SAFETY DATA SHEET



Date of issue 1/16/2025 (month/day/year)

Version 1.01

Section 1. Chemical product and company identification

A. Product name	: SIGMADUR 550 BASE RAL 5021
Product code	: 00475631

B. Relevant identified uses of the substance or mixture and uses advised against

Product use Use of the substance/ mixture	Professional applications, Used by spraying.Coating.
Uses advised against	: Product is not intended, labelled or packaged for consumer use.
C. Supplier's or Importer's information	: PPG SSC (680-090) 19, Yeocheon-ro 217beon-gil, Nam-gu, Ulsan, Korea Tel: +82-52-210-8222
Email Address	Korea.MSDS@PPG.COM
Emergency telephone number:	: <mark>⊁</mark> 82-52-210-8331

Section 2. Hazards identification

A. Hazard classification	: FLAMMABLE LIQUIDS - Category 3
	SKIN IRRITATION - Category 2
	EYE IRRITATION - Category 2A
	SKIN SENSITIZATION - Category 1
	CARCINOGENICITY - Category 2
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -
	Category 3
	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
	AQUATIC HAZARD (LONG-TERM) - Category 3
	This product is classified in accordance with the Industrial Safety and Health Act and
	the Chemical Control Act.

B. GHS label elements, including precautionary statements



Signal word

Symbol

: Warning

Date of issue 1/16/2025 (month/day/year)

Product name SIGMADUR 550 BASE RAL 5021

Section 2. Hazards identification

Hazard statements	 H226 - Flammable liquid and vapor. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness. H351 - Suspected of causing cancer. H373 - May cause damage to organs through prolonged or repeated exposure. (central nervous system (CNS), kidneys, liver) H412 - Harmful to aquatic life with long lasting effects.
Precautionary statement	S
Prevention	 P202 - Do not handle until all safety precautions have been read and understood. P280 - Wear protective gloves, protective clothing and eye or face protection. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P241 - Use explosion-proof electrical, ventilating or lighting equipment. P241 - Use explosion-proof electrical, ventilating or lighting equipment. P242 - Use non-sparking tools. P243 - Take action to prevent static discharges. P240 - Ground and bond container and receiving equipment. P273 - Avoid release to the environment. P260 - Do not breathe vapor. P264 - Wash thoroughly after handling.
Response	 P370 + P378 - In case of fire: Never use water to extinguish. P308 + P313 - IF exposed or concerned: Get medical advice or attention. P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell. P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention. P321 - Specific treatment (see the label).
Storage	: P403 + P233 - Store in a well-ventilated place. Keep container tightly closed. P403 + P235 - Keep cool.
Disposal	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
C. Other hazards which do not result in classification	: Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

CAS number/other identifiers

CAS number

: Not applicable.

Korea (GHS) Page: 2/15

Section 3. Composition/information on ingredients

Chemical name	Common name	Identifiers	%
Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, ethenylbenzene, 1,2-propanediol mono (2-methyl-2-propenoate) and 2-propenoic acid	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	CAS: 37237-99-3	20 - <30
Solvent naphtha (petroleum), light aromatic	SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC	CAS: 64742-95-6	5 - <10
No. 1. march 1997		EC: 265-199-0	5 . 10
Xylene	XYLENES	CAS: 1330-20-7 EC: 215-535-7	5 - <10
1,2,4-trimethylbenzene	1,2,4-TRIMETHYL BENZENE	CAS: 95-63-6 EC: 202-436-9	5 - <10
n-butyl acetate	N-BUTYL ACETATE	CAS: 123-86-4 EC: 204-658-1	5 - <10
Talc , not containing asbestiform fibres	Talc, non-asbestos form	CAS: 14807-96-6 EC: 238-877-9	1 - <5
titanium dioxide	TITANIUM DIOXIDE	CAS: 13463-67-7 EC: 236-675-5	1 - <5
ethylbenzene	ETHYLBENZENE	CAS: 100-41-4 EC: 202-849-4	1 - <5
polychloro copper phthalocyanine	COPPER PHTHALOCYANINE GREEN	CAS: 1328-53-6 EC: 215-524-7	1 - <5
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	BIS(PENTAMETHYLPIPERIDYL) SEBACATE	CAS: 41556-26-7	0.1 - <1
cumene	CUMENE	EC: 255-437-1 CAS: 98-82-8 EC: 202-704-5	0.1 - <1

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.

