SAFETY DATA SHEET

pPG

Date of issue/Date of revision 10 December 2024 Version1.02

Section 1. Identification

Product code	: 00467861
Product name	: SIGMADUR 550 BASE RAL 1028
CAS number	: Not applicable.
EC number	: Mixture.
Product type	: Liquid.
Relevant identified uses of	of the substance or mixture and uses advised against
Product use	Coating. Professional applications, Used by spraying.
Uses advised against	: Product is not intended, labelled or packaged for consumer use.
Supplier's details	: PPG Yung Chi Coatings Co. Ltd Lot 219, Amata Street, Long Binh IZ Bien Hoa City, Dong Nai Province Vietnam Tel : +84 61 3936121/22
Emergency telephone number (with hours of operation)	: CHEMTREC +(84)-444581938 (CCN 17704)

Section 2. Hazards identification

Classification of the substance or mixture	 FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (dermal) - Category 5 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 1 AQUATIC TOXICITY (ACUTE) - Category 3 AQUATIC TOXICITY (CHRONIC) - Category 3 Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 41.3% Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 70.6% Percentage of the mixture consisting of ingredient(s) of unknown hazards to the
<u>GHS label elements</u> Hazard pictograms	•
Signal word	: Danger

Product code 00467861

Product name SIGMADUR 550 BASE RAL 1028

Section 2. Hazards identification

Hazard statements	:	Flammable liquid and vapor. May be harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Harmful if inhaled. May cause cancer. Harmful to aquatic life with long lasting effects.
Precautionary statements		
Prevention	:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing vapor. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Response	:	F exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. If skin irritation or rash occurs: Get medical advice or attention.
Storage	:	Store locked up.
Disposal	:	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Routes of entry	:	Not available.
Other hazards which do not result in classification	:	Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

: Mixture

Substance/	mixture

CAS number/other identifiers

CAS number: Not applicable.EC number: Mixture.			
Ingredient name	CAS number	Chemical formula	%
Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, ethenylbenzene, 1,2-propanediol mono(2-methyl-2-propenoate) and 2-propenoic acid	37237-99-3	(C8H8.C7H12O3. C7H12O2.C5H8O2. C3H4O2)x	≥25 - ≤50
barium sulfate	7727-43-7	O4-S.Ba	≥10 - ≤25
Solvent naphtha (petroleum), light aromatic	64742-95-6	-	≤10
Talc , not containing asbestiform fibres	14807-96-6	H2-03-Si.3/4Mg	≤9.5
1,2,4-trimethylbenzene	95-63-6	C9-H12	≤7
n-butyl acetate	123-86-4	C6-H12-O2	≤7.2
ethylbenzene	100-41-4	C8-H10	≤3
xylene	1330-20-7	C8-H10	≤2
2,6-dimethylheptan-4-one	108-83-8	C9-H18-O	≤1.3
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	41556-26-7	C30H56N2O4	≤0.3
cumene	98-82-8	C9-H12	≤0.3

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Product name SIGMADUR 550 BASE RAL 1028

Section 3. Composition/information on ingredients

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

SUB codes represent substances without registered CAS Numbers.

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

Section 4. First aid measures

Description of necess	sary first aid measures
Eye contact	 Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
Inhalation	: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Skin contact	: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Ingestion	 If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Most important symptoms/e	ffects, acute and delayed
Potential acute health effect	<u>ets</u>
Eye contact	: No known significant effects or critical hazards.
Inhalation	: Harmful if inhaled.
Skin contact	: May be harmful in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/symp	<u>toms</u>
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking
Ingestion	: No specific data.
Indication of immediate med	lical 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.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon oxides sulfur oxides 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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
Methods and materials for co	ont	ainment 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.

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 release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling	L	
Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters Occupational exposure limits

Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits	
▶arium sulfate	ACGIH TLV (United States, 7/2023) TWA 8 hours: 5 mg/m ³ . Form: Inhalab	le
Talc , not containing asbesti	TWA 8 hours: 3 mg/m³. Form: inhalab	le
	dust. TWA 8 hours: 1 mg/m³. Form: respirat dust.	
	TWA 8 hours: 2 mg/m³. Form: total du concentration.	SI
1,2,4-trimethylbenzene	ACGIH TLV (United States, 7/2023)	
n-butyl acetate	TWA 8 hours: 10 ppm. Ministry of Health (Viet Nam, 6/2019) TWA 8 hours: 500 mg/m ³ . STEL 15 minutos: 700 mg/m ³	
ethylbenzene	STEL 15 minutes: 700 mg/m ³ . ACGIH TLV (United States, 7/2023)	
	Ototoxicant. TWA 8 hours: 20 ppm.	
xylene	Ministry of Health (Viet Nam, 6/2019)	
	[xylene] TWA 8 hours: 100 mg/m³.	
	STEL 15 minutes: 300 mg/m ³ .	
2,6-dimethylheptan-4-one	ACGIH TLV (United States, 7/2023) TWA 8 hours: 25 ppm.	
	TWA 8 hours: 145 mg/m ³ .	
cumene	Ministry of Health (Viet Nam, 6/2019) TWA 8 hours: 80 mg/m ³ .	
	STEL 15 minutes: 100 mg/m³.	
Recommended monitoring procedures	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.	I
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 co also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.	
nvironmental exposure ontrols	Emissions from ventilation or work process equipment should be checked to e they comply with the requirements of environmental protection legislation. In s cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.	
ndividual protection measu		
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, I 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.	thing า
Eye/face protection	Chemical splash goggles.	
Skin protection		

Section 8. Exposure controls/personal protection

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

Section 9. Physical and chemical properties

Appearance

Decomposition temperature		Not available.	
Auto-ignition temperature		Not available.	
Partition coefficient: n- octanol/water	:	Not applicable.	
Solubility(ies)	-	cold water	Not soluble
		Media	Result
Bulk Density (g/cm ³)	1	1.352	
Relative density	:	1.34	
Vapor density	:	Not available.	
Vapor pressure	:	Not available.	
Lower and upper explosive (flammable) limits	:	Not available.	
Flammability (solid, gas)	1	Not available.	
Evaporation rate	1	Not available.	
Flash point	1	Closed cup: 31°C (87.8°F)	
Boiling point	:	>37.78°C (>100°F)	
Melting point	:	Not available.	
рН	:	Not applicable.	
Odor threshold	:	Not available.	
Odor	:	Aromatic.	
Color	1	Various	
Physical state	1	Liquid.	

Product code 00467861

Product name SIGMADUR 550 BASE RAL 1028

Section 9. Physical and chemical properties

Viscosity: Dynamic (room temperature): Not available.
Kinematic (room temperature): Not available.
Kinematic (40°C): >21 mm²/s

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 sulfur oxides metal oxide/oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2-Propenoic acid, 2-methyl-,	LD50 Oral	Rat	>5000 mg/kg	-
methyl ester, polymer with				
butyl 2-propenoate,				
ethenylbenzene,				
1,2-propanediol mono				
(2-methyl-2-propenoate)				
and 2-propenoic acid				
barium sulfate	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Solvent naphtha (petroleum),	LD50 Dermal	Rabbit	3.48 g/kg	-
light aromatic				
•	LD50 Oral	Rat	8400 mg/kg	-
1,2,4-trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m ³	4 hours
•	LD50 Oral	Rat	5 g/kg	-
n-butyl acetate	LC50 Inhalation Vapor	Rat	>21.1 mg/l	4 hours
	LC50 Inhalation Vapor	Rat	2000 ppm	4 hours
	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10.768 g/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	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
-	LD50 Oral	Rat	4.3 g/kg	-
2,6-dimethylheptan-4-one	LD50 Dermal	Rabbit	16 g/kg	-
	LD50 Oral	Rat	5750 mg/kg	-
bis(1,2,2,6,6-pentamethyl-	LD50 Oral	Rat	3.125 g/kg	-
4-piperidyl) sebacate				
	l			
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roduct code 00467861 roduct name SIGMADUR 55	50 BASE RAL 1	028	Date of	issue 1	0 Decembe	er 2024	Version 1.02
ection 11. Toxico	ological ir	nformat	ion				
cumene	LC50 Inhalation Vapor LD50 Dermal LD50 Oral		Rat Rabbit Rat	1	39000 mg/m³ 4 12.3 g/kg - 2260 mg/kg -		
Conclusion/Summary rritation/Corrosion	: There are n	o data availa	able on the mixt	ure itself.			
Product/ingredient name	Result		Species	Score	Expo	sure	Observation
xylene	Skin - Modera	te irritant	Rabbit	-	-	urs 500	
Conclusion/Summary							
Skin	: There are n	o data availa	able on the mixt	ure itself.			
Eyes	: There are n	o data availa	able on the mixt	ure itself.			
Respiratory	: There are n	o data availa	able on the mixt	ure itself.			
Sensitization							
Product/ingredient name	Route of exposure	Specie	S	F	Result		
2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, ethenylbenzene, 1,2-propanediol mono (2-methyl-2-propenoate) and 2-propenoic acid	skin	Mouse		S	Sensitizing		
Skin Respiratory			able on the mixt able on the mixt				
<u>Autagenicity</u>	. There are h			ure noon.			
Conclusion/Summary	: There are n	o data availa	able on the mixt	ure itself.			
<u>Carcinogenicity</u> Conclusion/Summary	: There are n	o data availa	able on the mixt	ure itself.			
<u>Reproductive toxicity</u> Conclusion/Summary	: There are n	o data availa	able on the mixt	ure itself.			
<u>Feratogenicity</u>							
Conclusion/Summary	• There are n	o data avail	able on the mixt	ure itself			
Specific target organ toxicit							
Name			Category		ute of posure	Та	rget organs
Solvent naphtha (petroleum),	light aromatic		Category 3	-		Na	rcotic effects
Falc , not containing asbestif			Category 3	-		Re	spiratory tract tation
1,2,4-trimethylbenzene			Category 3	-		irri	spiratory tract tation
n-butyl acetate xylene			Category 3 Category 3	- -		Re	rcotic effects spiratory tract
2,6-dimethylheptan-4-one			Category 3	-		Re	tation spiratory tract tation
cumene			Category 3	-		Re	spiratory tract

