SAFETY DATA SHEET

Date of issue/Date of revision 9 August 2023

Version4.01

Section 1. Identification

Product code	: 00427157
Product name	: SIGMADUR 550 Y BASE RAL 9005
CAS number	: Not applicable.
EC number	: Mixture.
Product type	: Liquid.
Relevant identified uses	of the substance or mixture and uses advised against
Product use	Coating. Professional applications, Used by spraying.
Uses advised against	: Product is not intended, labelled or packaged for consumer use.
Supplier's details	: PPG Yung Chi Coatings Co. Ltd Lot 219, Amata Street, Long Binh IZ Bien Hoa City, Dong Nai Province Vietnam Tel : +84 61 3936121/22
Emergency telephone number (with hours of operation)	: CHEMTREC +(84)-444581938 (CCN 17704)

Section 2. Hazards identification

Classification of the	: FLAMMABLE LIQUIDS - Category 3
substance or mixture	ACUTE TOXICITY (oral) - Category 5
	ACUTE TOXICITY (dermal) - Category 5
	ACUTE TOXICITY (inhalation) - Category 4
	SKIN IRRITATION - Category 2
	EYE IRRITATION - Category 2A
	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
	AQUATIC TOXICITY (ACUTE) - Category 3
	AQUATIC TOXICITY (CHRONIC) - Category 3
	Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 30.8%
	Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 35.5%
	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 84.1%
	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 72.5%
GHS label elements	
Hazard pictograms	

Section 2. Hazards identification

Signal word	1	Warning
Hazard statements	:	Flammable liquid and vapor. May be harmful if swallowed or in contact with skin. Causes skin irritation. Causes serious eye irritation. Harmful if inhaled. May cause damage to organs through prolonged or repeated exposure. Harmful to aquatic life with long lasting effects.
Precautionary statements		
Prevention	:	Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe vapor. Wash thoroughly after handling.
Response	:	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. Wash with plenty of water. If skin irritation 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	1	Not applicable.
Disposal	:	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Routes of entry	:	Not available.
Other hazards which do not result in classification	:	Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

CAS number/other identifiers

CAS number: Not applicable.EC number: Mixture.			
Ingredient name	CAS number	Chemical formula	%
2-Propenoic acid, homopolymer	9003-01-4	(C3-H4-O2)x	≥25 - ≤49
Solvent naphtha (petroleum), light aromatic	64742-95-6	C36H48	≥10 - <20
xylene	1330-20-7	C8-H10	≤10
1,2,4-trimethylbenzene	95-63-6	C9-H12	≤2.6
crystalline silica, respirable powder (<10 microns)	14808-60-7	O2-Si	≤3
ethylbenzene	100-41-4	C8-H10	≤2
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	41556-26-7	C30H56N2O4	≤0.3

There are no 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.

SUB codes represent substances without registered CAS Numbers.

Occupational exposure limits, if available, are listed in Section 8.

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Section 4. First aid measures

Description of necessary fi	rst 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 recognized skin cleanser. Do NOT use solvents or thinners.
Ingestion	: If swallowed, seek medical advice immediately and show this 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>cts</u>
Eye contact	: Causes serious eye irritation.
Inhalation	: Harmful if inhaled.
Skin contact	: May be harmful in contact with skin. Causes skin irritation. Defatting to the skin.
Ingestion	: May be harmful if swallowed.
<u>Over-exposure signs/sym</u>	<u>otoms</u>
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking
Ingestion	: No specific data.
Indication of immediate me	dical attention and special treatment needed, if necessary
Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large
Notes to physician	quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. 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

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. Fire-fighting measures

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 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 : No action shall be taken involving any personal risk or without suitable training. For non-emergency Evacuate surrounding areas. Keep unnecessary and unprotected personnel from personnel 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. If specialized clothing is required to deal with the spillage, take note of any For emergency responders 2 information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". : Avoid dispersal of spilled material and runoff and contact with soil, waterways, **Environmental precautions** 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. 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

Precautions	for safe	handling	
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Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. 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.
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. 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

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
kylene	Ministry of Health (Viet Nam, 6/2019). [xylene] STEL: 300 mg/m³ 15 minutes.
1,2,4-trimethylbenzene	TWA: 100 mg/m ³ 8 hours. ACGIH TLV (United States, 1/2022). TWA: 10 ppm 8 hours.
crystalline silica, respirable powder (<10 microns)	ACGIH TLV (United States, 1/2022). [Silica, crystalline]
	TWA: 0.025 mg/m ³ 8 hours. Form: Respirable
ethylbenzene	ACGIH TLV (United States, 1/2022). Ototoxicant. TWA: 20 ppm 8 hours.

