaoctanethylenediamin	skin	Guinea pig	Sensitizing
Skin	: There are no da	ata available on the mixture itse	lf.
Respiratory	: There are no da	ata available on the mixture itse	lf.
<u>Mutagenicity</u>			
Conclusion/Summary	: There are no da	ata available on the mixture itse	lf.
Carcinogenicity			
Conclusion/Summary	: There are no da	ata available on the mixture itse	lf.
Reproductive toxicity			
Conclusion/Summary	: There are no da	ata available on the mixture itse	lf.
Teratogenicity			

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

Specific target organ toxicity (single exposure)

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

Specific target organ toxicity (repeated exposure)

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

Aspiration hazard

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Section 11. Toxicological information

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

nformation on the likely outes of exposure	: Not available.
Potential acute health effects	
Eye contact	: Causes serious eye damage.
Inhalation	: Harmful if inhaled. May cause respiratory irritation.
Skin contact	: Causes severe burns. May be harmful in contact with skin. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: Harmful if swallowed. Corrosive to the digestive tract. Causes burns.
Symptoms related to the phy	vsical, 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
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

<u>Short term exposure</u>	
Potential immediate effects	: There are no data available on the mixture itself.
Potential delayed effects	: There are no data available on the mixture itself.
Long term exposure	
Potential immediate effects	: There are no data available on the mixture itself.
Potential delayed effects	: There are no data available on the mixture itself.
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.

Section 11. Toxicological information

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Øral	1978.03 mg/kg
Dermal	2265.88 mg/kg
Inhalation (vapors)	29.35 mg/l
Inhalation (dusts and mists)	2.25 mg/l

Other information

Causes digestive tract burns. 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. Exposure to amine vapor has been reported to cause transient corneal edema described as blue haze, halo effect, foggy or blurred vision for several hours. This condition is typically temporary and does not cause permanent visual effects. When the proper eye protection specified in Section 8 is worn, exposure is significantly reduced and the condition has not been observed.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Atty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	EC10 1.78 mg/l	Algae	72 hours
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
reaction product: bisphenol- A-(epichlorhydrin); epoxy resin	Chronic NOEC 0.3 mg/l	Daphnia	21 days
2,4,6-tris	Acute LC50 >100 mg/l	Daphnia	48 hours
(dimethylaminomethyl)phenol			
	Acute LC50 >100 mg/l	Fish	96 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-

Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
A-(epichlorhydrin); epoxy resin	OECD 301F	5 % - 28 days	-	-
2,4,6-tris (dimethylaminomethyl)phenol	OECD 301D Ready Biodegradability - Closed Bottle Test	4 % - Not readily - 28 days	-	-
ethylbenzene	-	79 % - Readily - 10 days	-	-

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Section 12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Atty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	-	-	Not readily
xylene	-	-	Readily
benzyl alcohol	-	-	Readily
reaction product: bisphenol- A-(epichlorhydrin); epoxy resin	-	-	Not readily
2,4,6-tris	-	-	Not readily
(dimethylaminomethyl)phenol ethylbenzene	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
x ylene	3.12	7.4 to 18.5	Low
2-methylpropan-1-ol	1	-	Low
benzyl alcohol	0.87	-	Low
reaction product: bisphenol-	2.64 to 3.78	31	Low
A-(epichlorhydrin); epoxy			
resin			
2,4,6-tris	0.219	-	Low
(dimethylaminomethyl)phenol			
3,6-diazaoctanethylenediamin	-1.66 to -1.4	-	Low
ethylbenzene	3.6	79.43	Low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

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

Product name SIGMACOVER 350 LT HARDENER

Section 14. Transport information

	UN	IMDG	ΙΑΤΑ
UN number	UN3469	UN3469	UN3469
UN proper shipping name	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE
Transport hazard class(es)	3 (8)	3 (8)	3 (8)
Packing group	III	III	III
Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	(Polyamide)	Not applicable.

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

Decial 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

Safety, health and	1	No known specific national and/or regional regulations applicable to this product
environmental regulations specific for the product		(including its ingredients).
Circular no. 05/1000/TT BVT		

Circular no. 05/1999/TT-BYT

Ingredient name	Category	Notes
xylene	Category 2	

Toxic classification (TCVN : 3

3164-79)

International regulations

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 2 October 2024
Date of previous issue	: 8/12/2024
Version	: 1.02
Prepared by	: EHS
Key to abbreviations	 ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = International Air Transport Association IBC = 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) UN = United Nations
References	: Not available.

V Indicates information that has changed from previously issued version.

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