# **SAFETY DATA SHEET**



Date of issue/Date of revision 23 June 2021 Version 2

Section 1. Identification			
Product code	: 00422652		
Product name	: SIGMACOVER 246/410/430/620 HARDENER		
Product type	: Liquid.		
Relevant identified uses o	f the substance or mixture and uses advised against		
Product use	Coating. Professional applications, Used by spraying.		
Supplier's details	: PPG Industries (Singapore) Pte. Ltd., No. 1 Tuas Basin Close, Singapore 638803. Tel +65 68653737		
Emergency telephone number (with hours of operation)	: CHEMTREC +(65)-31581349 (CCN 17704)		

# Section 2. Hazards identification

Classification of the	: 🗾
substance or mixture	ACUTE TOXICITY (inhalation) - Category 4
	SKIN CORROSION/IRRITATION - Category 1C
	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
	SKIN SENSITISATION - Category 1
	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract
	irritation) - Category 3
	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2

**GHS label elements, including precautionary statements** 

Hazard pictograms	
Signal word	: Danger
Hazard statements	<ul> <li>Fighly flammable liquid and vapour. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Harmful if inhaled. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure. (hearing organs)</li> </ul>

Date of issue 23 June 2021

Version 2

Product name SIGMACOVER 246/410/430/620 HARDENER

### Section 2. Hazards identification

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. Avoid release to the environment. Do not breathe vapour.
Response	:	Collect spillage. IF INHALED: Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
Storage	:	Store 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	:	Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation.

Toxic to aquatic life with long lasting effects

### Section 3. Composition/information on ingredients

Sub	stan	ce/	mi	xtu	re
ous	otun			ALU	

: Mixture

#### CAS number/other identifiers

CAS number	: Not applicable.
EC number	: Mixture.

Ingredient name	%	CAS number
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	25 - <50	68082-29-1
Phenol, styrenated	20 - <25	61788-44-1
ethylbenzene	10 - <20	100-41-4
2-methylpropan-1-ol	10 - <20	78-83-1
xylene	5 - <10	1330-20-7
2,4,6-tris(dimethylaminomethyl)phenol	5 - <10	90-72-2
3,6-diazaoctanethylenediamin	3 - <5	112-24-3

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

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

SUB codes represent substances without registered CAS Numbers.

## Section 4. First aid measures

#### Description of necessary first aid measures

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

Most important symptoms/e	acute and delayed	
Potential acute health effe		
Eye contact	uses serious eye damage.	
Inhalation	rmful if inhaled. May cause respiratory irritation.	
Skin contact	uses severe burns. Defatting to the skin. May cause	an allergic skin reaction.
Ingestion	rrosive to the digestive tract. Causes burns.	
Over-exposure signs/symp		
Eye contact	verse symptoms may include the following: n tering ness	
Inhalation	verse symptoms may include the following: piratory tract irritation Jghing	
Skin contact	verse symptoms may include the following: n or irritation Iness ness cking stering may occur	
Ingestion	verse symptoms may include the following: mach pains	
Indication of immediate mee	<u>ention and special treatment needed, if necessary</u>	
Notes to physician	case of inhalation of decomposition products in a fire, s e exposed person may need to be kept under medical	
Specific treatments	specific treatment.	
Protection of first-aiders	action shall be taken involving any personal risk or wir suspected that fumes are still present, the rescuer sho sk or self-contained breathing apparatus. It may be d viding aid to give mouth-to-mouth resuscitation. Was roughly with water before removing it, or wear gloves.	uld wear an appropriate angerous to the person

#### See toxicological information (Section 11)

Singapore	English (GB)	Page: 3/14
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### Section 5. Firefighting measures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Highly flammable liquid and vapour. 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
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	<ul> <li>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.</li> </ul>

## 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 spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialised 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 spilt 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 material for con	tai	nment 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.

