SAFETY DATA SHEET



Date of issue 9/1/2024 (month/day/year)

Version 3.03

Section 1. Chemical product and company identification

A. Product name: SIGMADUR 550H BASE RAL 7035Product code: 00445306

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:	: ₱82-52-210-8331

Section 2. Hazards identification

A. Hazard classification	: FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 2
	AQUATIC HAZARD (LUNG-TERNI) - Calegory 2

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

Symbol

Signal word

Hazard statements

: Warning
: H226 - Flammable liquid and vapor.

- H315 Causes skin irritation.
- H351 Suspected of causing cancer.
- H373 May cause damage to organs through prolonged or repeated exposure.
- (central nervous system (CNS), kidneys, liver)
- H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

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Section 2. Hazards identification

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. P242 - Use non-sparking tools. P243 - Take action to prevent static discharges. P273 - Avoid release to the environment. P260 - Do not breathe vapor. P264 - Wash thoroughly after handling.
Response	 P391 - Collect spillage. P308 + P313 - IF exposed or concerned: Get medical advice or attention. P362 + P364 - Take off contaminated clothing and wash it before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water.
Storage	: P403 + P235 - Store in a well-ventilated place. Keep cool.
Disposal	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
C. Other hazards which do	: Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

CAS number/other identifiers

CAS number

not result in classification

: Not applicable.

Chemical name	Common name	Identifiers	%
titanium dioxide	TITANIUM DIOXIDE	CAS: 13463-67-7	10 -<20
Solvent naphtha (petroleum), light aromatic	SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC	CAS: 64742-95-6	5 - <10
1,2,4-trimethylbenzene	1,2,4-TRIMETHYL BENZENE	CAS: 95-63-6	1 - <5
n-butyl acetate	N-BUTYL ACETATE	CAS: 123-86-4	1 - <5
Xylene	XYLENES	CAS: 1330-20-7	1 - <5
Talc , not containing asbestiform fibres	Talc, non-asbestos form	CAS: 14807-96-6	1 - <5
trizinc bis(orthophosphate)	ZINC ORTHOPHOSPHATE	CAS: 7779-90-0	1 - <5
3-ethyltoluene	Benzene, 1-ethyl-3-methyl	CAS: 620-14-4	1 - <5
ethylbenzene	ETHYLBENZENE	CAS: 100-41-4	0.1 - <1
bis(1,2,2,6,6-pentamethyl-4-piperidyl)	BIS(PENTAMETHYLPIPERIDYL)	CAS: 41556-26-7	0.1 - <1
sebacate	SEBACATE		
titanium dioxide (<10 microns)	TITANIUM DIOXIDE (<10 microns)	CAS: 13463-67-7	0.1 - <1
propylidynetrimethanol	TRIMETHYLOLPROPANE	CAS: 77-99-6	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

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.
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.
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.
D.	Ingestion	:	If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
Ε.	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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

L				
	A.	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 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 sulfur oxides phosphorus 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.

Section 6. Accidental release measures

A. Personal precautions, protective equipment and emergency procedures	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
B. 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.
C. Methods and materials for	СС	intainment 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.
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

Α.	Precautions for safe handling	ot ha br wi in ve cc he (v Ta	ut on appropriate personal protective equipment (see Section 8). Avoid exposure - otain special instructions before use. Do not handle until all safety precautions ave been read and understood. Do not get in eyes or on skin or clothing. Do not reathe vapor or mist. Do not ingest. Avoid release to the environment. Use only ith adequate ventilation. Wear appropriate respirator when ventilation is adequate. Do not enter storage areas and confined spaces unless adequately entilated. Keep in the original container or an approved alternative made from a ompatible material, kept tightly closed when not in use. Store and use away from eat, sparks, open flame or any other ignition source. Use explosion-proof electrical rentilating, lighting and material handling) equipment. Use only non-sparking tools. ake precautionary measures against electrostatic discharges. Empty containers stain product residue and can be hazardous. Do not reuse container.
В.	Conditions for safe storage, including any incompatibilities	ac in ar lo co op st	tore between the following temperatures: 0 to 35°C (32 to 95°F). Store in coordance with local regulations. Store in a segregated and approved area. Store original container protected from direct sunlight in a dry, cool and well-ventilated rea, away from incompatible materials (see Section 10) and food and drink. Store cked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep ontainer tightly closed and sealed until ready for use. Containers that have been bened must be carefully resealed and kept upright to prevent leakage. Do not ore in unlabeled containers. Use appropriate containment to avoid environmental ontamination. See Section 10 for incompatible materials before handling or use.

