SAFETY DATA SHEET



Date of issue/Date of revision16 December 2024Version 1.07

Section 1. Identification		
Product code	: 000001099157	
Product name	: SIGMACOVER 456 BASE BS 00A05	
Other means of identificat 00141368; 00141369	ion	
Product type	: Liquid.	
Relevant identified uses or Product use	 f the substance or mixture and uses advised against 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 SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
GHS label elements, inclu	uding precautionary statements
Hazard pictograms	
Signal word	: Warning
Hazard statements	 Flammable liquid and vapor. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation.

Section 2. Hazards identification

Precautionary statements	
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 vapor. 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. If skin irritation or rash occurs: Get medical advice or attention. 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.

result in classification

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

Section 3. Composition/information on ingredients

CAS number/other identifiers

CAS number: Not applicable.EC number: Mixture.		
Ingredient name	%	CAS number
Epoxy Resin xylene Epoxy resin (MW ≤ 700) Talc , not containing asbestiform fibres ethylbenzene 2-methylpropan-1-ol N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide)	20 - <25 10 - <20 5 - <10 3 - <5 3 - <5 1 - <3 0.1 - <0.3	SUB110652 1330-20-7 25068-38-6 14807-96-6 100-41-4 78-83-1 123-26-2

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

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.

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Section 4. First aid measures

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

most important symptoms/c	doute and delayed	
Potential acute health effect		
Eye contact	uses serious eye irritatio	n.
Inhalation	rmful if inhaled. May ca	ise respiratory irritation.
Skin contact	uses skin irritation. Defa	tting to the skin. May cause an allergic skin reaction.
Ingestion	known significant effect	s or critical hazards.
Over-exposure signs/symp		
Eye contact	verse symptoms may ind in or irritation ttering dness	lude the following:
Inhalation	verse symptoms may inc piratory tract irritation ughing	lude the following:
Skin contact	verse symptoms may ind tation dness /ness acking	lude the following:
Ingestion	specific data.	
Indication of immediate med	tention and special trea	tment needed, if necessary
Notes to physician	eat symptomatically. Co antities have been inges	ntact poison treatment specialist immediately if large ed or inhaled.
Specific treatments	specific treatment.	
Protection of first-aiders	suspected that fumes are ask or self-contained bre oviding aid to give mouth	olving any personal risk or without suitable training. If it still present, the rescuer should wear an appropriate athing apparatus. It may be dangerous to the person to-mouth resuscitation. Wash contaminated clothing e 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

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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.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon oxides sulfur oxides halogenated compounds 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, protecti	ve 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 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.
For emergency responders	If specialized 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 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).
Methods and materials 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 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 spilled 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 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
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.
Talc , not containing asbestiform fibres	Workplace Safety and Health Act (Singapore, 2/2006)
ethylbenzene	 PEL (long term) 8 hours: 2 mg/m³. Workplace Safety and Health Act (Singapore, 2/2006) PEL (long term) 8 hours: 100 ppm. PEL (long term) 8 hours: 434 mg/m³. PEL (short term) 15 minutes: 543 mg/m³. PEL (short term) 15 minutes: 125 ppm.
2-methylpropan-1-ol	Workplace Safety and Health Act (Singapore, 2/2006) PEL (long term) 8 hours: 50 ppm. PEL (long term) 8 hours: 152 mg/m ³ .
N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide)	ACGIH TLV (United States)

Section 8. Exposure controls/personal protection

			TWA: 10 mg/m³. Form: Total dust. TWA: 3 mg/m³. Form: Respirable.		
Recommended monitoring procedures	:		riate monitoring standards. Reference to nods for the determination of hazardous		
Appropriate engineering controls	:	contaminants below any recommende	Is to keep worker exposure to airborne ed or statutory limits. The engineering controls concentrations below any lower explosive		
Environmental exposure controls	:	they comply with the requirements of e cases, fume scrubbers, filters or engin	Emissions from ventilation or work process equipment should be checked to ensure hey 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	:	eating, smoking and using the lavatory 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. In the end of the working period. In the allowed out of the workplace. Wash Ensure that eyewash stations and safety ocation.		
Eye/face protection	:	Chemical splash goggles.			
Skin protection					
Hand protection	:	be worn at all times when handling che this is necessary. Considering the par 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 through for any glove material may be rers. In the case of mixtures, consisting of the of the gloves cannot be accurately		
Gloves	1	butyl rubber			
Body protection	:	being performed and the risks involve			
Other skin protection	:		al skin protection measures should be ormed and the risks involved and should be ng this product.		
Respiratory protection	:	hazards of the product and the safe w workers are exposed to concentration appropriate, certified respirators. Use	n known or anticipated exposure levels, the orking limits of the selected respirator. If s above the exposure limit, they must use a properly fitted, air-purifying or air-fed I standard if a risk assessment indicates this is		

