SAFETY DATA SHEET



Date of issue/Date of revision13 December 2024Version 1.01

Section 1. Identification			
Product code	: 000001202054		
Product name	: SIGMADUR 550 BASE WHITE		
Other means of identificatio	n		
00238750; 00238754			
Product type	: Liquid.		
Relevant identified uses of t	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 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3
GHS label elements, includi	ng precautionary statements
Hazard pictograms	
Signal word	: Warning
Hazard statements	: Flammable liquid and vapour. Causes skin irritation. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation.
Precautionary statements	

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Section 2. Hazards identification

Prevention	: Wear 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. IF ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. 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.
Other hazards which do not	Prolonged or repeated contact may dry skin and cause irritation

result in classification

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

Section 3. Composition/information on ingredients

Substance/mixture

CAS number/other identifiers

: Mixture

CAS number EC number	Not applicable.Mixture.		
Ingredient name		%	CAS number
x ylene		20 - <25	1330-20-7
n-butyl acetate		5 - <10	123-86-4
ethylbenzene		3 - <5	100-41-4
Talc , not containing as	pestiform fibres	1 - <3	14807-96-6
Octadecanamide, N,N'-	1,6-hexanediylbis[12-hydroxy-	0.3 - <1	55349-01-4
	yl-4-piperidyl) sebacate	0.1 - <0.3	41556-26-7
toluene		0.1 - <0.3	108-88-3

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

r <u>y first aid measures</u>
 Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
 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.
 Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
 If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.

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Section 4. First aid measures

Most important symptoms/effects, acute and delayed

Potential acute health effect		
Eye contact	Cause	s serious eye irritation.
Inhalation	: Harmfu	I if inhaled. May cause respiratory irritation.
Skin contact	Cause	s skin irritation. Defatting to the skin.
Ingestion	No kno	wn significant effects or critical hazards.
<u>Over-exposure signs/symp</u>	<u>ms</u>	
Eye contact		
Inhalation		e symptoms may include the following: tory tract irritation ng
Skin contact	Advers irritatio rednes drynes crackir	s s
Ingestion	No spe	cific data.
Indication of immediate med	al attent	on and special treatment needed, if necessary
Notes to physician		ymptomatically. Contact poison treatment specialist immediately if large ies have been ingested or inhaled.
Specific treatments	No spe	cific treatment.
Protection of first-aiders	is susp mask o	on shall be taken involving any personal risk or without suitable training. If it bected that fumes are still present, the rescuer should wear an appropriate or self-contained breathing apparatus. It may be dangerous to the person ng aid to give mouth-to-mouth resuscitation.

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.
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.

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Section 5. Firefighting measures

Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon 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, protective 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".
Environmental precautions	: 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 con	tainment 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.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour 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 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
xylene	Workplace Safety and Health Act (Singapore, 2/2006) [Xylene] PEL (long term) 8 hours: 100 ppm. PEL (long term) 8 hours: 434 mg/m ³ . PEL (short term) 15 minutes: 651 mg/m ³ . PEL (short term) 15 minutes: 150 ppm.
n-butyl acetate	Workplace Safety and Health Act (Singapore, 2/2006) PEL (long term) 8 hours: 150 ppm. PEL (long term) 8 hours: 713 mg/m ³ . PEL (short term) 15 minutes: 950 mg/m ³ . PEL (short term) 15 minutes: 200 ppm.
ethylbenzene	Workplace Safety and Health Act (Singapore, 2/2006) PEL (long term) 8 hours: 100 ppm. PEL (long term) 8 hours: 434 mg/m ³ .
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Section 8. Exposure controls/personal protection

Talc , not containing asbestif	bres PEL (short term) 15 minutes: 54 PEL (short term) 15 minutes: 12 Workplace Safety and Health Ad (Singapore, 2/2006) PEL (long term) 8 hours: 2 mg/m Workplace Safety and Health Ad (Singapore, 2/2006) PEL (long term) 8 hours: 50 ppm PEL (long term) 8 hours: 188 mg	5 ppm. ct n ³ . ct n.	
Recommended monitoring procedures	eference should be made to appropriate monitoring standards. Refere ational guidance documents for methods for the determination of hazar ubstances will also be required.		
Appropriate engineering controls	se only with adequate ventilation. Use process enclosures, local exhau entilation or other engineering controls to keep worker exposure to airbountaminants below any recommended or statutory limits. The engineer so need to keep gas, vapour or dust concentrations below any lower ex nits. Use explosion-proof ventilation equipment.	orne ring controls	
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			
Hygiene measures	ash hands, forearms and face thoroughly after handling chemical prod ating, smoking and using the lavatory and at the end of the working per ppropriate techniques should be used to remove potentially contaminat ash contaminated clothing before reusing. Ensure that eyewash static afety showers are close to the workstation location.	iod. ted clothing.	
Eye/face protection	hemical splash goggles.		
Skin protection			
Hand protection	hemical-resistant, impervious gloves complying with an approved stand e worn at all times when handling chemical products if a risk assessme is is necessary. Considering the parameters specified by the glove ma neck during use that the gloves are still retaining their protective proper hould be noted that the time to breakthrough for any glove material may fferent for different glove manufacturers. In the case of mixtures, cons everal substances, the protection time of the gloves cannot be accurate stimated.	ent indicates anufacturer, ties. It y be sisting of	
Body protection	ersonal protective equipment for the body should be selected based on eing performed and the risks involved and should be approved by a spe efore handling this product. When there is a risk of ignition from static ear anti-static protective clothing. For the greatest protection from stati scharges, clothing should include anti-static overalls, boots and gloves	ecialist electricity, ic	
Other skin protection	ppropriate footwear and any additional skin protection measures should elected based on the task being performed and the risks involved and s oproved by a specialist before handling this product.		