Section 4. First aid measures

			Korea (GHS) Page: 3/15	
	Specific treatments	1	No specific treatment.	
Е.	Notes to physician	:	Freat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.	
D.	Ingestion	: If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.		
C.	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.	
В.	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.	
Α.	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.	

Section 4. First aid measures

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

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Α.	Extinguishing media		
	Suitable extinguishing media	:	Use dry chemical, CO ₂ , water spray (fog) or foam.
	Unsuitable extinguishing media	:	Do not use water jet.
В.	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
C.	Special equipment for fire-fighting	:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Fire-fighting procedures	:	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.
S	Section 6. Accidental release measures		

A. Personal precautions, : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from protective equipment and entering. Do not touch or walk through spilled material. Shut off all ignition sources. emergency procedures 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.

B. Environmental : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused precautions environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

C. Methods and materials for containment and cleaning up

Section 6. Accidental release measures

Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non- combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

A. 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. 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 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.
B. 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

A. Occupational exposure limits

Ingredient name	Exposure limits
Xylene	ISHA Article 42 (Republic of Korea,
	1/2020) [Xylene]
	STEL 15 minutes: 150 ppm.
	TWA 8 hours: 100 ppm.
1,2,4-trimethylbenzene	ISHA Article 42 (Republic of Korea,
	1/2020) [Trimethyl benzene]
	TWA 8 hours: 25 ppm.
n-butyl acetate	ISHA Article 42 (Republic of Korea,
	Korea (GHS) Page: 5/15

Product name SIGMADUR 550 BASE RAL 5021

Section 8. Exposure controls/personal protection

	_		
			1/2020) STEL 15 minutes: 200 ppm.
			TWA 8 hours: 150 ppm.
	Talc , not containing asbe	estiform fibres	ISHA Article 42 (Republic of Korea,
			1/2020)
			TWA 8 hours: 2 mg/m ³ (as asbestos).
			Form: fibers.
	titanium dioxide		ISHA Article 42 (Republic of Korea,
			1/2020)
			TWA 8 hours: 10 mg/m ³ .
	ethylbenzene		ISHA Article 42 (Republic of Korea,
			1/2020)
			STEL 15 minutes: 125 ppm.
			TWA 8 hours: 100 ppm.
	cumene		ISHA Article 42 (Republic of Korea,
			1/2020) Absorbed through skin.
			TWA 8 hours: 50 ppm.
		.	
	Recommended monitoring procedures		appropriate monitoring standards. Reference to for methods for the determination of hazardous ed.
В.	Appropriate engineering controls	ventilation or other engineering contaminants below any recon	tion. Use process enclosures, local exhaust g controls to keep worker exposure to airborne nmended or statutory limits. The engineering controls or dust concentrations below any lower explosive
	Environmentel	limits. Use explosion-proof ve	ntilation equipment.
	Environmental exposure controls	they comply with the requireme cases, fume scrubbers, filters	work process equipment should be checked to ensure ents of environmental protection legislation. In some or engineering modifications to the process o reduce emissions to acceptable levels.
C.	Personal protective equip	oment	
	Respiratory protection	hazards of the product and the workers are exposed to conce appropriate, certified respirate	based on known or anticipated exposure levels, the e safe working limits of the selected respirator. If entrations above the exposure limit, they must use ors. Use a properly fitted, air-purifying or air-fed approved standard if a risk assessment indicates this is
	Eye protection	: Chemical splash goggles.	
	Hand protection	: Chemical-resistant, imperviou	is gloves complying with an approved standard should idling chemical products if a risk assessment indicates
		this is necessary. Considering check during use that the glow	g the parameters specified by the glove manufacturer, ves are still retaining their protective properties. It to breakthrough for any glove material may be
		different for different glove ma	anufacturers. In the case of mixtures, consisting of ction time of the gloves cannot be accurately
	Gloves	different for different glove ma several substances, the prote	