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Section 8. Exposure controls/personal protection

A. Occupational exposure limits

Ingredient name		Exposure limits				
titanium dioxide		Ministry of Employment and Labor (Republic of Korea, 1/2020).				
		TWA: 10 mg/m ³ 8 hours. Form: total dust with less than 1% of free SiO2				
1,2,4-trimethylbenzene		Ministry of Employment and Labor (Republic of Korea, 1/2020). [Trimethyl benzene]				
		TWA: 25 ppm 8 hours.				
n-butyl acetate		Ministry of Employment and Labor				
5		(Republic of Korea, 1/2020).				
		STEL: 200 ppm 15 minutes.				
		TWA: 150 ppm 8 hours.				
Xylene		Ministry of Employment and Labor				
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		(Republic of Korea, 1/2020). [Xylene]				
		STEL: 150 ppm 15 minutes.				
		TWA: 100 ppm 8 hours.				
Talc , not containing asbes	tiform fibres	Ministry of Employment and Labor				
raio, not containing acces		(Republic of Korea, 1/2020).				
		TWA: 2 mg/m ³ 8 hours. Form: fibers				
ethylbenzene		Ministry of Employment and Labor				
etrybenzene		(Republic of Korea, 1/2020).				
		STEL: 125 ppm 15 minutes.				
		TWA: 100 ppm 8 hours.				
titanium dioxide (<10 micro	ns)	Ministry of Employment and Labor				
		(Republic of Korea, 1/2020).				
		TWA: 10 mg/m ³ 8 hours. Form: total dust				
		with less than 1% of free SiO2				
Recommended monitoring procedures		propriate monitoring standards. Reference to methods for the determination of hazardous				
Appropriate engineering	: Use only with adequate ventilatio	n. Use process enclosures, local exhaust				
controls	contaminants below any recomm	ontrols to keep worker exposure to airborne ended or statutory limits. The engineering controls lust concentrations below any lower explosive ation equipment.				
Environmental		k process equipment should be checked to ensure				
exposure controls	cases, fume scrubbers, filters or	s of environmental protection legislation. In some engineering modifications to the process educe emissions to acceptable levels.				
Personal protective equip	oment					
Respiratory protection	hazards of the product and the s workers are exposed to concent appropriate, certified respirators.	sed on known or anticipated exposure levels, the afe working limits of the selected respirator. If rations above the exposure limit, they must use Use a properly fitted, air-purifying or air-fed				

Eye protection

Β.

С.

Chemical splash goggles.

necessary.

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respirator complying with an approved standard if a risk assessment indicates this is

Section 8. Exposure controls/personal protection

Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Gloves	: For prolonged or repeated handling, use the following type of gloves:
	Recommended: neoprene, natural rubber (latex), Chloroprene, polyvinyl alcohol (PVA), Viton® May be used: butyl rubber Not recommended: nitrile 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.
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. 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	1	Not available.						
В.	Odor	1	Characteristic.						
С.	Odor threshold	1	Not available.						
D.	рН	:	Not applicable.						
Ε.	Melting/freezing point	1	Not available.						
F.	Boiling point/boiling range	:	>37.78°C (>100°F)						
G.	Flash point	:	Closed cup: 35°C (95	5°F)					
н.	Evaporation rate	:	Not available.						
Т.	Flammability (solid, gas)	:	Not available.						
J.	Lower and upper explosive (flammable) limits	:	Greatest known rang light aromatic)	e: Lower:	1.4% U	pper: 7.6% (S	olvent na	aphtha (p	etroleum),
К.	Vapor pressure	:		Vapor	[.] Pressu	re at 20°C	Vap	or press	ure at 50°C
			Ingredient name	mm Ha	kPa	Method	mm	kPa	Method