Singapore	English (GB)	Page	e: 4/14
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Product name SIGMACOVER 246/410/430/620 HARDENER

### Section 6. Accidental release measures

#### Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the 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 spill product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

### Section 7. Handling and storage

#### Precautions for safe handling

Protective measures	: Fut 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 vapour 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 oxidising 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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Version 2

Section 8. Exposure controls/personal protection

### **Control parameters**

Singapore

### **Occupational exposure limits**

Ingredient name			Exposure limits		
ethylbenzene			Workplace Safety and Health Act (Singapore, 2/2006). PEL (short term): 543 mg/m <sup>3</sup> 15 minutes. PEL (short term): 125 ppm 15 minutes. PEL (long term): 434 mg/m <sup>3</sup> 8 hours. PEL (long term): 100 ppm 8 hours.		
2-methylpropan-1-ol			Workplace Safety and Health Act (Singapore, 2/2006). PEL (long term): 152 mg/m <sup>3</sup> 8 hours.		
xylene			PEL (long term): 50 ppm 8 hours. <b>Workplace Safety and Health Act</b> <b>(Singapore, 2/2006).</b> PEL (short term): 651 mg/m <sup>3</sup> 15 minutes. PEL (short term): 150 ppm 15 minutes. PEL (long term): 434 mg/m <sup>3</sup> 8 hours. PEL (long term): 100 ppm 8 hours.		
Recommended monitoring procedures	:	atmosphere or biological monitoring n of the ventilation or other control mea			
Appropriate engineering controls	:	contaminants below any recommende	ols to keep worker exposure to airborne ed or statutory limits. The engineering controls t concentrations below any lower explosive		
Environmental exposure controls	:				
ndividual protection measu	<u>res</u>				
<ul> <li>Hygiene measures</li> <li>Wash hands, forearms and face thoroughly after handling chemical products, the eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clo Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safet showers are close to the workstation location.</li> </ul>			y and at the end of the working period. ed to remove potentially contaminated clothing. ot be allowed out of the workplace. Wash Ensure that eyewash stations and safety		
Eye/face protection Skin protection	:	Chemical splash goggles and face shield.			

Product code 00422652

Product name SIGMACOVER 246/410/430/620 HARDENER

# Section 8. Exposure controls/personal protection

Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Gloves	: nitrile neoprene
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	<ul> <li>Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.</li> </ul>
Respiratory protection	: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

# Section 9. Physical and chemical properties

<u>Appearance</u>	
Physical state	: Liquid.
Odour	: Characteristic.
рН	insoluble in water.
Boiling point	: >37.78°C (>100°F)
Flash point	: Closed cup: 20°C (68°F)
Evaporation rate	: Highest known value: 0.84 (ethylbenzene) Weighted average: 0.76compared with butyl acetate
Flammability (solid, gas)	: liquid
Vapour pressure	: Highest known value: <1.6 kPa (<12 mm Hg) (at 20°C) (2-methylpropan-1-ol). Weighted average: 0.6 kPa (4.5 mm Hg) (at 20°C)
Vapour density	: <b>F</b> ighest known value: 5.04 (Air = 1) (3,6-diazaoctanethylenediamin). Weighted average: 3.49 (Air = 1)
Relative density	: 0.93
Solubility	: Insoluble in the following materials: cold water.
Auto-ignition temperature	: ✔owest known value: 337.78°C (640°F) (3,6-diazaoctanethylenediamin).
Viscosity	: <b>K</b> inematic (40°C (104°F)): >21 mm²/s (>21 cSt)

### 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: oxidising agents, strong alkalis, strong acids.
Hazardous decomposition products	: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides

# Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Phenol, styrenated	LD50 Dermal	Rabbit	>5010 mg/kg	-
-	LD50 Oral	Rat	3550 mg/kg	-
ethylbenzene	LC50 Inhalation Vapour	Rat	17.8 mg/l	4 hours
	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
2-methylpropan-1-ol	LC50 Inhalation Vapour	Rat	24.6 mg/l	4 hours
	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 mg/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
2,4,6-tris	LD50 Dermal	Rabbit	1.28 g/kg	-
(dimethylaminomethyl)				
phenol				
	LD50 Dermal	Rat	1280 mg/kg	-
	LD50 Oral	Rat	1200 mg/kg	-
3,6-diazaoctanethylenediamin	LD50 Dermal	Rabbit	1465 mg/kg	-
	LD50 Oral	Rat	1716 mg/kg	-

