SAFETY DATA SHEET



Date of issue/Date of revision20 December 2023Version 3.03

Section 1. Identification		
Product code	: 00393279	
Product name	: SIGMADUR 550 BASE BLACK 8000	
Product type	: Liquid.	
Relevant identified uses of the substance or mixture and uses advised against		
Product use	Coating. Professional applications, Used by spraying.	
Supplier's details	: PPG Industries (Singapore) Pte. Ltd., No. 1 Tuas Basin Close, Singapore 638803. Tel +65 68653737	
Emergency telephone number (with hours of operation)	: CHEMTREC +(65)-31581349 (CCN 17704)	

Section 2. Hazards identification

Classification of the substance or mixture	 FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A SKIN SENSITISATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 2
	irritation) - Category 3

GHS label elements, including precautionary statements

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Hazard pictograms

Signal word	: Warning
Hazard statements	 Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation.
Precautionary statements	

Section 2. Hazards identification

Prevention	: ₩ear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid breathing vapour. Wash thoroughly after handling.
Response	: IF INHALED: Call a POISON CENTER or doctor if you feel unwell. Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.
Storage	: Store in a well-ventilated place. Keep container tightly closed.
Disposal	: Not applicable.

result in classification

Other hazards which do not : Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

: Mixture

Substan	ce/mixture	
oubstan	CC/IIIALUI C	

CAS number/other identifiers

CAS number EC number	Not applicable.Mixture.		
Ingredient name		%	CAS number
X /lene		20 - <25	1330-20-7
Talc , not containing asbestiform fibres		10 - <20	14807-96-6
n-butyl acetate		5 - <10	123-86-4
ethylbenzene		3 - <5	100-41-4
Octadecanamide, N,N'-1,6-hexanediylbis[12-hydroxy-		1 - <3	55349-01-4
2-butoxyethanol		0.3 - <1	111-76-2
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate		0.1 - <0.3	41556-26-7

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.

SUB codes represent substances without registered CAS Numbers.

Section 4. First aid measures

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

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Section 4. First aid measures

Ingestion

: If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effe	<u>S</u>
Eye contact	Causes serious eye irritation.
Inhalation	: Harmful if inhaled. May cause respiratory irritation.
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/symp	<u>oms</u>
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking
Ingestion	: No specific data.
Indication of immediate me	cal attention and special treatment needed, if necessary
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.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.

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Section 5. Firefighting measures

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Specific hazards arising from the chemical	: Flammable liquid and vapour. 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.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur oxides metal oxide/oxides
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protect	ive equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	: Avoid dispersal of spilt 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).
Methods and material for cont	ainment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the 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 spill product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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Section 6. Accidental release measures

		appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising 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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
<mark>x</mark> ylene	Workplace Safety and Health Act (Singapore, 2/2006). [Xylene] PEL (short term): 651 mg/m ³ 15 minutes. PEL (short term): 150 ppm 15 minutes. PEL (long term): 434 mg/m ³ 8 hours. PEL (long term): 100 ppm 8 hours.
Talc , not containing asbestiform fibres	Workplace Safety and Health Act (Singapore, 2/2006). PEL (long term): 2 mg/m ³ 8 hours.
n-butyl acetate	Workplace Safety and Health Act (Singapore, 2/2006). PEL (short term): 950 mg/m ³ 15 minutes. PEL (short term): 200 ppm 15 minutes. PEL (long term): 713 mg/m ³ 8 hours. PEL (long term): 150 ppm 8 hours.
ethylbenzene	Workplace Safety and Health Act (Singapore, 2/2006). PEL (short term): 543 mg/m ³ 15 minutes. PEL (short term): 125 ppm 15 minutes. PEL (long term): 434 mg/m ³ 8 hours.

Section 8. Exposure controls/personal protection

2-butoxyethanol			PEL (long term): 100 ppm 8 hours. Workplace Safety and Health Act (Singapore, 2/2006). PEL (long term): 121 mg/m ³ 8 hours. PEL (long term): 25 ppm 8 hours.	
Recommended monitoring procedures	:		riate monitoring standards. Reference to hods for the determination of hazardous	
Appropriate engineering controls	:	contaminants below any recommende	ols to keep worker exposure to airborne ed or statutory limits. The engineering controls t concentrations below any lower explosive	
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.		
Individual protection measur	<u>es</u>			
Hygiene measures	:	eating, smoking and using the lavator Appropriate techniques should be use Contaminated work clothing should no	bughly after handling chemical products, before y and at the end of the working period. ed to remove potentially contaminated clothing. bt be allowed out of the workplace. Wash Ensure that eyewash stations and safety location.	
Eye/face protection	:	Chemical splash goggles.		
Skin protection				
Hand protection	:	be worn at all times when handling ch this is necessary. Considering the pa check during use that the gloves are s should be noted that the time to break	s complying with an approved standard should emical products if a risk assessment indicates rameters specified by the glove manufacturer, still retaining their protective properties. It athrough for any glove material may be rers. In the case of mixtures, consisting of the of the gloves cannot be accurately	
Gloves	:	butyl rubber		
Body protection	:	being performed and the risks involve		
Other skin protection	:		nal skin protection measures should be formed and the risks involved and should be ing this product.	