	Vapor Pressure at 20°C			Vapor pressure at 50°C			
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method	
p-butyl acetate	11.25096	1.5	DIN EN 13016-2				

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Section 9. Physical and chemical properties

Solubility(ies)		Media R	esult		
		cold water N	ot soluble		
Solubility in water	:	Not available.			
Vapor density	:	Not available.			
Relative density	:	1.51			
 Partition coefficient: n- octanol/water 	:	Not applicable.			
Auto-ignition temperature	:				
		Ingredient name	°C	°F	Method
		So lvent naphtha (petroleum), light aromatic	280 to 470	536 to 878	
Decomposition temperature	:	Not available.			
, Viscosity	:	Kinematic (40°C (104°F)): >2	1 mm²/s (>21	cSt)	
Flow time (ISO 2431)	1	Not available.			

Section 10. Stability and reactivity

Α.	Chemical stability	1	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	:	Depending on conditions, decomposition products may include the following materials: carbon oxides sulfur oxides phosphorus oxides metal oxide/oxides

Section 11. Toxicological information

 Information on th routes of exposure 	
Potential acute heal	th effects
Inhalation	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Skin contact	: Causes skin irritation. Defatting to the skin.
Eye contact	: No known significant effects or critical hazards.
Over-exposure sign	<u>s/symptoms</u>
Inhalation	: No specific data.
Ingestion	: No specific data.

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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
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	-
Solvent naphtha (petroleum), light aromatic	LD50 Dermal	Rabbit	3.48 g/kg	-
	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	-
Xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
,	LD50 Oral	Rat	4.3 g/kg	-
trizinc bis(orthophosphate)	LC50 Inhalation Dusts and	Rat	>5.7 mg/l	4 hours
	mists		Ŭ	
	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	-
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	LD50 Oral	Rat	3.125 g/kg	-
titanium dioxide (<10 microns)	LC50 Inhalation Dusts and mists	Rat	>6.82 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	_
	LD50 Oral	Rat	>5000 mg/kg	-
propylidynetrimethanol	LD50 Dermal	Rabbit	10 g/kg	-
	LD50 Oral	Rat	14000 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.				

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Section 11. Toxicological information

Respiratory	: There are no data available on the mixture itself.
Sensitization	
Conclusion/Summary	
Skin	: There are no data available on the mixture itself.
Respiratory	: 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.
oonolusion/ouninary	

Specific target organ toxicity (single exposure)

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

Name	Result
	ASPIRATION HAZARD - Category 1 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.	
Carcinogenicity	: Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.	

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Section 11. Toxicological information

Mutagenicity

: No known significant effects or critical hazards.

Reproductive toxicity : No known si

: 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.