Section 8. Exposure controls/personal protection

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.
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

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Α.	Appearance			
	Physical state	1	Liquid.	
	Color	:	Not available.	
В.	Odor	1	Characteristic.	
С.	Odor threshold	:	Not available.	
D.	рН	:	Not applicable.	
Ε.	Melting/freezing point	:	Not available.	
F.	Boiling point/boiling range	:	>37.78°C (>100°F)	
G.	Flash point	1	Closed cup: 32°C (89	9.6°F)
н.	Evaporation rate	:	Not available.	
I.	Flammability (solid, gas)	:	Not available.	
J.	Lower and upper explosive (flammable) limits	:	Not available.	
к.	Vapor pressure	:		Va
			Ingredient name	mm
			n-butyl acetate	11.250
L.	Solubility(ies)		Media	<u> </u>
			cold water	

- Vapor density
- Μ. **Relative density**
- Partition coefficient: n- : Not applicable. О. octanol/water
- **Auto-ignition** Ρ.
- temperature

Korea (GHS) Page: 7/15

	Vapo	r Press	ure at 20°C	Va	por press	sure at 50°
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
n-butyl acetate	11.25096	1.5	DIN EN 13016-2			
Media	Re	sult				
cold water	No	t solubl	е			
Not available.						

- : Not available.
- : 1.33

2

- Solubility in water
- N.

Section 9. Physical and chemical properties

		ngredient name °C °F		°F	Method			
		Solvent naphtha (petroleum), light aromatic	280 to 470	536 to 878				
Q.	Decomposition : temperature	Not available.						
R.	-	Øynamic (room temperature): Not available. Kinematic (room temperature): Not available. Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt)						
	Flow time (ISO 2431) :	Not available.						
s.	Molecular weight :	Not applicable.						

Section 10. Stability and reactivity

Α.	Chemical stability	:	The product is stable.
	Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
В.	Conditions to avoid	:	When exposed to high temperatures may produce hazardous decomposition products.
C.	Incompatible materials	:	Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
D.	Hazardous decomposition products	:	Pepending on conditions, decomposition products may include the following materials: carbon oxides sulfur oxides metal oxide/oxides

Section 11. Toxicological information

A. Information on the likely routes of exposure	: Not available.			
Potential acute health effect	<u>ts</u>			
Inhalation :	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.			
Ingestion :	Can cause central nervous system (CNS) depression.			
Skin contact :	Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.			
Eye contact :	ntact : Causes serious eye irritation.			
Over-exposure signs/symp	<u>toms</u>			
Inhalation :	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness			
Ingestion :	No specific data.			

Section 11. Toxicological information

Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness

B. Health hazards

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, ethenylbenzene, 1,2-propanediol mono (2-methyl-2-propenoate) and 2-propenoic acid	LD50 Oral	Rat	>5000 mg/kg	-
Solvent naphtha (petroleum), light aromatic	LD50 Dermal	Rabbit	3.48 g/kg	-
	LD50 Oral	Rat	8400 mg/kg	-
Xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/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	-
titanium dioxide	LC50 Inhalation Dusts and mists	Rat	>6.82 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 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	-
polychloro copper phthalocyanine	LD50 Oral	Rat	>6400 mg/kg	-
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	LD50 Oral	Rat	3.125 g/kg	-
cumene	LC50 Inhalation Vapor	Rat	39000 mg/m ³	4 hours
	LD50 Dermal	Rabbit	12.3 g/kg	-
	LD50 Oral	Rat	2260 mg/kg	-

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

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
₩ylene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Conclusion/Summary				-	
Skin	: There are no data available on the mixture itself.				
Eyes	There are no data available on the mixture itself.				
Respiratory	: There are no data availabl	There are no data available on the mixture itself.			
					D

Korea (GHS) Page: 9/15

Product name SIGMADUR 550 BASE RAL 5021

Section 11. Toxicological information

Sensitization

Product/ingredient name	Route of exposure	Species	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	Sensitizing
Conclusion/Summary			
Skin :	There are no data a	available on the mixture itself.	
Respiratory :	There are no data a	available on the mixture itself.	
Mutagenicity			
Conclusion/Summary :	There are no data	available on the mixture itself.	