Specific target organ toxicity (repeated exposure)

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Section 11. Toxicological information

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

Aspiration hazard

Name	Result
ethylbenzene xylene 2,6-dimethylheptan-4-one	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely	: Not available.
routes of exposure	

May cause an allergic skin reaction. Ingestion : No known significant effects or critical hazards. Symptoms related to the physical. chemical and toxicological characteristics Eye contact : Adverse symptoms may include the following: pain or irritation watering redness Inhalation : No specific data. Skin contact : Adverse symptoms may include the following: irritation redness Inhelation : No specific data. Skin contact : Adverse symptoms may include the following: irritation redness dryness cracking Ingestion : No specific data. Delayed and immediate effects and also chronic effects from short and long term exposure Short term exposure Potential immediate Potential delayed effects : There are no data available on the mixture itself. effects : There are no data available on the mixture itself. effects : There are no data available on the mixture itself. Potential delayed effects : There are no data available on the mixture itself. effects : There are no data available on the mixture itself. Potential delayed effects : There are no data available on the mixture itself. effects : There are no data available on the mixture itself. Potential delayed effects			
Inhalation : Harmful if inhaled. Skin contact : May be harmful in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction. Ingestion : No known significant effects or critical hazards. Symptoms related to the physical. chemical and toxicological characteristics Eye contact : Adverse symptoms may include the following: pain or irritation watering redness Inhalation : No specific data. Skin contact : Adverse symptoms may include the following: irritation redness dryness cracking Ingestion : No specific data. Delayed and immediate effects and also chronic effects from short and long term exposure Short term exposure : There are no data available on the mixture itself. Potential delayed effects : There are no data available on the mixture itself. Long term exposure : There are no data available on the mixture itself. Potential delayed effects : There are no data available on the mixture itself. Effects : There are no data available on the mixture itself. Potential delayed effects : There are no data available on the mixture itself. Potential delayed effects : There are no data available on the mixture itself. Potential chronic health effects : Potoniged or repeated contact can defat th	Potential acute health effects	Ł	
Skin contact : May be harmful in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction. Ingestion : No known significant effects or critical hazards. Symptoms related to the physical, chemical and toxicological characteristics Eye contact : Adverse symptoms may include the following: pain or irritation watering redness Inhalation : No specific data. Skin contact : Adverse symptoms may include the following: irritation redness dryness cracking Ingestion : No specific data. Skin contact : Adverse symptoms may include the following: irritation redness dryness cracking Ingestion : No specific data. Delayed and immediate effects and also chronic effects from short and long term exposure Short term exposure Potential immediate = forces Potential immediate : There are no data available on the mixture itself. Long term exposure Potential immediate = : There are no data available on the mixture itself. Potential immediate : There are no data available on the mixture itself. Long term exposure Potential immediate = : There are no data available on the mixture itself. Potential delayed effects : There are no data available on the mixture itself. Potential delayed effects : There are no data	Eye contact	1	No known significant effects or critical hazards.
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Symptoms related to the physical, chemical and toxicological characteristics Eye contact : Adverse symptoms may include the following: pain or irritation watering redness Inhalation : No specific data. Skin contact : Adverse symptoms may include the following: irritation redness dryness cracking Ingestion : No specific data. Delayed and immediate effects and also chronic effects from short and long term exposure Short term exposure Potential immediate : There are no data available on the mixture itself. effects Potential delayed effects : There are no data available on the mixture itself. Long term exposure Potential immediate Potential delayed effects : There are no data available on the mixture itself. Long term exposure Potential delayed effects Potential delayed effects : There are no data available on the mixture itself. Potential delayed effects : There are no data available on the mixture itself. Potential delayed effects : There are no data available on the mixture itself. Potential delayed effects : There are no data available on the mixture itself. Potential delayed effects : There are no data available on the mixture itself. Potential chronic health effects : There are no data available on the mixture itself.	Skin contact	:	May be harmful in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
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	General	:	
Viet Nam Page: 1	Carcinogenicity	:	May cause cancer. Risk of cancer depends on duration and level of exposure.
			Viet Nam Page: 10/14