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

#### Irritation/Corrosion

### Section 11. Toxicological information

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine       Skin - Irritant       Human       -       -       -         xylene       Eyes - Severe irritant Skin - Moderate irritant       Rabbit       -       -       -         2,4,6-tris (dimethylaminomethyl) phenol       Skin - Visible necrosis       Rabbit       -       -       -         Conclusion/Summary Skin       Skin - Visible necrosis       Rabbit       -       4 hours       7 days         Products with       There are no data available on the mixture itself.       -       -       -       -         Skin       :       There are no data available on the mixture itself.       -       -       -       -         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       Sensitising         Skin       guinea pig       Sensitising       Sensitising       Sensitising         Skin       :       There are no data available on the mixture itself.       Sensitising         Skin       :       Guinea pig       Sensitising         Skin </th <th>Product/ingredient name</th> <th>Result</th> <th></th> <th>Species</th> <th>Score</th> <th>e</th> <th>Exposure</th> <th>Observation</th>	Product/ingredient name	Result		Species	Score	e	Exposure	Observation
xylene       Skin - Moderate irritant (dimethylaminomethyl) phenol       Rabbit       -       24 hours 500 mg       -         2,4,6-tris (dimethylaminomethyl) phenol       Skin - Visible necrosis       Rabbit       -       4 hours       7 days         Conclusion/Summary       Skin       :       There are no data available on the mixture itself.       -       4 hours       7 days         Skin       :       :       There are no data available on the mixture itself.       -       -       -       7 days         Respiratory       :       There are no data available on the mixture itself.       -       -       -       -       -       -       -       7 days         Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine Phenol, styrenated       skin       Mouse       Sensitising       -	dimers, oligomeric reaction products with tall-oil fatty acids and				-		-	-
2.4,6-tris (dimethylaminomethyl) phenol       Skin - Visible necrosis       Rabbit       -       4 hours       7 days         Conclusion/Summary Skin       :       There are no data available on the mixture itself.       -       4 hours       7 days         Conclusion/Summary Skin       :       There are no data available on the mixture itself.       -       4 hours       7 days         Skin       :       :       There are no data available on the mixture itself.       -       -       4 hours       7 days         Respiratory       :       :       There are no data available on the mixture itself.       -       <	vulana				-		- 24 hours 500	-
2,4,6-tris (dimethylaminomethyl) phenol       Skin - Visible necrosis       Rabbit       -       4 hours       7 days         Conclusion/Summary Skin       :       There are no data available on the mixture itself. Eyes       :       There are no data available on the mixture itself. Respiratory       :       There are no data available on the mixture itself.         Respiratory       :       There are no data available on the mixture itself.       Result         Product/ingredient name products with tall-oil fatty acids and triethylenetetramine Phenol, styrenated 2,4,6-tris (dimethylaminomethyl) phenol       skin       Mouse       Sensitising         Skin       skin       Guinea pig       Sensitising         Conclusion/Summary Skin       :       There are no data available on the mixture itself.         Respiratory       :       skin       Mouse       Sensitising         Skin       :       Guinea pig       Sensitising         Conclusion/Summary Skin       :       :       There are no data available on the mixture itself.         Respiratory       :       There are no data available on the mixture itself.         Respiratory       :       There are no data available on the mixture itself.         Respiratory       :       There are no data available on the mixture itself.         Resp	xyierie	Skin - Moderale	Imani	Rappil	-			-
Skin       : There are no data available on the mixture itself.         Eyes       : There are no data available on the mixture itself.         Respiratory       : There are no data available on the mixture itself.         Respiratory       : There are no data available on the mixture itself.         Respiratory       : There are no data available on the mixture itself.         Respiratory       : There are no data available on the mixture itself.         Respiratory       : Shin       Mouse         Product/ingredient name       Route of exposure       Sensitising         Patty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine       skin       Mouse       Sensitising         Phenol, styrenated       skin       skin       Guinea pig       Sensitising         3,6-diazaoctanethylenediamin       skin       Guinea pig       Sensitising         Skin       :       There are no data available on the mixture itself.         Respiratory       :       There are no data available on the mixture itself.         Mutagenicity       :       There are no data available on the mixture itself.         Conclusion/Summary       :       There are no data available on the mixture itself.         Conclusion/Summary       :       There are no data available on the mixture itself. <td>(dimethylaminomethyl)</td> <td>Skin - Visible neo</td> <td>crosis</td> <td>Rabbit</td> <td>-</td> <td></td> <td></td> <td>7 days</td>	(dimethylaminomethyl)	Skin - Visible neo	crosis	Rabbit	-			7 days