Conclusion/Summary

|--|

Conclusion/Summary	1	There are no data available on the mixture itself.
--------------------	---	--

Reproductive toxicity

Conclusion/Summary	: There are no data available on the mixture itse	elf.
---------------------------	---	------

Teratogenicity

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

Specific target organ toxicity (single exposure)

Name	Classification	Route of exposure	Target organs
Solvent naphtha (petroleum), light aromatic Xylene 1,2,4-trimethylbenzene	Category 3 Category 3 Category 3	- - -	Narcotic effects Narcotic effects Respiratory tract irritation
n-butyl acetate Talc , not containing asbestiform fibres	Category 3 Category 3	-	Narcotic effects Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Classification	Route of exposure	Target organs
Xylene	Category 1		central nervous system (CNS), kidneys, liver

Aspiration hazard

Section 11. Toxicological information

Name	Result		
Solvent naphtha (petroleum), light aromatic ethylbenzene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1		

Potential chronic health effects

General	: May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	: Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: No known significant effects or critical hazards.

Additional 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.

Chemical name	Identifiers	GHS Classification
Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, ethenylbenzene, 1,2-propanediol mono (2-methyl-2-propenoate) and 2-propenoic acid	CAS: 37237-99-3	SKIN SENSITIZATION - Category 1B
Solvent naphtha (petroleum), light aromatic	CAS: 64742-95-6	FLAMMABLE LIQUIDS - Category 3
	EC: 265-199-0	SKIN IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2
Xylene	CAS: 1330-20-7 EC: 215-535-7	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE
1,2,4-trimethylbenzene	CAS: 95-63-6 EC: 202-436-9	EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
n-butyl acetate	CAS: 123-86-4	AQUATIC HAZARD (LONG-TERM) - Category 2 FLAMMABLE LIQUIDS - Category 2
		Korea (GHS) Page: 11/15

Product name SIGMADUR 550 BASE RAL 5021

Section 11. Toxicological information

	EC: 204-658-1	SPECIFIC TARGET ORGAN TOXICITY (SINGLE
Talc , not containing asbestiform fibres	CAS: 14807-96-6	EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) -
		Category 3
	EC: 238-877-9	
titanium dioxide	CAS: 13463-67-7 EC: 236-675-5	CARCINOGENICITY - Category 2
ethylbenzene	CAS: 100-41-4	FLAMMABLE LIQUIDS - Category 2
ethyloenzene	EC: 202-849-4	ACUTE TOXICITY (inhalation) - Category 4
	20.202 010 1	CARCINOGENICITY - Category 2
		ASPIRATION HAZARD - Category 1
		AQUATIC HAZARD (LONG-TERM) - Category 3
polychloro copper phthalocyanine	CAS: 1328-53-6	Not classified.
	EC: 215-524-7	
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	CAS: 41556-26-7	SKIN SENSITIZATION - Category 1B
	EC: 255-437-1	TOXIC TO REPRODUCTION - Category 2
		AQUATIC HAZARD (ACUTE) - Category 1
		AQUATIC HAZARD (LONG-TERM) - Category 1
cumene	CAS: 98-82-8	FLAMMABLE LIQUIDS - Category 3
	EC: 202-704-5	CARCINOGENICITY - Category 2

Section 12. Ecological information

A. Ecotoxicity

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
titanium dioxide	Acute LC50 >100 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
polychloro copper phthalocyanine	Acute LC50 356 mg/l	Fish	96 hours

B. Persistence and degradability

Product/ingredient name	Test	Result		Dose		Inoculum
-butyl acetate	TEPA and OECD 301D	83 % - Rea	adily - 28 days	-		-
ethylbenzene	-	79 % - Rea	adily - 10 days	-		-
Product/ingredient name	Aquatic half-life		Photolysis		Biodeg	gradability
₩ylene n-butyl acetate ethylbenzene	- -		- -		Readily Readily Readily	,

C. Bioaccumulative potential

Section 12. Ecological information

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

D. Mobility in soil

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

E. <u>Other adverse effects</u> : No known significant effects or critical hazards.

Section 13. Disposal considerations

Α.	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.

