SAFETY DATA SHEET



Date of issue 1/28/2021 (month/day/year)

Version 8.01

Section 1. Chemical product and company identification

A. Product name	SIG	MADUR 550 BASE RAL 9004
Product code	003	345784

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 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:	:	+82-52-210-8222

Section 2. Hazards identification

A. Hazard classification	: FLAMMABLE LIQUIDS - Category 3	
	SKIN CORROSION/IRRITATION - Category 2	
	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2	
	SKIN SENSITIZATION - Category 1	
	CARCINOGENICITY - Category 2	
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -	
	Category 3	
	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1	
This product is closelified in apportance with the Industrial Safety and Health Act and the Chemical Control Act		

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

Date of issue 1/28/2021 (month/day/year)

Product name SIGMADUR 550 BASE RAL 9004

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. H372 - Causes damage to organs through prolonged or repeated exposure. (central nervous system (CNS), kidneys, liver)
Precautionary statements	
Prevention	 P201 - Obtain special instructions before use. 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. P260 - Do not breathe vapor. P270 - Do not eat, drink or smoke when using this product. P264 - Wash thoroughly after handling.
Response	 F308 + P313 - IF exposed or concerned: Get medical advice or attention. P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell. P362 + P364 - Take off contaminated clothing and wash it before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water. 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.
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.
 Other hazards which do not result in classification 	: P rolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

CAS number/other identifiers

|--|

: Not applicable.

Chemical name	Common name	Identifiers	%
X ylene	XYLENES	CAS: 1330-20-7	20 - <30
Talc , not containing asbestiform fibres	Talc, non-asbestos form	CAS: 14807-96-6	10 -<20
n-butyl acetate	N-BUTYL ACETATE	CAS: 123-86-4	5 - <10
ethylbenzene	ETHYLBENZENE	CAS: 100-41-4	1 - <5
Octadecanamide, N,N'-1,6-hexanediylbis	N,N-1,6-HEXANEDIYLBIS	CAS: 55349-01-4	1 - <5
[12-hydroxy-	(12-HYDROXY-OCTADECANEIMIDE)		
carbon black, respirable powder	CARBON BLACK	CAS: 1333-86-4	1 - <5
2-butoxyethanol	2-BUTOXY ETHANOL	CAS: 111-76-2	0.1 - <1
bis(1,2,2,6,6-pentamethyl-4-piperidyl)	BIS(PENTAMETHYLPIPERIDYL)	CAS: 41556-26-7	0.1 - <1
sebacate	SEBACATE		
cyclohexanone	CYCLOHEXANONE	CAS: 108-94-1	0.1 - <1
		Korea (GHS)	Page: 2/14

Product name SIGMADUR 550 BASE RAL 9004

Section 3. Composition/information on ingredients

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

See toxicological information (Section 11)

Section 5. Fire-fighting measures

			Korea (GHS) Page: 3/14
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.
	Hazardous thermal decomposition products	:	Decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur oxides metal oxide/oxides
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.
	Unsuitable extinguishing media	:	Do not use water jet.
	Suitable extinguishing media	:	Use dry chemical, CO ₂ , water spray (fog) or foam.
Α.	Extinguishing media		

Section 5. Fire-fighting measures

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).

C. Methods and materials for containment 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 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 Put on appropriate personal protective equipment (see Section 8). Eating, drinking handling and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. 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 non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Korea (GHS) Page: 4/14

Section 7. Handling and storage

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
X ylene	Ministry of Employment and Labor
	(Republic of Korea, 1/2020).
	STEL: 150 ppm 15 minutes.
	TWA: 100 ppm 8 hours.
Talc , not containing asbestiform fibres	ACGIH TLV (United States, 3/2019).
	TWA: 2 mg/m ³ 8 hours. Form: Respirable
n-butyl acetate	Ministry of Employment and Labor
	(Republic of Korea, 1/2020).
	STEL: 200 ppm 15 minutes.
ethylbenzene	TWA: 150 ppm 8 hours. Ministry of Employment and Labor
ethylbenzene	(Republic of Korea, 1/2020).
	STEL: 125 ppm 15 minutes.
	TWA: 100 ppm 8 hours.
carbon black, respirable powder	Ministry of Employment and Labor
	(Republic of Korea, 1/2020).
	TWA: 3.5 mg/m ³ 8 hours. Form: inhalable
	fraction
2-butoxyethanol	Ministry of Employment and Labor
	(Republic of Korea, 1/2020). Absorbed
	through skin.
	TWA: 20 ppm 8 hours.
cyclohexanone	Ministry of Employment and Labor
	(Republic of Korea, 1/2020). Absorbed
	through skin.
	TWA: 25 ppm 8 hours.
	STEL: 50 ppm 15 minutes.

standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
 B. Appropriate engineering controls
 Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

protective equipment. Reference should be made to appropriate monitoring

Korea (GHS) Page: 5/14

Section 8. Exposure controls/personal protection

	Environmental exposure controls		Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
С.	Personal protective equip	pme	ent
	Respiratory protection	:	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.
	Eye protection	1	Chemical splash goggles.
	Hand protection	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
	Gloves	:	butyl rubber
	Body protection	:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
	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

Α.	Appearance	
	Physical state	: Liquid.
	Color	: Black.
В.	Odor	: Not available.
C .	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	: Closed cup: 29°C (84.2°F)
н.	Evaporation rate	: Not available.

I. Flammability (solid, gas) : Not available.

J.	Lower and upper explosive (flammable) limits	-	Greatest known range: Lower: 1.4% Upper: 7.6% (n-butyl acetate)
Κ.	Vapor pressure	:	Not available.
L.	Solubility	1	Insoluble in the following materials: cold water.
	Solubility in water	:	Not available.
Μ.	Vapor density	:	Not available.
Ν.	Relative density	:	1.27
0.	Partition coefficient: n- octanol/water	:	Not available.
Ρ.	Auto-ignition temperature	:	Not available.
Q.	Decomposition temperature	:	Not available.
R.	Viscosity	:	Kinematic (40°C (104°F)): >0.21 cm²/s (>21 cSt)
S.	Molecular weight	:	Not applicable.

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 nitrogen oxides sulfur oxides metal oxide/oxides

Section 11. Toxicological information

A. Information on the lik routes of exposure	xely : Not available.
Potential acute health e	ffects
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	: Causes serious eye irritation.
Over-exposure signs/sy	ymptoms

Section 11. Toxicological information

Inhalation	Adverse symptoms may include the followi nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness	ng:
Ingestion	No specific data.	
Skin contact	Adverse symptoms may include the followi irritation redness dryness cracking	ng:
Eye contact	Adverse symptoms may include the followi pain or irritation watering redness	ng:

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	-
carbon black, respirable powder	LD50 Oral	Rat	>10 g/kg	-
2-butoxyethanol	LD50 Dermal	Rabbit	1060 mg/kg	-
	LD50 Oral	Rat - Male	1480 mg/kg	-
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	LD50 Oral	Rat	3.125 g/kg	-
cyclohexanone	LC50 Inhalation Gas.	Rat	8000 ppm	4 hours
,	LC50 Inhalation Vapor	Rat	11 mg/l	4 hours
	LD50 Dermal	Rabbit	1100 mg/kg	-
	LD50 Oral	Rat	1.54 g/kg	-

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

Irritation/Corrosion

	Species	Score	Exposure	Observation
Skin - Moderate irritant	Rabbit	-	24 hours 500	-
Skin - Moderate irritant	Rabbit	-	mg 4 hours	28 days
Eyes - Irritant	Rabbit	-	24 hours	21 days
: There are no data available on the mixture itself.				
: There are no data available on the mixture itself.				
: There are no data available on the mixture itself.				
	Skin - Moderate irritant Eyes - Irritant There are no data available There are no data available	Skin - Moderate irritant Eyes - IrritantRabbit RabbitThere are no data available on the mixture There are no data available on the mixture	Skin - Moderate irritant Eyes - IrritantRabbit Rabbit-There are no data available on the mixture itself. There are no data available on the mixture itself.	Skin - Moderate irritant Rabbit - mg Skin - Moderate irritant Rabbit - 4 hours Eyes - Irritant Rabbit - 24 hours There are no data available on the mixture itself. There are no data available on the mixture itself.

Korea (GHS) Page: 8/14

Section 11. Toxicological information

Sensitization Conclusion/Summary	
Skin Respiratory	There are no data available on the mixture itself.There are no data available on the mixture itself.
<u>Mutagenicity</u> Conclusion/Summary	: There are no data available on the mixture itself.
Carcinogenicity Conclusion/Summary	: There are no data available on the mixture itself.
Reproductive toxicity Conclusion/Summary	: There are no data available on the mixture itself.