Eyes       : There are no data available on the mixture itself.         Respiratory       : There are no data available on the mixture itself.         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       Sensitising         Phenol, styrenated 2,4,6-tris       skin       Mouse       Sensitising       Sensitising         Sin       skin       Guinea pig       Sensitising       Sensitising         Scholazaoctanethylenediamin       skin       Guinea pig       Sensitising         Skin       :       There are no data available on the mixture itself.         Respiratory       :       There are no data available on the mixture itself.         Respiratory       :       There are no data available on the mixture itself.         Mutagenicity       :       There are no data available on the mixture itself.         Conclusion/Summary       :       There are no data available on the mixture itself.         Respiratory       :       There are no data available on the mixture itself.         Respiratory       :       There are no data available on the mixture itself.         Respiratory       :       There are no data available on the mixture itself. </td <td>Conclusion/Summary</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Conclusion/Summary	-						
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Tensitisation         Product/ingredient name       Route of exposure       Species       Result         Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine Phenol, styrenated 2,4,6-tris (dimethylaminomethyl) phenol 3,6-diazaoctanethylenediamin       skin       Mouse Guinea pig       Sensitising Sensitising         Stin       Skin       Guinea pig       Sensitising       Sensitising         Conclusion/Summary       skin       Guinea available on the mixture itself.       Sensitising         Respiratory       :       There are no data available on the mixture itself.       Interesting         Quineapricity       :       There are no data available on the mixture itself.       Sensitising	Eyes :	There are no data	available	on the mixtur	e itself.			
Product/ingredient nameRoute of exposureSpeciesResultPatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine Phenol, styrenated 2,4,6-tris (dimethylaminomethyl) phenol 3,6-diazaoctanethylenediaminskinMouse Mouse Guinea pigSensitising Sensitising SensitisingConclusion/Summary Skin:There are no data available on the mixture itself.Respiratory:There are no data available on the mixture itself.Conclusion/Summary Conclusion/Summary:There are no data available on the mixture itself.	Respiratory :	There are no data	available	on the mixtur	e itself.			
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Phenol, styrenated       skin       Mouse       Sensitising         2,4,6-tris       skin       Guinea pig       Sensitising         (dimethylaminomethyl)       skin       Guinea pig       Sensitising         3,6-diazaoctanethylenediamin       skin       Guinea pig       Sensitising         Conclusion/Summary       skin       Guinea pig       Sensitising         Skin       :       There are no data available on the mixture itself.         Respiratory       :       There are no data available on the mixture itself.         Mutagenicity       :       There are no data available on the mixture itself.         Conclusion/Summary       :       There are no data available on the mixture itself.	dimers, oligomeric reaction products with tall-oil fatty acids and	skin	Mouse			Sensi	itising	
(dimethylaminomethyl)       skin       Guinea pig       Sensitising         3,6-diazaoctanethylenediamin       skin       Guinea pig       Sensitising         Conclusion/Summary       Skin       : There are no data available on the mixture itself.         Respiratory       : There are no data available on the mixture itself.         Intagenicity       Conclusion/Summary       : There are no data available on the mixture itself.         Sconclusion/Summary       : There are no data available on the mixture itself.         Sconclusion/Summary       : There are no data available on the mixture itself.		skin	Mouse			Sens	itising	
3,6-diazaoctanethylenediamin       skin       Guinea pig       Sensitising         Conclusion/Summary       :       There are no data available on the mixture itself.       Sensitising         Skin       :       There are no data available on the mixture itself.       Itself.         Respiratory       :       There are no data available on the mixture itself.         Iutagenicity       :       There are no data available on the mixture itself.         Conclusion/Summary       :       There are no data available on the mixture itself.	(dimethylaminomethyl)	skin	Guinea pig		Sensitising			
Skin       : There are no data available on the mixture itself.         Respiratory       : There are no data available on the mixture itself.         Autagenicity       : There are no data available on the mixture itself.         Conclusion/Summary       : There are no data available on the mixture itself.         Carcinogenicity       : There are no data available on the mixture itself.		skin	Guinea	pig		Sens	itising	
Skin       : There are no data available on the mixture itself.         Respiratory       : There are no data available on the mixture itself.         Autagenicity       : There are no data available on the mixture itself.         Conclusion/Summary       : There are no data available on the mixture itself.         Carcinogenicity       : There are no data available on the mixture itself.	Conclusion/Summary	•						
Iutagenicity         Conclusion/Summary       : There are no data available on the mixture itself.         carcinogenicity		There are no data	available	on the mixtur	e itself.			
Conclusion/Summary : There are no data available on the mixture itself.	Respiratory :	There are no data	available	on the mixtur	e itself.			
Carcinogenicity	<u>lutagenicity</u>							
		There are no data	a available	e on the mixtu	re itself.			
Conclusion/Summary : There are no data available on the mixture itself.		There are no data	a available	e on the mixtu	re itself.			

