SAFETY DATA SHEET



Date of issue 12/13/2024 (month/day/year)

Version 1.03

Section 1. Chemical product and company identification

Α.	Product name :		SIGMADUR 550 BASE RAL 2002
	Product code	1	000001202637

Other means of identification 00347029

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

Product use	: Professional applications, Used by spraying.
Use of the substance/ mixture	: 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 EYE IRRITATION - Category 2A CARCINOGENICITY - Category 1A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 3
	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 Symbol :

Signal word

: Danger

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Section 2. Hazards identification

	Hazard statements	-	 H226 - Flammable liquid and vapor. H315 - Causes skin irritation. H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness. H350 - May cause cancer. H372 - Causes damage to organs through prolonged or repeated exposure. (central nervous system (CNS), kidneys, liver) H412 - Harmful to aquatic life with long lasting effects.
	Precautionary statements		
	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. P270 - Do not eat, drink or smoke when using this product. 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. 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	1	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.
) .	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

С

: Not applicable.

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Section 3. Composition/information on ingredients

Chemical name	Common name	Identifiers	%
Xylene	XYLENES	CAS: 1330-20-7	20 -
			<30
		EC: 215-535-7	
n-butyl acetate	N-BUTYL ACETATE	CAS: 123-86-4	5 - <10
		EC: 204-658-1	
ethylbenzene	ETHYLBENZENE	CAS: 100-41-4	1 - <5
		EC: 202-849-4	
Talc , not containing asbestiform fibres	Talc, non-asbestos form	CAS: 14807-96-6	1 - <5
		EC: 238-877-9	
iron hydroxide oxide yellow	IRON HYDROXIDE OXIDE	CAS: 51274-00-1	1 - <5
		EC: 257-098-5	
crystalline silica, respirable powder (<10 microns)	QUARTZ (<10 microns)	CAS: 14808-60-7	0.1 - <1
		EC: 238-878-4	
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	BIS(PENTAMETHYLPIPERIDYL) SEBACATE	CAS: 41556-26-7	0.1 - <1
		EC: 255-437-1	
trizinc bis(orthophosphate)	ZINC ORTHOPHOSPHATE	CAS: 7779-90-0	0.1 - <1
		EC: 231-944-3	
Toluene	TOLUENE	CAS: 108-88-3	0.1 - <1
		EC: 203-625-9	

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.
Е.	Notes to physician	;	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	Specific treatments	:	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.

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Section 4. First aid measures

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Α.	Extinguishing media		
	Suitable extinguishing media	1	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 nitrogen oxides sulfur oxides halogenated compounds 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.
C. Methods and materials for	co	ntainment 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 noncombustible, 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). 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.
n-butyl acetate	ISHA Article 42 (Republic of Korea,
	1/2020)
	STEL 15 minutes: 200 ppm.
	TWA 8 hours: 150 ppm.
ethylbenzene	ISHA Article 42 (Republic of Korea,
	1/2020)
	STEL 15 minutes: 125 ppm.
	TWA 8 hours: 100 ppm.
Talc , not containing asbestiform fibres	ISHA Article 42 (Republic of Korea,
	1/2020)
	TWA 8 hours: 2 mg/m³ (as asbestos).
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Section 8. Exposure controls/personal protection

L	iron hydroxide oxide yellov	V		Form: fibers. ISHA Article 42 (Republic of Korea, 1/2020) [Iron oxide] TWA 8 hours: 5 mg/m ³ (as Fe). Form: Fume. TWA 8 hours: 5 mg/m ³ (as Fe).
	crystalline silica, respirable	e powder (<10	microns)	TWA 8 hours: 5 mg/m ³ (as Fe). ISHA Article 42 (Republic of Korea, 1/2020) TWA 8 hours: 0.05 mg/m ³ . Form:
	Toluene			Respirable fraction. ISHA Article 42 (Republic of Korea, 1/2020) STEL 15 minutes: 150 ppm. TWA 8 hours: 50 ppm.
	Recommended monitoring procedures	national gui		opriate monitoring standards. Reference to ethods for the determination of hazardous
в.	Appropriate engineering controls	ventilation of contaminar also need to	or other engineering con ts below any recommen	Use process enclosures, local exhaust trols to keep worker exposure to airborne ided or statutory limits. The engineering controls st concentrations below any lower explosive on equipment.
	Environmental exposure controls	they comply cases, fum	y with the requirements of scrubbers, filters or en	process equipment should be checked to ensure of environmental protection legislation. In some gineering modifications to the process uce emissions to acceptable levels.
С.	Personal protective equip	ment		
	Respiratory protection	: Respirator hazards of workers ar appropriate	the product and the safe e exposed to concentrat e, certified respirators. L complying with an appro-	d on known or anticipated exposure levels, the e working limits of the selected respirator. If ions above the exposure limit, they must use Jse a properly fitted, air-purifying or air-fed ved standard if a risk assessment indicates this is
	Eye protection	: Chemical s	splash goggles.	
	Hand protection	be worn at this is nece check durin should be different fo	all times when handling essary. Considering the ng use that the gloves an noted that the time to bro r different glove manufa ostances, the protection	ves complying with an approved standard should chemical products if a risk assessment indicates parameters specified by the glove manufacturer, re still retaining their protective properties. It eakthrough for any glove material may be cturers. In the case of mixtures, consisting of time of the gloves cannot be accurately
	Body protection	being perfo before han wear anti-s	ormed and the risks invo dling this product. Whe static protective clothing.	the body should be selected based on the task lved and should be approved by a specialist n there is a risk of ignition from static electricity, For the greatest protection from static anti-static overalls, boots and gloves.