Section 11. Toxicological information

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	47341.17 mg/kg
Dermal	4389.03 mg/kg
Inhalation (vapors)	50.73 mg/l
Inhalation (dusts and mists)	4.71 mg/l

Other information

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

Section 12. Ecological information

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Toxicity

Product/ingredient name	Result	Species	Exposure
Solvent naphtha (petroleum), light aromatic	Acute LC50 8.2 mg/l	Fish	96 hours
n-butyl acetate	Acute LC50 18 mg/l	Fish	96 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-

Persistence and degradability

Product/ingredient name	Test	Result		Dose		Inoculum
n -butyl acetate	TEPA and OECD 301D	83 % - Rea	dily - 28 days	-		-
ethylbenzene	-	79 % - Rea	dily - 10 days	-		-
Product/ingredient name	Aquatic half-life		Photolysis		Biodeg	radability
n-butyl acetate ethylbenzene xylene	- - -		- - -		Readily Readily Readily	/

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential	
1,2,4-trimethylbenzene	3.63	120.23	Low	
n-butyl acetate	2.3	-	Low	
ethylbenzene	3.6	79.43	Low	
xylene	3.12	7.4 to 18.5	Low	
2,6-dimethylheptan-4-one	3.71	-	Low	
cumene	3.55	35.48	Low	

Section 12. Ecological information

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

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

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
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.
- Transport in bulk according : Not applicable. to IMO instruments

Section 15. Regulatory information

Safety, health and environmental regulations specific for the product	 Law on Chemicals - Law No. 06/2007/QH12 Decree No. 113/2017/ND-CP Specifying and guiding the implementation of a number of articles of the Law on Chemicals Decree No. 82/2022/ND-CP Amending and supplementing a number of articles of Decree 113/201/ND-CP dated October 9, 2017 of the Government detailing and guiding the implementation of a number of articles of the Law on Chemicals Decree 33/2024/ND-CP Stipulating the implementation of the convention prohibiting the development, production, stockpiling, use and destruction of chemical weapons
	 Decree 34/2024/ND-CP Stipulating the list of dangerous goods, transport of dangerous goods by road motor vehicles and inland waterway vehicles Decree 43/2017/ND-CP Decree on Goods Labeling Decree 111/2021/ND-CP Amending and supplementing a number of articles of Decree 43/2017/ND-CP dated April 14, 2017 Circular 32/2017/TT-BCT Specifying and guiding the implementation of a number of articles of the Law on Chemicals and Decree No. 113/2017/ND-CP dated October
	 9, 2017 of the Government detailing and guiding the implementation of a number of articles of the Law on Chemicals Circular 17/2022 Amending and supplementing a number of articles of Circular No. 32/2017/TT-BCT dated December 28, 2017 of the Minister of Industry and Trade specifying and guiding the implementation of a number of articles of the Law on Chemicals and Decree No. 113/2017/ND-CP dated October 9, 2017 of the Government detailing and guiding the implementation of a number of articles of the Law on Chemicals and Decree No. 113/2017/ND-CP dated October 9, 2017 of the Government detailing and guiding the implementation of a number of articles of the Law on Chemicals and implementing a number of articles of the Law on Chemicals

Circular no. 05/1999/TT-BYT

Ingredient name	Category	Notes
7,4-dioxane	Category 2	
chloromethane	Category 2	
Formaldehyde, solution	Category 2	
ethylene oxide	Category 2	
benzene	Category 1	
toluene	Category 2	
xylene	Category 2	
lead massive	Category 2	
Cadmium (Non-pyrophoric)	Category 2	
arsenic	Category 1	
antimony	Category 2	
chromium	Category 2	
N,N-dimethylformamide	Category 2	
1,1'-Biphenyl, chloro derivs.	Category 2	

International regulations

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 10 December 2024
Date of previous issue	: 4/8/2024
Version	: 1.02
Prepared by	: EHS
Key to abbreviations	 ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = 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
References	: Not available.

V 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.