SAFETY DATA SHEET



Date of issue/Date of revision 18 May 2021 Version 3

Section 1. Identification		
Product code	: 00366524	
Product name	: SIGMACOVER 410 BASE RAL 9006	
Product type	: Liquid.	
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 (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	: FLAMMABLE LIQUIDS - Category 3
substance or mixture	SKIN CORROSION/IRRITATION - Category 2
	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
	SKIN SENSITIZATION - Category 1
	TOXIC TO REPRODUCTION - Category 2
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract
	irritation) - Category 3
	AQUATIC HAZARD (ACUTE) - Category 1
	AQUATIC HAZARD (LONG-TERM) - Category 1

GHS label elements, including precautionary statements

Hazard pictograms	
Signal word	: Danger
Hazard statements	 Fammable liquid and vapor. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation. Suspected of damaging fertility or the unborn child. Very toxic to aquatic life with long lasting effects.

Section 2. Hazards identification

Precautionary statements		
Prevention	:	Debtain special instructions before use. 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. Avoid breathing vapor. Wash thoroughly after handling.
Response	:	Collect spillage. IF exposed or concerned: Get medical advice or attention. IF INHALED: Call a POISON CENTER or doctor if you feel unwell. Take off contaminated clothing and wash it 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	:	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
Epoxy resin (MW ≤ 700)	10 - <20	25068-38-6
Talc, not containing asbestiform fibres	5 - <10	14807-96-6
xylene	5 - <10	1330-20-7
Naphtha (petroleum), hydrotreated heavy	5 - <10	64742-48-9
Solvent naphtha (petroleum), light aromatic	5 - <10	64742-95-6
nonylphenol	3 - <5	25154-52-3
Epoxy Resin (700 <mw<=1100)< td=""><td>3 - <5</td><td>25036-25-3</td></mw<=1100)<>	3 - <5	25036-25-3
2-methylpropan-1-ol	3 - <5	78-83-1
Phenol, methylstyrenated	3 - <5	68512-30-1
ethylbenzene	1 - <3	100-41-4
Reaction products of 12-hydroxyoctadecanoic acid and octadecanoic acid and 1,3-phenylenedimethanamine	0.3 - <1	911674-82-3

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	 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 symp	otoms/effects, acute and delayed
Potential acute heal	th effects
Eye contact	: Causes serious eye damage.
Inhalation	: May cause respiratory irritation.
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.
<u>Over-exposure sign</u>	<u>s/symptoms</u>
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: stomach pains reduced fetal weight increase in fetal deaths skeletal malformations
Indication of immedia	ate medical attention and special treatment needed, if necessary
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

		quantities have been ingested of initialed.	
Singapore	English (US)		Page: 3/

Section 4. First aid measures

Specific treatments: No specific treatment.Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate		
is suspected that fumes are still present, the rescuer should wear an appropriate	Specific treatments	: No specific treatment.
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.	Protection of first-aiders	is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing

See toxicological inform	nation (Section 11)
--------------------------	---------------------

Section 5. Fire-fighting measures

Oection 5. The ingliting measures		
Extinguishing media		
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.	
Unsuitable extinguishing media	: Do not use water jet.	
Specific hazards arising from the chemical	: Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.	
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon oxides halogenated compounds metal oxide/oxides	
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.	
Special protective equipment for fire-fighters	 Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. 	

Section 6. Accidental release measures

Personal precautions.	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".

Product name SIGMACOVER 410 BASE RAL 9006

Section 6. Accidental release measures

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.
		May be narmful to the environment if released in large quantities. Collect spillage.

Methods and materials	<u>for containment and cleaning up</u>
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

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. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
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.

Section 7. Handling and storage

Conditions for safe storage,	: Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in
including any	accordance with local regulations. Store in a segregated and approved area. Store
incompatibilities	in original container protected from direct sunlight in a dry, cool and well-ventilated
	area, away from incompatible materials (see Section 10) and food and drink. Store
	locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep
	container tightly closed and sealed until ready for use. Containers that have been
	opened must be carefully resealed and kept upright to prevent leakage. Do not
	store in unlabeled containers. Use appropriate containment to avoid environmental
	contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits	
✓alc , not containing asbestiform fibres	Workplace Safety and Health Act	
.	(Singapore, 2/2006).	
	PEL (long term): 2 mg/m ³ 8 hours.	
xylene	Workplace Safety and Health Act	
	(Singapore, 2/2006).	
	PEL (short term): 651 mg/m ³ 15 minutes.	
	PEL (short term): 150 ppm 15 minutes.	
	PEL (long term): 434 mg/m ³ 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 ³ 8 hours.	
	PEL (long term): 50 ppm 8 hours.	
ethylbenzene	Workplace Safety and Health Act	
	(Singapore, 2/2006).	
	PEL (short term): 543 mg/m ³ 15 minutes.	
	PEL (short term): 125 ppm 15 minutes.	
	PEL (long term): 434 mg/m ³ 8 hours.	
	PEL (long term): 100 ppm 8 hours.	
Reaction products of 12-hydroxyoctadecanoic acid and octadecanoic	ACGIH TLV (United States).	
acid and 1,3-phenylenedimethanamine	TWA: 3 mg/m ³ , (Respirable fraction)	
Recommended monitoring : If this product contains ingredients w	th exposure limits, personal, workplace	
	may be required to determine the effectivene	
	sures and/or the necessity to use respirator	

atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Appropriate engineering controls
 Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Singapore	English (US)	Page: 6/15
-----------	--------------	------------

Section 8. Exposure controls/personal protection

Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measures	S	
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.
	5	Chemical splash goggles and face shield.
Skin protection		
Hand protection	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Gloves	:	butyl rubber
Body protection	:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	:	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Section 9. Physical and chemical properties

<u>Appearance</u>	
Physical state	: Liquid.
Color	: Silver-white.
Odor	: Characteristic.
рН	insoluble in water.
Boiling point	: >37.78°C (>100°F)
Flash point	: Closed cup: 36°C (96.8°F)

Singapore	English (US)	Page: 7/15
-----------	--------------	------------

Section 9. Physical and chemical properties

Evaporation rate	: Highest known value: 0.84 (ethylbenzene) Weighted average: 0.51compared with butyl acetate	1
Flammability (solid, gas)	: liquid	
Vapor pressure	: Highest known value: <1.6 kPa (<12 mm Hg) (at 20°C) (2-methylpropan-1-ol). Weighted average: 0.47 kPa (3.53 mm Hg) (at 20°C)	
Vapor density	: Highest known value: 7.59 (Air = 1) (nonylphenol). Weighted average: 4.66 (Air 1)	=
Relative density	: 1.26	
Solubility	: Insoluble in the following materials: cold water.	
Auto-ignition temperature	: Lowest known value: 280 to 470°C (536 to 878°F) (Naphtha (petroleum), hydrotreated heavy).	
Viscosity	: ₭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: oxidizing agents, strong alkalis, strong acids.
Hazardous decomposition products	: Depending on conditions, decomposition products may include the following materials: carbon oxides halogenated compounds metal oxide/oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Epoxy resin (MW ≤ 700)	LD50 Dermal	Rabbit	>2 g/kg	-
	LD50 Oral	Rat	>2 g/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
-	LD50 Oral	Rat	4.3 g/kg	-
Naphtha (petroleum), hydrotreated heavy	LD50 Dermal	Rabbit	>5000 mg/kg	-
,	LD50 Oral	Rat	>6 g/kg	-
Solvent naphtha (petroleum), light aromatic	LD50 Dermal	Rabbit	3.48 g/kg	-
0	LD50 Oral	Rat	8400 mg/kg	-
nonylphenol	LD50 Dermal	Rabbit	2.14 g/kg	-
ingapore English (US)				Page

apore	English (US)	Page: 8/15

Section 11. Toxicological information

7		-	-	
	LD50 Oral	Rat	580 mg/kg	-
Epoxy Resin (700 <mw <=1100)</mw 	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
2-methylpropan-1-ol	LC50 Inhalation Vapor	Rat	24.6 mg/l	4 hours
	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 mg/kg	-
Phenol, methylstyrenated	LD50 Dermal	Rabbit	>2000 mg/kg	-
	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	-
Reaction products of	LC50 Inhalation Dusts and mists	Rat	>5.08 mg/l	4 hours
12-hydroxyoctadecanoic				
acid and octadecanoic acid				
and				
1,3-phenylenedimethanamine				

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

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Epoxy resin (MW ≤ 700)	Skin - Mild irritant	Rabbit Rabbit	-	-	-
xylene	Eyes - Mild irritant Skin - Moderate irritant	Rabbit Rabbit	-	- 24 hours 500	-
				mg	

Conclusion/Summary

Skin : There are no data available on the mixture itse	elf.
--	------

Eyes Respiratory

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

Sensitization

•	Route of exposure	Species	Result
Epoxy resin (MW ≤ 700)	skin	Mouse	Sensitizing

Conclusion/Summary

Skin	1	There are no data available on the mixture itself.
Respiratory	1	There are no data available on the mixture itself.
Mutagenicity		
Conclusion/Summary	:	There are no data available on the mixture itself.
Carcinogenicity		
Conclusion/Summary	:	There are no data available on the mixture itself.
Reproductive toxicity		
Conclusion/Summary	:	There are no data available on the mixture itself.
Teratogenicity		
Conclusion/Summary	:	There are no data available on the mixture itself.
Specific target organ tox	icit	<u>y (single exposure)</u>

