# SAFETY DATA SHEET



Date of issue 14 October 2024

Version 6.01

## **Section 1. Identification**

Chemical name : SIGMACOVER 256/435/456/522 HARDENER
GHS product identifier : SIGMACOVER 256/435/456/522 HARDENER

Code : 00393156

#### Relevant identified uses of the substance or mixture and uses advised against

Product use : Coating.

Professional applications, Used by spraying.

**Supplier's details**: PPG Industries International Inc. Taiwan Branch.

No.209, Hong Tzuenn Rd Ping Chen City, Taoyuan County, Taiwan

Tel: 886 3 3663922

886 3 3751639 (Automotive OEM Coatings Products).

Fax: 886 3 2182667

**Emergency telephone** 

number

: ₱886-3-3663922 +886-911998320

## Section 2. Hazards identification

Classification of the substance or mixture

: FLAMMABLE LIQUIDS - Category 3
ACUTE TOXICITY (oral) - Category 5
ACUTE TOXICITY (dermal) - Category 5
ACUTE TOXICITY (inhalation) - Category 4
SKIN CORROSION/IRRITATION - Category 1C

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

SKIN SENSITIZATION - Category 1

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

Category 3

AQUATIC TOXICITY (ACUTE) - Category 3
AQUATIC TOXICITY (CHRONIC) - Category 3

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

23.5%

Percentage of the mixture consisting of ingredient(s) of unknown acute dermal

toxicity: 23.5%

Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation

toxicity: 47.6%

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the

aquatic environment: 23.5%

**GHS label elements** 

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## Section 2. Hazards identification

**Hazard pictograms** 







Signal word

: Danger

**Hazard statements** 

: Flammable liquid and vapor.

May be harmful if swallowed or in contact with skin.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Harmful if inhaled.

May cause respiratory irritation. May cause drowsiness or dizziness.

Harmful to aquatic life with long lasting effects.

## **Precautionary statements**

**Prevention** 

: Wear protective gloves, protective clothing and eve or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use nonsparking tools. Take action to prevent static discharges. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing vapor. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

Response

: 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. Keep cool.

**Disposal** 

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

result in classification

Other hazards which do not : Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation.

# Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Hazardous ingredients	<b>Concentration %</b>	CAS number
kylene	20 - <25	1330-20-7
2-methylpropan-1-ol	20 - <25	78-83-1
Fatty acids, C18-unsatd., dimers, oligomeric	10 - <20	68082-29-1
reaction products with tall-oil fatty acids and		
triethylenetetramine		
ethylbenzene	3 - <5	100-41-4
2,4,6-tris(dimethylaminomethyl)phenol	3 - <5	90-72-2
3,6-diazaoctanethylenediamin	1 - <3	112-24-3

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# Section 3. Composition/information on ingredients

Hazardous ingredients	Concentration %	CAS number
<b>K</b> ylene	20 - <25	1330-20-7
2-methylpropan-1-ol	20 - <25	78-83-1
Fatty acids, C18-unsatd., dimers, oligomeric	10 - <20	68082-29-1
reaction products with tall-oil fatty acids and		
triethylenetetramine		
ethylbenzene	3 - <5	100-41-4
2,4,6-tris(dimethylaminomethyl)phenol	3 - <5	90-72-2
3,6-diazaoctanethylenediamin	1 - <3	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

**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.

**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.

**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.

#### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

**Eye contact** : Causes serious eye damage.

Inhalation : Harmful if inhaled. Can cause central nervous system (CNS) depression. May

cause drowsiness or dizziness. 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 : May be harmful if swallowed. Corrosive to the digestive tract. Causes burns. Can

cause central nervous system (CNS) depression.

#### Over-exposure signs/symptoms

**Eye contact**: Adverse symptoms may include the following:

pain watering redness

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# Section 4. First aid measures

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

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 medical 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** 

**Protection of first-aiders** 

: No specific treatment.

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

# Section 5. Fire-fighting measures

#### **Extinguishing media**

**Suitable** 

: Use dry chemical, CO2, water spray (fog) or foam.

Not suitable

: Do not use water jet.

nitrogen oxides

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

**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.

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# 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 : 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.

**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

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.