B. Disposal precautions
 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
A. UN number	UN1263	UN1263	UN1263
B. UN proper shipping name	PAINT	PAINT	PAINT
C. Transport hazard class(es)	3	3	3
D. Packing group	III	III	III
Environmental hazards	No.	No.	No.
E. Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

Additional information

Korea (GHS) Page: 13/15

Section 14. Transport information

UN	: None identified.
IMDG	: None identified.

IATA : None identified.

F. Special precaution which a user to be aware of or needs to comply with in connection with transport or transportation

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

A. <u>Regulation according to ISHA</u>

ISHA article 117 (Harmful substances prohibited from manufacture)	: None of the components are listed.
ISHA article 118 (Harmful substances requiring permission)	: None of the components are listed.
Article 2 of Youth Protection Act on Substances Hazardous to Youth	: It is not allowed to sell to persons under the age of 19.

Exposure Limits of Chemical Substances and Physical Factors

The following components have an OEL:

ISHA Enforcement Regs Annex 19 (Exposure standards established for harmful factors)	: None of the components are listed.			
ISHA Enforcement Regs Annex 11-5 (Harmful factors subject to Work Environment Measurement)	: The following components are listed: xylene, n-butyl acetate, talc / soapstone, titanium dioxide, ethyl benzene			
ISHA Enforcement Regs Annex 22 (Harmful Factors Subject to Special Health Check- up)	: The following components are listed: Xylene, Ethyl benzene			
Standard of Industrial Safety and Health Annex 12 (Hazardous substances subject to control)	: The following components are listed: xylene, n-butyl acetate, titanium dioxide, ethyl benzene, copper and its compounds			
Regulation according to Chemicals Control Act				

Article 11 (TRI)

Β.

: The following components are listed: Barium and its compounds, Xylene including o-,m-,p- isomer, Ethylbenzene, Copper and its compounds

Korea (GHS) Page: 14/15

Date of issue 1/16/2025 (month/day/year)

Version 1.01

Product name SIGMADUR 550 BASE RAL 5021

Section 15. Regulatory information

		:	None of the components are listed.
	Reach Article 27) Article 19 Subject to authorization (K-Reach Article 25)	:	None of the components are listed.
	Article 20 Restricted (K- Reach Article 27)	:	None of the components are listed.
	Article 20 Toxic Chemicals (K-Reach Article 20)	:	Not applicable
	Korea inventory	:	All components are listed or exempted.
	Article 39 (Accident Precaution Chemicals)	:	None of the components are listed.
C.	Dangerous Materials Safety Management Act	:	Class: Class 4 - Flammable Liquid Item: 4. Class 2 petroleums - Water-insoluble liquid Threshold: 1000 L Danger category: III Signal word: Contact with sources of ignition prohibited
D.	Wastes regulation	:	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Е.	Regulation according to o	oth	<u>er foreign laws</u>
	Safety, health and environmental regulations specific for the product	:	No known specific national and/or regional regulations applicable to this product (including its ingredients).
C	action 16 Other		formation

Section 16. Other information

Α.	References	 Korean Ministry of Environment; Chemical Control Act Korean Ministry of Labor; Industrial Safety and Health Act NIER Notice Registry of Toxic Effects of Chemical Substances (RTECS) U.S. Environmental Protection Agency, AQUIRE (Aquatic toxicity Information Retrieval) ECOTOX Database System.
В.	First issue date	: 1/31/2024
C.	Date of issue/Date of revision	: 1/16/2025
D.	Version	: 1.01
	Prepared by	: EHS
Ε.	Other	

Indicates information that has changed from previously issued version.

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.