Section 11. Toxicological information

Name	Category	Route of exposure	Target organs
■ alc , not containing asbestiform fibres	Category 3	-	Respiratory tract irritation
xylene	Category 3	-	Respiratory tract irritation
Naphtha (petroleum), hydrotreated heavy	Category 3	-	Respiratory tract irritation
Solvent naphtha (petroleum), light aromatic	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
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

Name	Result
Naphtha (petroleum), hydrotreated heavy Solvent naphtha (petroleum), light aromatic	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure	: Not available.
Potential acute health effect	<u>s</u>
Eye contact	: Causes serious eye damage.
Inhalation	: May cause respiratory irritation.
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.
Symptoms related to the phy Eye contact Inhalation	 ysical, chemical and toxicological characteristics Adverse symptoms may include the following: pain watering redness Adverse symptoms may include the following:
mnalation	respiratory tract irritation coughing reduced fetal weight increase in fetal deaths skeletal malformations

Section 11. Toxicological information

Skin contact	1	Adverse symptoms may include the following:
		pain or irritation
		redness
		dryness
		cracking blistering may occur
		reduced fetal weight
		increase in fetal deaths
		skeletal malformations
Ingestion	:	Adverse symptoms may include the following:
		stomach pains
		reduced fetal weight increase in fetal deaths
		skeletal malformations
Delayed and immediate effe	cts	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		
Potential immediate	1	Not available.
effects		
Potential delayed effects	1	Not available.
Potential chronic health eff	ect	<u>s</u>
General	1	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	1	No known significant effects or critical hazards.
Reproductive toxicity	:	Suspected of damaging fertility or the unborn child.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Øral	9591.21 mg/kg
Dermal	12612.53 mg/kg
Inhalation (vapors)	58.99 mg/l
Inhalation (dusts and mists)	7.58 mg/l

Other information

2

Singapore	English (US)	Page: 11/15
• •	C ()	

Section 11. Toxicological information

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

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Epoxy resin (MW ≤ 700)	Acute LC50 1.8 mg/l	Daphnia	48 hours
,	Chronic NOEC 0.3 mg/l	Daphnia	21 days
Solvent naphtha (petroleum), light aromatic	Acute LC50 8.2 mg/l	Fish	96 hours
nonylphenol	Acute EC50 0.056 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Chronic EC10 0.003 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Chronic NOEC 1 µg/l Fresh water	Daphnia - Daphnia magna	21 days
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
ethylbenzene	Acute LC50 150 to 200 mg/l Fresh water	Fish	96 hours
Reaction products of 12-hydroxyoctadecanoic acid and octadecanoic acid and	Acute LC50 >100 mg/l	Fish	96 hours
1,3-phenylenedimethanamine			

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

Persistence/degradability

Product/ingredient name	Test	Result		Dose	Inoculum
Epoxy resin (MW ≤ 700)	OECD 301F	5 % - 28 days		-	-
Conclusion/Summary	: There are no	data available on the	e mixture itse	elf.	
Product/ingredient name	Aquatic half-life		Photolysi	s	Biodegradability
Epoxy resin (MW ≤ 700) xylene ethylbenzene	-				Not readily Readily Readily

Bioaccumulative potential

Section 12. Ecological information

Product/ingredient name	LogPow	BCF	Potential
Epoxy resin (MW ≤ 700)	3	31	low
xylene	3.12	7.4 to 18.5	low
nonylphenol	3.28	154.88	low
2-methylpropan-1-ol	1	-	low
Phenol, methylstyrenated	3.627	-	low
ethylbenzene	3.6	79.43	low

Mobility in soil

Soil/water partition	: Not available.
coefficient (Koc)	

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	ΙΑΤΑ
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3
Packing group	III	III	III
Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.

Singapore	English (US)	Page: 13/15
-----------	--------------	-------------

Date of issue 18 May 2021

Version 3

Section 14. Transport information

Marine pollutant substances	Not applicable.	(Epoxy resin (MW ≤ 700), Solvent naphtha (petroleum), light aromatic)	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.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Section 16. Other information

History

<u>HISTOLY</u>	
Date of issue/Date of revision	: 18 May 2021
Date of previous issue	: 2/21/2020
Version	: 3
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

Section 16. Other information

Indicates information that has changed from previously issued version.

Notice to reader

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.