**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.

# 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 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.

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## Section 7. Handling and storage

including any incompatibilities

Conditions for safe storage, : 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
∞ylene	TW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 3/2018) [xylenes] STEL 15 minutes: 125 ppm. STEL 15 minutes: 542.5 mg/m³. TWA 8 hours: 100 ppm. TWA 8 hours: 434 mg/m³.
2-methylpropan-1-ol	TW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 3/2018)  STEL 15 minutes: 75 ppm.  STEL 15 minutes: 228 mg/m³.  TWA 8 hours: 50 ppm.  TWA 8 hours: 152 mg/m³.
ethylbenzene	TW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 3/2018)  STEL 15 minutes: 125 ppm.  STEL 15 minutes: 542.5 mg/m³.  TWA 8 hours: 100 ppm.  TWA 8 hours: 434 mg/m³.

#### 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.

#### Individual protection measures

#### **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.

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## Section 8. Exposure controls/personal protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should

be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately

estimated.

Gloves : nitrile neoprene

**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.

**Eye protection** : Chemical splash goggles and face shield.

**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.

# Section 9. Physical and chemical properties

**Appearance** 

Physical state : Liquid.

Color : Clear.

Odor : Aromatic.

Odor threshold : Not available.

pH : Not applicable.

Melting point : Not available.

Boiling point : >37.78°C (>100°F)

Flash point : Closed cup: 26°C (78.8°F)

Flammability (solid, gas) : Not available.

Burning time : Not applicable.

Burning rate : Not applicable.

Decomposition temperature : Not available.

Evaporation rate : Not available.

Lower and upper explosive : Not available.

(flammable) limits

Vapor pressure: Not available.Vapor density: Not available.

Relative density : 0.93

Solubility(ies) : Media Result

cold water Not soluble

Partition coefficient: n-

octanol/water

: Not applicable.

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# Section 9. Physical and chemical properties

**Auto-ignition temperature** 

: Not available.

: Dynamic (room temperature): Not available. **Viscosity** 

Kinematic (room temperature): >400 mm<sup>2</sup>/s

Kinematic (40°C): >21 mm<sup>2</sup>/s

: 40 - <60 s (ISO 6mm) **Viscosity** 

# Section 10. Stability and reactivity

**Chemical stability** 

Possibility of hazardous

reactions

**Conditions to avoid** 

: The product is stable. : Under normal conditions of storage and use, hazardous reactions will not occur.

: 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

**Hazardous polymerization** 

: Depending on conditions, decomposition products may include the following

materials: carbon oxides nitrogen oxides

: Under normal conditions of storage and use, hazardous polymerization will not

occur.

# **Section 11. Toxicological information**

## Information on toxicological effects **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
<b>x</b> ylene	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	-
Fatty acids, C18-unsatd.,	LD50 Dermal	Rat	>2000 mg/kg	-
dimers, oligomeric reaction products with tall-oil fatty				
acids and				
triethylenetetramine				
,	LD50 Oral	Rat	>2000 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	-
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	-

**Irritation/Corrosion** 

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## Product name SIGMACOVER 256/435/456/522 HARDENER

# Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Eyes - Severe irritant	Rabbit	-	-	-
	Skin - Irritant	Human	_	_	-

### **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
3,6-diazaoctanethylenediamin	skin	Guinea pig	Sensitizing

#### **Mutagenicity**

Not available.

#### **Carcinogenicity**

Not available.

## **Reproductive toxicity**

Not available.

### **Teratogenicity**

Not available.

### 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 effects

### 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
	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 2
ethylbenzene	ASPIRATION HAZARD - Category 1

Information on the likely

routes of exposure

: Not available.

Potential acute health effects

Inhalation : Harmful if inhaled. Can cause central nervous system (CNS) depression. May

cause drowsiness or dizziness. May cause respiratory irritation.

Ingestion : May be harmful if swallowed. Corrosive to the digestive tract. Causes burns. Can

cause central nervous system (CNS) depression.

**Skin contact**: Causes severe burns. May be harmful in contact with skin. Defatting to the skin.

May cause an allergic skin reaction.

**Eye contact** : Causes serious eye damage.

#### Symptoms related to the physical, chemical and toxicological characteristics

**Eyes** : Adverse symptoms may include the following:

pain watering redness

**Inhalation** : Adverse symptoms may include the following:

respiratory tract irritation

coughing

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

**Skin** : Adverse symptoms may include the following:

pain or irritation

redness dryness cracking

blistering may occur

**Ingestion**: Adverse symptoms may include the following:

stomach pains

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

**Short term exposure** 

Potential immediate

effects

: Not available.