Teratogenicity

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

Specific target organ toxicity (single exposure)

Name	Classification	Route of exposure	Target organs
Xylene Talc , not containing asbestiform fibres	Category 3 Category 3	-	Narcotic effects Respiratory tract irritation
n-butyl acetate	Category 3		Narcotic effects

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
ethylbenzene	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. 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

Korea (GHS) Page: 9/14

Product name SIGMADUR 550 BASE RAL 9004

Section 11. Toxicological information

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

Chemical name	Common name	CAS #	GHS Classification
₩ylene	XYLENES	1330-20-7	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY
Talc , not containing asbestiform fibres	Talc, non-asbestos form	14807-96-6	(REPEATED EXPOSURE) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract
n-butyl acetate	N-BUTYL ACETATE	123-86-4	irritation) - Category 3 FLAMMABLE LIQUIDS - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
ethylbenzene	ETHYLBENZENE	100-41-4	FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (inhalation) - Category 4 CARCINOGENICITY - Category 2 ASPIRATION HAZARD - Category 1
Octadecanamide, N, N'-1,6-hexanediylbis [12-hydroxy-	N,N-1,6-HEXANEDIYLBIS (12-HYDROXY- OCTADECANEIMIDE)	55349-01-4	SKIN SENSITIZATION - Category 1 AQUATIC HAZARD (LONG-TERM) -
carbon black, respirable powder	CARBON BLACK	1333-86-4	Category 4 CARCINOGENICITY - Category 2
2-butoxyethanol	2-BUTOXY ETHANOL	111-76-2	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 CARCINOGENICITY - Category 2
bis(1,2,2,6,6-pentamethyl- 4-piperidyl) sebacate	BIS (PENTAMETHYLPIPERIDYL) SEBACATE	41556-26-7	SKIN SENSITIZATION - Category 1
cyclohexanone	CYCLOHEXANONE	108-94-1	AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1 FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4
	·	-	Korea (GHS) Page: 10/14

Section 11. Toxicological information

SKIN CORROSION/IRRITATION -Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 GERM CELL MUTAGENICITY - Category 2 CARCINOGENICITY - Category 2

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 LC50 150 to 200 mg/l Fresh water	Fish	96 hours
2-butoxyethanol	Acute LC50 1474 mg/l	Fish	96 hours
	Chronic NOEC >100 mg/l	Fish	21 days

B. Persistence and degradability

Product/ingredient name	Test	Result		Dose		Inoculum
n-butyl acetate	TEPA and OECD 301D	83 % - Readily - 28 days		-		-
Product/ingredient name	Aquatic half-life		Photolysis		Biodeg	radability
₩ylene n-butyl acetate ethylbenzene 2-butoxyethanol	- - -		- - -		Readily Readily Readily Readily	

C. Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Xylene	3.16	7.4 to 18.5	low
n-butyl acetate	1.78	-	low
ethylbenzene	3.15	79.43	low
2-butoxyethanol	0.81	-	low
cyclohexanone	0.81	-	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	III
Environmental hazards	No.	No.	No.
E. Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

Additional 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

Date of issue 1/28/2021 (month/day/year)

Version 8.01

Product name SIGMADUR 550 BASE RAL 9004

Section 15. Regulatory information

Α.	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 Chem	ica	al Substances and Physical Factors			
	The following components Vene Talc, not containing asbes n-butyl acetate ethylbenzene carbon black, respirable p	stif	orm fibres			
	2-butoxyethanol cyclohexanone					
	ISHA Enforcement Regs Annex 19 (Exposure standards established for harmful factors)	:	The following components are listed: cyclohexanone			
	ISHA Enforcement Regs Annex 21 (Harmful factors subject to Work Environment Measurement)	:	The following components are listed: xylene, ethyl benzene, talc; soapstone, n-butyl acetate			
	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, ethyl benzene, n-butyl acetate			
B. Regulation according to Chemicals Control Act						
	CCA Article 11 (TRI)	The following components are listed: Xylene including o-,m-,p- isomer, Ethylbenzene, Barium and its compounds				
	CCA Article 18 Prohibited (K-Reach Article 27)	:	None of the components are listed.			
	CCA Article 19 Subject to authorization (K- Reach Article 25)	:	None of the components are listed.			

Date of issue 1/28/2021 (month/day/year)

Version 8.01

Product name SIGMADUR 550 BASE RAL 9004

Section 15. Regulatory information

	CCA Article 20 Restricted (K-Reach Article 27)	:	None of the components are listed.	
	CCA Article 20 Toxic Chemicals (K-Reach Article 20)	:	Not applicable	
	Korea inventory	1	All components are listed or exempted.	
	CCA 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	1	Dispose of contents and container in accordance with all local, regional, national and international regulations.	
Ε.	Regulation according to other 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

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.	Date of issue/Date of revision	1/28/2021	
C.	Version	8.01	
	Prepared by	EHS	
П	Other		

D. Other

✓ Indicates information that has changed from previously issued version.

<u>Disclaimer</u>

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.