Section 9. Physical and chemical properties

Appearance

Physical state	:	Liquid.				
Odor	:	Aromatic.				
рН	:	insoluble in water.				
Boiling point	:	>37.78°C (>100°F)				
Flash point	:	Closed cup: 27°C (80.6°F)			
Evaporation rate	:	Not available.				
Flammability (solid, gas)	:	liquid	iquid			
Vapor pressure	:	Not available.				
Vapor density	:					
Relative density	:	1.39				
Solubility(ies)		Media	Result			
Solubility(les)	1	cold water	Not soluble			
Auto-ignition temperature	:	Not available.				
Viscosity	:	Kinematic (room te	nperature): Not available. mperature): >400 mm²/s (>400 cSt) 04°F)): >21 mm²/s (>21 cSt)			
Viscosity	:	▶ 100 s (ISO 6mm)				

Section 10. Stability and reactivity

Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
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Chemical stability		The product is stable.
onemical stability	1	
Possibility of hazardous		Under normal conditions of storage and use, hazardous reactions will not occur.
reactions	1	onder normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid		When exposed to high temperatures may produce hazardous decomposition
	1	products.
Incompatible materials	:	Keep away from the following materials to prevent strong exothermic reactions:
		oxidizing agents, strong alkalis, strong acids.
Hazardous decomposition		Depending on conditions, decomposition products may include the following
products		materials: carbon oxides sulfur oxides halogenated compounds metal oxide/
		oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
Epoxy resin (MW ≤ 700)	LD50 Dermal	Rabbit	>2 g/kg	-
	LD50 Oral	Rat	>2 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	-
2-methylpropan-1-ol	LC50 Inhalation Vapor	Rat	24.6 mg/l	4 hours
	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 mg/kg	-
N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide)	LC50 Inhalation Dusts and mists	Rat	>5.11 mg/l	4 hours
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-

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

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Epoxy resin (MW ≤ 700)	Eyes - Mild irritant Skin - Mild irritant	Rabbit Rabbit	-	-	-

Conclusion/Summary

Skin	: There are no data available on the mixture itself.
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- Eyes : There are no data available on the mixture itself.
- Respiratory : There are no data available on the mixture itself.

Sensitization

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Epoxy resin (MW ≤ 700)	skin	Mouse	Sensitizing

$Epoxy resint (WW \leq 700)$	SKIII	Wouse	Sensidzing
Conclusion/Summary			
Skin	There are no data	available on the mixture itself.	
Respiratory	There are no data	available on the mixture itself.	
Mutagenicity			
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			
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Section 11. Toxicological information

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

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation
Talc , not containing asbestiform fibres	Category 3	-	Respiratory tract irritation
2-methylpropan-1-ol	Category 3	-	Respiratory tract irritation
	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 the likely : Not available. routes of exposure

Potential acute health	<u>effects</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 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.

Section 11. Toxicological information

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Delayed and immediate effe	cts and also chronic effects from short and long term exposure
<u>Short term exposure</u>	
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	
Inhalation (vapors)	6341.62 mg/kg 30.84 mg/l 3.96 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

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Toxicity

Product/ingredient name	Result	Species	Exposure
Epoxy resin (MW ≤ 700)	Acute LC50 1.8 mg/l	Daphnia	48 hours
	Chronic NOEC 0.3 mg/l	Daphnia	21 days
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
-	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide)	Acute EC50 29 to 43 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
,	Acute EC50 94 mg/l	Daphnia - Daphnia magna	48 hours
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Section 12. Ecological information

Conclusion/Summary

: There are no data available on the mixture itself.

Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Epoxy resin (MW ≤ 700) ethylbenzene N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide)	OECD 301F - -	5 % - 28 days 79 % - Readily - 10 days 63 % - 28 days	-	

Conclusion/Summary

: There are no data available on the mixture itself.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
xylene Epoxy resin (MW ≤ 700) ethylbenzene N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide)	- - - -	- - -	Readily Not readily Readily Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential	
xylene Epoxy resin (MW ≤ 700) ethylbenzene 2-methylpropan-1-ol N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide)	3.12 3 3.6 1 >6	7.4 to 18.5 31 79.43 - -	Low Low Low Low High	

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 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. This material and its container must be disposed of in a safe way. Care should be taken when handling

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Section 13. Disposal considerations

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.

Section 15. Regulatory information

Singapore - hazardous chemicals under government control

None.

International regulations Montreal Protocol

Not listed.

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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

Stockholm Convention on Persistent Organic Pollutants Not listed.

Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 16 December 2024
Date of previous issue	: 12/13/2024
Version	: 1.07
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.