Recommended monitoring procedures

: Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Section 8. Exposure controls/personal protection

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.
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 measu	res
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Chemical splash goggles.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Gloves	: For prolonged or repeated handling, use the following type of gloves: May be used: nitrile rubber Recommended: natural rubber (latex), polyvinyl alcohol (PVA), Viton®
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.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
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

Appearance

Physical state	:	Liquid.	
Color	:	Black.	
Odor	:	Aromatic. [Strong]	
Odor threshold	:	Not available.	
рН	:	Not applicable.	
Melting point	1	Not available.	
Boiling point	:	>37.78°C (>100°F)	
Flash point	:	Closed cup: 35°C (95°F)	
Evaporation rate	1	Not available.	
Flammability (solid, gas)	:	Not available.	
Lower and upper explosive (flammable) limits	1	Greatest known range: Lower: 1.4% Upper: 7.6% (Solvent naphtha (petroleum), light aromatic)	
Vapor pressure	1	Not available.	
Vapor density	1	Not available.	
Relative density	:	1.15	
Solubility(ies)	:	Media Result	
Solubility(les)		cold water Not soluble	
Partition coefficient: n- octanol/water	:	Not applicable.	
Auto-ignition temperature	:	Not available.	
Decomposition temperature	:	Not available.	
Viscosity	1	Kinematic (room temperature): >400 mm²/s Kinematic (40°C): >21 mm²/s	
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: oxidizing agents, strong alkalis, strong acids.
Hazardous decomposition products	:	Depending on conditions, decomposition products may include the following materials: carbon oxides metal oxide/oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2-Propenoic acid, homopolymer	LD50 Dermal	Rabbit	3 g/kg	-
	LD50 Oral	Rat	2500 mg/kg	-
Solvent naphtha (petroleum), light aromatic	LD50 Dermal	Rabbit	3.48 g/kg	-
-	LD50 Oral	Rat	8400 mg/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
-	LD50 Oral	Rat	4.3 g/kg	-
1,2,4-trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m ³	4 hours
	LD50 Oral	Rat	5 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	-
bis(1,2,2,6,6-pentamethyl- 4-piperidyl) sebacate	LD50 Oral	Rat	3.125 g/kg	-

Conclusion/Summary

: There are no data available on the mixture itself.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
x ylene	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	

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

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

Specific target organ toxicity (single exposure)

Name		Route of exposure	Target organs
Solvent naphtha (petroleum), light aromatic xylene	Category 3 Category 3	-	Narcotic effects Respiratory tract irritation
1,2,4-trimethylbenzene	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

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Section 11. Toxicological information

Name	Category	Route of exposure	Target organs
crystalline silica, respirable powder (<10 microns)	Category 1	inhalation	-
ethylbenzene	Category 2	-	hearing organs

Aspiration hazard

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

Information on the likely	1	Not available.
routes of exposure		
Potential acute health effects		

Eye contact	: Causes serious eye irritation.
Inhalation	: Harmful if inhaled.
Skin contact	: May be harmful in contact with skin. Causes skin irritation. Defatting to the skin.
Ingestion	: May be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking
Ingestion	: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

 May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
 or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. No known significant effects or critical hazards.
or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
or repeated contact can defat the skin and lead to irritation, cracking and/or
ffects
: 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.
: There are no data available on the mixture itself.

Section 11. Toxicological information

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Øral	4298.22 mg/kg
Dermal	3032.29 mg/kg
Inhalation (vapors)	15.77 mg/l
Inhalation (dusts and mists)	1.9 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 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.

Section 12. Ecological information

Toxicity Product/ingredient name Result **Species Exposure** Solvent naphtha (petroleum), Acute LC50 8.2 mg/l Fish 96 hours light aromatic ethylbenzene Acute EC50 1.8 mg/l Fresh water Daphnia 48 hours Chronic NOEC 1 mg/l Fresh water Daphnia - Ceriodaphnia dubia

Persistence and degradability

Product/ingredient name	Test	Result		Dose		Inoculum
ethylbenzene	-	79 % - Rea	dily - 10 days	-		-
Product/ingredient name	Aquatic half-life		Photolysis		Biodeg	radability
xylene ethylbenzene	-		-		Readily Readily	

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
₩ylene	3.12	7.4 to 18.5	Low
1,2,4-trimethylbenzene	3.63	120.23	Low
ethylbenzene	3.6	79.43	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

: The generation of waste should be avoided or minimized wherever possible. **Disposal methods** 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. 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
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3
Packing group	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 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

Safety, health and environmental regulations specific for the product

: No known specific national and/or regional regulations applicable to this product (including its ingredients).

Circular no. 05/1999/TT-BYT

Ingredient name	Category	Notes
benzene toluene xylene	Category 1 Category 2 Category 2	

Toxic classification (TCVN : 4

3164-79)

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	: 9 August 2023
Date of previous issue	: 12/4/2022
Version	: 4.01
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
References	: Not available.

V 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.