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Section 8. Exposure controls/personal protection

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Hygiene measures
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: 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.

A. Appearance

Physica	l state
Color	

- : Liquid.
- **B.** Odor
- : Orange.
 - Aromatic. [Slight]

: Not available.

- C. Odor threshold
- D. pH

Ι.

Μ.

N.

0.

- : Not applicable. : Not available.
- E. Melting/freezing point
- F. Boiling point/boiling range
- : Closed cup: 33°C (91.4°F)

: >37.78°C (>100°F)

H. Evaporation rate

G. Flash point

- Flammability (solid, gas) : Not available.
- J. Lower and upper
- explosive (flammable) limits
- K. Vapor pressure

L. Solubility(ies)

Vapor pressure		Vapo	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				
Solubility(ies)	Media	Re	Result					
	cold water	No	ot solubl	е				
Solubility in water	: Not available.							
Vapor density	: Not available.							
Relative density	: 1.31							
Partition coefficient: n- octanol/water	: Not applicable.							
Auto-ignition								

Auto-ignition

1	tem	pera	ature	9	

Ingredient name	°C	°F	Method
p≁butyl acetate	415	779	EU A.15

- **Decomposition** Q.
- : Not available.

temperature

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- : Not available.
- - : Not available.

Section 9. Physical and chemical properties

R.	Viscosity	:	Dynamic (room temperature): Not available. Kinematic (room temperature): >400 mm²/s (>400 cSt) 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	:	Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur oxides halogenated compounds metal oxide/oxides

Section 11. Toxicological information

A. Information on the likely routes of exposure

: Not available.

Potential acute health effects

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.
Eye contact	: Causes serious eye irritation.
Over-exposure sign	<u>s/symptoms</u>
Inhalation	: Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Ingestion	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation redness dryness

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

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Section 11. Toxicological information

B. Health hazards

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
X ylene	LD50 Dermal	Rabbit	1.7 g/kg	-
-	LD50 Oral	Rat	4.3 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	-
iron hydroxide oxide yellow	LC50 Inhalation Dusts and	Rat	>5.05 mg/l	4 hours
	mists			
	LD50 Oral	Rat	>10 g/kg	-
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	LD50 Oral	Rat	3.125 g/kg	-
trizinc bis(orthophosphate)	LC50 Inhalation Dusts and mists	Rat	>5.7 mg/l	4 hours
	LD50 Oral	Rat	>5000 mg/kg	-
Toluene	LC50 Inhalation Vapor	Rat	49 g/m³	4 hours
	LD50 Dermal	Rabbit	8.39 g/kg	-
	LD50 Oral	Rat	5580 mg/kg	-

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

Irritation/Corrosion

Product/ingredient name		Result	Species	Score	Exposure	Observation
Xylene		Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Conclusion/Summary			-		·	
Skin	: Т	here are no data available or	n the mixture its	elf.		
Eyes	: T	here are no data available or	n the mixture its	elf.		
Respiratory	: Т	here are no data available or	n the mixture its	elf.		
<u>Sensitization</u> <u>Conclusion/Summary</u> Skin Respiratory	• • • •	ere are no data available on ere are no data available on				
<u>Mutagenicity</u> Conclusion/Summary	: Tł	nere are no data available on	the mixture itse	elf.		
Carcinogenicity Conclusion/Summary	: TI	here are no data available or	n the mixture its	elf.		
Reproductive toxicity Conclusion/Summary	: т	here are no data available o	n the mixture its	elf.		

Section 11. Toxicological information

Teratogenicity

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

Specific target organ toxicity (single exposure)

Classification	Route of exposure	Target organs
Category 3 Category 3 Category 3	-	Narcotic effects Narcotic effects Respiratory tract irritation Narcotic effects
	Category 3 Category 3	exposureCategory 3-Category 3-Category 3-

Specific target organ toxicity (repeated exposure)

Name	Classification	Route of exposure	Target organs
Xylene	Category 1		central nervous system (CNS), kidneys, liver
Toluene	Category 2	-	-

Aspiration hazard

Name	Result	
ethylbenzene	ASPIRATION HAZARD - Category 1	
Toluene	ASPIRATION HAZARD - Category 1	

Potential chronic health effects

General	: Causes 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 Mutagenicity	 May cause cancer. Risk of cancer depends on duration and level of exposure. 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
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 EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY
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Section 11. Toxicological information