<b>Conclusion/Summary</b>	: There are no data available on the mixture itself.				
Teratogenicity					
<b>Conclusion/Summary</b>	: There are no data available on the mixture itself.				
Specific target organ toxicity (single exposure)					

Reproductive toxicity

# Section 11. Toxicological information

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

#### Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
<b>e</b> thylbenzene	Category 2	-	hearing organs

#### Aspiration hazard

Name	Result
•	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on likely routes	: Not available.
of exposure	

#### Potential acute health effects

Eye contact	: Causes serious eye damage.
Inhalation	: 📕 armful if inhaled. May cause respiratory irritation.
Skin contact	: $ ot\!$
Ingestion	: 🖉 orrosive to the digestive tract. Causes burns.

#### 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	
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>Delayed and immediate effects as well as chronic effects from short and long-term exposure</u> <u>Short term exposure</u>

Singapore	English (GB)	Page: 10/14

### Section 11. Toxicological information

Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health eff	<u>ects</u>
General	: May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: No known significant effects or critical hazards.

#### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value
Øral	11231.14 mg/kg
Dermal	5829.28 mg/kg
Inhalation (vapours)	21.24 mg/l
Inhalation (dusts and mists)	2.19 mg/l

#### Other information

Zauses 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 vapour/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
Atty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	EC10 1.78 mg/l	Algae	72 hours
Phenol, styrenated	Acute EC50 3.8 mg/l	Daphnia	48 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
-	Acute LC50 150 to 200 mg/l Fresh water	Fish	96 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
Singapore English (GB)	·	' 	Page: 11/14

Product name SIGMACOVER 246/410/430/620 HARDENER

### Date of issue 23 June 2021

Version 2

### Section 12. Ecological information

2-methylpropan-1-ol 2,4,6-tris (dimethylaminomethyl)phenol	Acute EC50 1100 mg/l Acute LC50 175 mg/l	Daphnia Fish	48 hours 96 hours
Conclusion/Summary	: There are no data available on the m	ixture itself.	

#### Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
henol, styrenated ethylbenzene	OECD 301F -	7 % - Not readily - 28 days 79 % - Readily - 10 days	-	-

Conclusion/Summary

: There are no data available on the mixture itself.

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
Phenol, styrenated ethylbenzene xylene	- - -	- - -	Not readily Readily Readily

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
ethylbenzene	3.6	79.43	low
2-methylpropan-1-ol	1	-	low
xylene	3.12	7.4 to 18.5	low
2,4,6-tris	0.219	-	low
(dimethylaminomethyl)phenol			
3,6-diazaoctanethylenediamin	-1.66 to -1.4	-	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 minimised 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
	all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and

### Section 13. Disposal considerations

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. Vapour 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 spilt material and runoff and contact with soil, waterways, drains and sewers.

Date of issue 23 June 2021

### 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	II	II	II
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, Phenol, styrenated)	Not applicable.

#### Additional information

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.

**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

Singapore - hazardous chemicals under government control

None.

International regulations

Montreal Protocol

Not listed.

Singapore English (GB)

Page: 13/14

## Section 15. Regulatory information

Stockholm Convention on Persistent Organic Pollutants Not listed.

### Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 23 June 2021
Date of previous issue	: 2/21/2020
Version	: 2
Prepared by	: EHS
Key to abbreviations	<ul> <li>ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container 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) UN = United Nations</li> </ul>

✓ Indicates information that has changed from previously issued version.

#### Notice to reader

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