Product name SIGMADUR 550 BASE WHITE

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	1	Liquid.	
Colour	1	White.	
рН	:	insoluble in water.	
Boiling point	:	>37.78°C (>100°F)	
Flash point	:	Closed cup: 35°C (95°F)	
Evaporation rate	:	Not available.	
Flammability (solid, gas)	:	liquid	
Vapour pressure	:	Not available.	
Vapour density	:		
Relative density	:	1.34	
Solubility(ies)		Media	Result
Solubility(les)	1	cold water	Not soluble
Auto-ignition temperature	:	370°C	
Viscosity	:	Dynamic (room temperatu Kinematic (room tempera Kinematic (40°C (104°F))	ture): >400 mm²/s (>400 cSt)
Viscosity	:	60 - 100 s (ISO 6mm)	

Section 10. Stability and reactivity

Reactivity	;	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	:	The product is stable.
Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	:	When exposed to high temperatures may produce hazardous decomposition products.
Incompatible materials	:	Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.
Hazardous decomposition products	:	Depending on conditions, decomposition products may include the following materials: carbon oxides sulfur oxides metal oxide/oxides
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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	-
bis(1,2,2,6,6-pentamethyl-	LD50 Oral	Rat	3.125 g/kg	-
4-piperidyl) sebacate				
toluene	LC50 Inhalation Vapour	Rat	49 g/m³	4 hours
	LD50 Dermal	Rabbit	8.39 g/kg	-
	LD50 Oral	Rat	5580 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Conclusion/Summary					
Skin	: There are no data available	e on the mixture i	tself.		
Eyes	: There are no data available	e on the mixture i	tself.		
Respiratory	: There are no data available	e on the mixture i	tself.		
Sensitisation					
Conclusion/Summary					
Skin	: There are no data available	e on the mixture i	tself.		
Respiratory	: There are no data available	here are no data available on the mixture itself.			
Mutagenicity					
Conclusion/Summary	: There are no data availabl	le on the mixture	itself.		
Carcinogenicity					
Conclusion/Summary	: There are no data availabl	le on the mixture	itself.		
Reproductive toxicity					
Conclusion/Summary	: There are no data availabl	le on the mixture	itself.		
Teratogenicity					
Conclusion/Summary	: There are no data availabl	le on the mixture	itself.		
Specific target organ toxic	<u>city (single exposure)</u>				

Section 11. Toxicological information

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

Specific target organ toxicity (repeated exposure)

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

Aspiration hazard

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

Information on likely routes : Not available. of exposure

Potential acute health effects

Eye contact	: Causes serious eye irritation.	
Inhalation	: Harmful if inhaled. May cause respiratory irritation.	
Skin contact	: Causes skin irritation. Defatting to the skin.	
Ingestion	: No known significant effects or critical hazards.	

Symptoms related to the physical, 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.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

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Section 11. Toxicological information

<u>Short term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
<u>Long term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health eff	ects
General	 Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/ or dermatitis.
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
Inhalation (vapours)	7156.44 mg/kg 33.92 mg/l 4.36 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

Toxicity

Product/ingredient name	Result	Species	Exposure
ethylbenzene	Acute LC50 18 mg/l	Fish	96 hours
	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - <i>Ceriodaphnia dubia</i>	-

Conclusion/Summary

: 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 Biodegradabili		Biodegradability	

Product/ingredient name	Aquatic nait-life	Photolysis	Biodegradability	
x ylene	-	-	Readily	
n-butyl acetate	-	-	Readily	
ethylbenzene	-	-	Readily	
toluene	-	-	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
toluene	2.73	8.32	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
	dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	UN	IMDG	ΙΑΤΑ
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	: 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

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

IATA : 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	: 13 December 2024
Date of previous issue	: 4/10/2024
Version	: 1.01
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.