Solvent naphtha (petroleum), light aromatic CAS: 64742-95-6 FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2 1,2,4-trimethylbenzene CAS: 95-63-6 FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (Inhalation) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2 ACUTE TOXICITY (Inhalation) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 AQUATIC HAZARD (LONG-TERM) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic Tedfects) - Category 3 AQUATIC HAZARD (LONG-TERM) - Category 3 AQUATIC HAZARD (LONG-TERM) - Category 3 ACUTE TOXICITY (Inhalation) - Category 4 ACUTE TOXICITY (Inhalation) - Category 3 ACUTE TOXICITY (Inhalation) - Category 3 ACUTE TOXICITY (Inhalation) - Category 4 ACUTE TOXICITY (Inhalation) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2 EYE IRRITATION - Category 2 EYE IRRITATION - Category 3 ACUTE TOXICITY (Inhalation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic TarGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic TarGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2 ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2 ACUTE TOXICITY (Inhalation) - Category 3 ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2 ACUTE TOXICITY (Inhalation) - Category 3 ACUTE TOXICITY (Inhalation) - Category 3 ACUTE TOXICITY (Inhala	Chemical name	Identifiers	GHS Classification
Skiin IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2 FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (Inhalation) - Category 4 SKIN IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 AQUATIC HAZARD (LONG-TERM) - Category 3 ACUTE TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 4 ACUTE TOXICITY (Inhalation) - Category 4 ACUTE TOXICITY (Inhalation) - Category 3 ACUTE TOXICITY (Inhalation) - Category 4 ACUTE TOXICITY (Inhalation) - Category 4 ACUTE TOXICITY (Inhalation) - Category 4 SKIN IRRITATION - Category 2 SECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ACUTE TOXICITY (Inhalation) - Category 2 SECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2 ASPIRATION HAZARD - Category 3 ASPIRATION HAZARD - Category 3 ASPIRA	iffanium dioxide Solvent naphtha (petroleum), light aromatic		
n-butyl acetate CAS: 123-86-4 CAS: 123-86-4 FLAMMABLE LIQUIDS - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2 EYE IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2 EYE IRRITATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 1 CAS: 14807-96-6 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 1 CAS: 7779-90-0 AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2 ethylbenzene CAS: 100-41-4 FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (inhalation) - Category 2 ACUTE TOXICITY (inhalation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2 ACUTE TOXICITY (inhalation) - Category 2 ACUTE TOXICITY (inhalation) - Category 2 ACUTE TOXICITY (inhalation) - Category 3 SPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2 ACUTE TOXICITY (inhalation) - Category 3 SPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2 ACUTE TOXICITY (inhalation) - Category 3 SPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 3 SPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 3 SPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 3 SPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 3 SPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 3 SPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 3 SPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 3 SPIRATION HAZARD (LONG-T	1,2,4-trimethylbenzene	CAS: 95-63-6	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2 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) -
XyleneCAS: 1330-20-7FLAMMABLÉ LIQUIDS - Category 3 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3Talc , not containing asbestiform fibresCAS: 14807-96-6SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3Talc , not containing asbestiform fibresCAS: 14807-96-6SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3Talc , not containing asbestiform fibresCAS: 14807-96-6SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3Talc , not containing asbestiform fibresCAS: 14807-96-6SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3Talc , not containing asbestiform fibresCAS: 14807-96-6SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3Talc , not containing asbestiform fibresCAS: 14807-96-6SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3Talc , not containing asbestiform fibresCAS: 7779-90-0AQUATIC HAZARD (LONG-TERM) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2 ACUTE TOXICITY (Inhalation) - Category 2 ACUTE TOXICITY (Inhalation) - Category 2 ACUTE TOXICITY (Inhalation) - Category 2 ASPIRATION	n-butyl acetate	CAS: 123-86-4	FLAMMABLE LIQUIDS - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE
Talc , not containing asbestiform fibresCAS: 14807-96-6SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3trizinc bis(orthophosphate)CAS: 7779-90-0AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1 	Xylene	CAS: 1330-20-7	FLAMMABLÉ 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 EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY
trizinc bis(orthophosphate)CAS: 7779-90-0AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1 Sethyltoluene3-ethyltolueneCAS: 620-14-4FLAMMABLE LIQUIDS - Category 3 ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2 FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (inhalation) - Category 4 CARCINOGENICITY - Category 1 AQUATIC HAZARD - Category 1 AQUATIC HAZARD - Category 2 ACUTE TOXICITY (inhalation) - Category 4 CARCINOGENICITY - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 3 SFIRATION HAZARD - Category 1 AQUATIC HAZARD - Category 2 ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 3 SKIN SENSITIZATION - Category 1B	Talc , not containing asbestiform fibres	CAS: 14807-96-6	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) -
3-ethyltoluene CAS: 620-14-4 FLAMMABLE LIQUIDS - Category 3 ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2 FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (inhalation) - Category 4 CARCINOGENICITY - Category 2 ASPIRATION HAZARD - Category 1 AQUATIC HAZARD - Category 1 AQUATIC HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 3 SKIN SENSITIZATION - Category 1B	trizinc bis(orthophosphate)	CAS: 7779-90-0	AQUATIC HAZARD (ACUTE) - Category 1
ethylbenzeneCAS: 100-41-4FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (inhalation) - Category 4 CARCINOGENICITY - Category 2 ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 3bis(1,2,2,6,6-pentamethyl-4-piperidyl)CAS: 41556-26-7SKIN SENSITIZATION - Category 1B	3-ethyltoluene	CAS: 620-14-4	FLAMMABLE LIQUIDS - Category 3 ASPIRATION HAZARD - Category 1
bis(1,2,2,6,6-pentamethyl-4-piperidyl) CAS: 41556-26-7 SKIN SENSITIZATION - Category 1B	ethylbenzene	CAS: 100-41-4	FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (inhalation) - Category 4 CARCINOGENICITY - Category 2 ASPIRATION HAZARD - Category 1
	bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	CAS: 41556-26-7	