Potential delayed effects

: Not available.

**Long term exposure** 

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# Section 11. Toxicological information

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

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.
 Inhalation
 No known significant effects or critical hazards.
 Ingestion
 No known significant effects or critical hazards.

**Skin contact**: Once sensitized, a severe allergic reaction may occur when subsequently exposed

to very low levels.

**Eye contact**: No known significant effects or critical hazards.

#### **Numerical measures of toxicity**

#### **Acute toxicity estimates**

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
SIGMACOVER 256/435/456/522 HARDENER xylene 2-methylpropan-1-ol Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	2853.5	2153.1	N/A	21.0	2.7
	4300	1700	N/A	11	1.5
	2830	2460	N/A	24.6	N/A
	2500	2500	N/A	N/A	N/A
ethylbenzene	3500	17800	N/A	17.8	1.5
2,4,6-tris(dimethylaminomethyl)phenol	1200	1280	N/A	N/A	N/A
3,6-diazaoctanethylenediamin	1716	1465	N/A	N/A	N/A

#### 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.

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# Section 12. Ecological information

## **Toxicity**

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Product/ingredient name	Result	Species	Exposure
Z-methylpropan-1-ol Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Acute EC50 1100 mg/l	Daphnia	48 hours
	EC10 1.78 mg/l	Algae	72 hours
ethylbenzene  2,4,6-tris	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - <i>Ceriodaphnia dubia</i>	-
	Acute LC50 >100 mg/l	Daphnia	48 hours
(dimethylaminomethyl)phenol		Fish	96 hours

## Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
<b>e</b> thylbenzene	-	79 % - Readily - 10 days	-	-
2,4,6-tris	OECD 301D	4 % - Not readily - 28 days	-	-
(dimethylaminomethyl)phenol	,			
	Biodegradability -			
	Closed Bottle			
	Test			

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<b>x</b> ylene	-	-	Readily
Fatty acids, C18-unsatd.,	-	-	Not readily
dimers, oligomeric reaction			
products with tall-oil fatty			
acids and			
triethylenetetramine			
ethylbenzene	-	-	Readily
2,4,6-tris	-	-	Not readily
(dimethylaminomethyl)phenol			

### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
<b>x</b> ylene	3.12	7.4 to 18.5	Low
2-methylpropan-1-ol	1	-	Low
ethylbenzene	3.6	79.43	Low
2,4,6-tris	0.219	-	Low
(dimethylaminomethyl)phenol			
3,6-diazaoctanethylenediamin		-	Low

## **Mobility in soil**

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# Section 12. Ecological information

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.

# Section 14. Transport information

	UN	IMDG	IATA
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	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

#### **Additional information**

UN : None identified. **IMDG** : None identified. IATA : None identified.

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

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### Product name SIGMACOVER 256/435/456/522 HARDENER

## **Section 14. Transport information**

Transport in bulk according : Not applicable.

to IMO instruments

# Section 15. Regulatory information

#### **TCCSCA List of toxic chemicals**

Not applicable.

#### **TCCSCA List of concerned chemicals**

Not applicable.

List of chemicals for which manufacturing or handling is defined as "work specially hazardous to health" : This product contains substances "Specially hazardous to health": xylene,

2-methylpropan-1-ol.

Regulations Applicable:

1. Rules for Occupational Safety and Health Facilities

- 2. Regulations for the Labeling and Hazard Communication of Hazardous Chemicals
- 3. Prevention Rules for Organic Solvent Intoxication/Poisoning.
- 4. Standards of Permissible Exposure Limits of Airborne Hazardous Substances in Workplace
- 5. Traffic Safety Regulation of Road.

## **Section 16. Other information**

References	Not available.		
Organization that prepared the SDS	Name: PPG Industries International Inc., Taiwan Branch		
	Address / Telephone: No. 209, Hong Tzuenn Rd. Ping Chen City, Taoyuan County, Taiwan +886-3-3663922 +886-911998320		
Person who prepared the SDS	Title: Technical manager	Name: (Signature): Tony Cheng	
Date of issue	14 October 2024		

Date of previous issue : 10/14/2023 Version : 6.01

▼ Indicates information that has changed from previously issued version.

Remarks : New SDS layout incorporating TW Table 2017

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#### Product name SIGMACOVER 256/435/456/522 HARDENER

## Section 16. Other information

**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

#### Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

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