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Section 8. Exposure controls/personal protection

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.
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Section 9. Physical and chemical properties

<u>Appearance</u>		
Physical state	:	Liquid.
Colour	:	Black.
рН	:	insoluble in water.
Boiling point	:	>37.78°C (>100°F)
Flash point	:	Closed cup: 25°C (77°F)
Evaporation rate	:	Highest known value: 1 (n-butyl acetate) Weighted average: 0.82compared with butyl acetate
Flammability (solid, gas)	:	liquid
Vapour pressure	:	Highest known value: 1.5 kPa (11.3 mm Hg) (at 20°C) (n-butyl acetate). Weighted average: 1.03 kPa (7.73 mm Hg) (at 20°C)
Vapour density	1	Highest known value: 4 (Air = 1) (n-butyl acetate). Weighted average: 3.75 (Air = 1)
Relative density	:	1.31
Colubility/ico)		Media Result
Solubility(ies)	-	old water Not soluble
Auto-ignition temperature	:	Lowest known value: 415°C (779°F) (n-butyl acetate).
Viscosity	:	Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt)

Section 10. Stability and reactivity

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Hazardous decomposition products	: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur oxides metal oxide/oxides	
Incompatible materials	: Keep away from the following materials to prevent strong exothermic reaction oxidising agents, strong alkalis, strong acids.	ıs:
Conditions to avoid	: When exposed to high temperatures may produce hazardous decomposition products.	I
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occ	sur.
Chemical stability	: The product is stable.	
Reactivity	: No specific test data related to reactivity available for this product or its ingrec	lients.

Section 11. Toxicological information

Information on toxicological effects

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 Vapour	Rat	>21.1 mg/l	4 hours
-	LC50 Inhalation Vapour	Rat	2000 ppm	4 hours
	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10.768 g/kg	-
ethylbenzene	LC50 Inhalation Vapour	Rat	17.8 mg/l	4 hours
-	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
2-butoxyethanol	LC50 Inhalation Vapour	Rat	3 mg/l	4 hours
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	1200 mg/kg	-
bis(1,2,2,6,6-pentamethyl- 4-piperidyl) sebacate	LD50 Oral	Rat	3.125 g/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
x ylene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
2-butoxyethanol	Eyes - Irritant Skin - Moderate irritant	Rabbit Rabbit	-	24 hours 4 hours	21 days 28 days

Conclusion/Summary	
Skin	: There are no data available on the mixture itself.
Eyes	: There are no data available on the mixture itself.
Respiratory	: There are no data available on the mixture itself.
Sensitisation	
Conclusion/Summary	
Skin	: There are no data available on the mixture itself.
Respiratory	: 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.
<u>Feratogenicity</u>	
Conclusion/Summary	: There are no data available on the mixture itself.
Specific target organ to	<u>icity (single exposure)</u>

Section 11. Toxicological information

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

Specific target organ toxicity (repeated exposure)

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

Aspiration hazard

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

Information on likely routes of exposure	: Not available.
Potential acute health effects	<u>5</u>
Eye contact	: Causes serious eye irritation.
Inhalation	: Harmful if inhaled. May cause respiratory irritation.
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.
Symptoms related to the phy	vsical, chemical and toxicological characteristics
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following:

	respiratory tract irritation coughing
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking
Ingestion	: No specific data.

<u>Delayed and immediate effects as well as chronic effects from short and long-term exposure</u> <u>Short term exposure</u>

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Section 11. Toxicological information

Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health eff	<u>ects</u>
General	 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	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Øermal	4373.59 mg/kg
Inhalation (vapours)	24.13 mg/l
Inhalation (dusts and mists)	3.28 mg/l

Other information

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

Section 12. Ecological information

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Toxicity

Product/ingredient name	Result	Species	Exposure
p -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	-
2-butoxyethanol	Acute LC50 1474 mg/l	Fish	96 hours
	Chronic NOEC >100 mg/l	Fish	21 days

Conclusion/Summary : Th

: There are no data available on the mixture itself.

Persistence/degradability

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Section 12. Ecological information

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Product/ingredient name	Test	Result	Dose	Inoculum
-butyl acetate	TEPA and OECD 301D	83 % - Readily - 28	days -	-
ethylbenzene	-	79 % - Readily - 10	days -	-
Conclusion/Summary : There are no data available on the mixture itself.				
Product/ingredient name	Aquatic half-life		Photolysis	Biodegradability

Product/ingredient name	Aquatic han-me	FIIOLOIYSIS	Бючеугацарінту
x ylene	-	-	Readily
n-butyl acetate	-	-	Readily
ethylbenzene	-	-	Readily
2-butoxyethanol	-	-	Readily

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
2-butoxyethanol	0.81	-	Low

Mobility in soil

Soil/water partition	
coefficient (Koc)	

: Not available.

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

Section 13. Disposal considerations

Disposal	methods

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

Section 14. Transport information

	UN	IMDG	IATA
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3
Packing group	III	III	III
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

Additional information

UN	: None identified.
IMDG	: None identified.
ΙΑΤΑ	: None identified.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not applicable. to IMO instruments

Section 15. Regulatory information

Singapore - hazardous chemicals under government control

None.

International regulations

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants Not listed.

Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 20 December 2023
Date of previous issue	: 7/1/2021
Version	: 3.03
Prepared by	: EHS
Key to abbreviations	 ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

✓ Indicates information that has changed from previously issued version.

Notice to reader

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.