Section 11. Toxicological information

titanium dioxide (<10 microns) propylidynetrimethanol

CAS: 13463-67-7 CAS: 77-99-6

TOXIC TO REPRODUCTION - Category 2 AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1 CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 2

Section 12. Ecological information

A. Ecotoxicity

Product/ingredient name	Result	Species	Exposure
titanium dioxide	Acute LC50 >100 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
Solvent naphtha	Acute LC50 8.2 mg/l	Fish	96 hours
(petroleum), light aromatic			
n-butyl acetate	Acute LC50 18 mg/l	Fish	96 hours
trizinc bis(orthophosphate)	Acute LC50 0.112 mg/l	Fish	96 hours
	Chronic NOEC 0.026 mg/l	Fish	30 days
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
titanium dioxide (<10	Acute LC50 >100 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
microns)			
propylidynetrimethanol	Acute LC50 >1000 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	radability
p-butyl acetate Xylene ethylbenzene	-		-		Readily Readily Readily	

C. Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
7,2,4-trimethylbenzene	3.63	120.23	Low
n-butyl acetate	2.3	-	Low
Xylene	3.12	7.4 to 18.5	Low
3-ethyltoluene	3.98	-	Low
ethylbenzene	3.6	79.43	Low
propylidynetrimethanol	-0.47	-	Low

D. Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

E. Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

- A. 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	II
Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.
E. Marine pollutant substances	Not applicable.	Solvent naphtha (petroleum), light aromatic)	Not applicable.

Additional information

IMDG

- UN : None identified.
 - : The marine pollutant mark is not required when transported in sizes of ≤ 5 L or ≤ 5 kg.
- **IATA** : The environmentally hazardous substance mark may appear if required by other transportation regulations.

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

Date of issue 9/1/2024 (month/day/year)

Version 3.03

Product name SIGMADUR 550H BASE RAL 7035

Section 15. Regulatory information

Α.	Regulation according to ISHA					
	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 Chem	ica	Il Substances and Physical Factors			
	The following components ifanium dioxide 1,2,4-trimethylbenzene n-butyl acetate Xylene Talc , not containing asbes ethylbenzene titanium dioxide (<10 micro	stif	orm fibres			
	ISHA Enforcement Regs Annex 19 (Exposure standards established for harmful factors)	:	None of the components are listed.			
	ISHA Enforcement Regs Annex 21 (Harmful factors subject to Work Environment Measurement)	:	The following components are listed: titanium dioxide, n-butyl acetate, xylene, talc / soapstone			
	ISHA Enforcement Regs Annex 22 (Harmful Factors Subject to Special Health Check- up)	:	The following components are listed: Xylene			
	Standard of Industrial Safety and Health Annex 12 (Hazardous substances subject to control)	:	The following components are listed: titanium dioxide, n-butyl acetate, xylene, zinc and its compounds			
В.	Regulation according to Chemicals Control Act					
	Article 11 (TRI)	:	The following components are listed: Barium and its compounds, Xylene including o- ,m-,p- isomer, Zinc and its compounds, Ethylbenzene			
	Article 18 Prohibited (K- Reach Article 27)	:	None of the components are listed.			
	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.			

Date of issue 9/1/2024 (month/day/year)

Version 3.03

Product name SIGMADUR 550H BASE RAL 7035

Section 15. Regulatory information

	Article 20 Toxic Chemicals (K-Reach Article 20)	:	Not applicable	
	Korea inventory	1	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.	
E. <u>Regulation according to other 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).	

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	: 7/15/2021	
C.	Date of issue/Date of revision	: 9/1/2024	
D.	Version	: 3.03	
	Prepared by	: EHS	

E. 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.