L		(REPEATED EXPOSURE) - Category 1
n-butyl acetate	CAS: 123-86-4	FLAMMABLE LIQUIDS - Category 2
n-butyr acciate	EC: 204-658-1	SPECIFIC TARGET ORGAN TOXICITY (SINGLE
	LO: 204-030-1	EXPOSURE) (Narcotic effects) - Category 3
ethylbenzene	CAS: 100-41-4	FLAMMABLE LIQUIDS - Category 2
ethylberizerie	EC: 202-849-4	ACUTE TOXICITY (inhalation) - Category 4
	LO: 202-049-4	CARCINOGENICITY - Category 2
		ASPIRATION HAZARD - Category 1
		AQUATIC HAZARD (LONG-TERM) - Category 3
Talc , not containing asbestiform fibres	CAS: 14807-96-6	SPECIFIC TARGET ORGAN TOXICITY (SINGLE
Tale, not containing assessment indies	0.14007-30-0	EXPOSURE) (Respiratory tract irritation) -
		Category 3
	EC: 238-877-9	outogory o
iron hydroxide oxide yellow	CAS: 51274-00-1	Not classified.
	EC: 257-098-5	
crystalline silica, respirable powder (<10	CAS: 14808-60-7	CARCINOGENICITY - Category 1A
microns)		······································
,	EC: 238-878-4	
bis(1,2,2,6,6-pentamethyl-4-piperidyl)	CAS: 41556-26-7	SKIN SENSITIZATION - Category 1B
sebacate		
	EC: 255-437-1	TOXIC TO REPRODUCTION - Category 2
		AQUATIC HAZARD (ACUTE) - Category 1
		AQUATIC HAZARD (LONG-TERM) - Category 1
trizinc bis(orthophosphate)	CAS: 7779-90-0	AQUATIC HAZARD (ACUTE) - Category 1
	EC: 231-944-3	AQUATIC HAZARD (LONG-TERM) - Category 1
Toluene	CAS: 108-88-3	FLAMMABLE LIQUIDS - Category 2
	EC: 203-625-9	SKIN IRRITATION - Category 2
		TOXIC TO REPRODUCTION - Category 2
		SPECIFIC TARGET ORGAN TOXICITY (SINGLE
		EXPOSURE) (Narcotic effects) - Category 3
		SPECIFIC TARGET ORGAN TOXICITY
		(REPEATED EXPOSURE) - Category 2
		ASPIRATION HAZARD - Category 1

Section 12. Ecological information

A. Ecotoxicity

Product/ingredient name	Result	Species	Exposure
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	-
iron hydroxide oxide yellow	Acute LC50 >100000 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

B. Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
-butyl acetate	TEPA and OECD 301D	83 % - Readily - 28 days	-	-
ethylbenzene	-	79 % - Readily - 10 days	-	-

Section 12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
X ylene	-	-	Readily
n-butyl acetate	-	-	Readily
ethylbenzene	-	-	Readily
Toluene	-	-	Readily

C. Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
X ylene	3.12	7.4 to 18.5	Low
n-butyl acetate	2.3	-	Low
ethylbenzene	3.6	79.43	Low
Toluene	2.73	8.32	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

- 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	111		
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Section 14. Transport information

Environmental hazards	No.	No.	No.	
E. Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	

Additional information

UN	: This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5.1.
IMDG	 This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5.
ΙΑΤΑ	: 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

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 Chemical Substances and Physical Factors

The following components have an OEL:

ISHA Enforcement Regs Annex 19 (Exposure standards established for harmful factors)	: The following components are listed: toluene
ISHA Enforcement Regs Annex 11-5 (Harmful factors subject to Work Environment Measurement)	: The following components are listed: xylene, n-butyl acetate, ethyl benzene, talc / soapstone, iron oxide

Date of issue ^{12/13/2024} (month/day/year)

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Product name SIGMADUR 550 BASE RAL 2002

Section 15. Regulatory information

	ISHA Enforcement Regs Annex 22 (Harmful Factors Subject to Special Health Check- up)	•	The following components are listed: Xylene, Ethyl benzene, Iron oxide (dust, fume)
	Standard of Industrial Safety and Health Annex 12 (Hazardous substances subject to control)	:	The following components are listed: xylene, n-butyl acetate, ethyl benzene, iron and its compounds
В.	Regulation according to (Che	emicals Control Act
	Article 11 (TRI)	1	The following components are listed: Barium and its compounds, Xylene including o- ,m-,p- isomer, Ethylbenzene, Vanadium and its compounds
	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.
	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.	<u>Dangerous Materials</u> <u>Safety Management Act</u>	:	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	1	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Е.	Regulation according to o	oth	er foreign laws
	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

A. 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.
B. First issue date	: 6/11/2024

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Section 16. Other information

C.	Date of issue/Date of revision	:	12/13/2024
D.	Version	:	1.03
	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.