SAFETY DATA SHEET



Date of issue/Date of revision13 December 2024Version 5.11

Section 1. Identification		
Product code	: 00239981	
Product name	: SIGMADUR 550 BASE GREY	
Product type	: Liquid.	
Relevant identified uses o	f 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, including precautionary statements

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Hazard pictograms

Signal word Hazard statements	 Warning Flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation.
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.

Singapore	English (US)	Page: 1/13
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Section 2. Hazards identification

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

Section 3. Composition/information on ingredients

Substance/mixture		Mixture
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CAS number/other identifiers

CAS number EC number	: Not applicable. : Mixture.		
Ingredient name		%	CAS number
bis(1,2,2,6,6-pentamet	sbestiform fibres -1,6-hexanediylbis[12-hydroxy- hyl-4-piperidyl) sebacate	20 - <25 5 - <10 3 - <5 3 - <5 0.3 - <1 0.1 - <0.3	1330-20-7 123-86-4 100-41-4 14807-96-6 55349-01-4 41556-26-7
toluene		0.1 - <0.3	108-8

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 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 effects

Singapore	English (US)	Page: 2/13
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Section 4. First aid measures

	u measures
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.
<u>Over-exposure signs/sym</u>	<u>otoms</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	dical attention and special treatment needed, if necessary
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large 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.

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.
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 metal oxide/oxides

Singapore	English (US)	Page: 3/13
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Product name SIGMADUR 550 BASE GREY

Section 5. Fire-fighting measures

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	tive 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".
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for co	ntainment 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

Large SpinStop leak it without risk. Howe containers from spin 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.

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 vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use 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
Viene	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 .
Singapore English (US)	Page: 5/13

Section 8. Exposure controls/personal protection

Talc , not containing asbestif	bres PEL (short term) 15 minutes: 543 PEL (short term) 15 minutes: 125 Workplace Safety and Health Ac (Singapore, 2/2006) PEL (long term) 8 hours: 2 mg/m ² Workplace Safety and Health Ac (Singapore, 2/2006) PEL (long term) 8 hours: 50 ppm. PEL (long term) 8 hours: 188 mg/	5 ppm. st ³ . st	
Recommended monitoring procedures	eference should be made to appropriate monitoring standards. Referer ational guidance documents for methods for the determination of hazarc ubstances will also be required.		
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 measur			
Hygiene measures	ash hands, forearms and face thoroughly after handling chemical produ ating, smoking and using the lavatory and at the end of the working perio opropriate techniques should be used to remove potentially contaminate ash contaminated clothing before reusing. Ensure that eyewash station afety showers are close to the workstation location.	od. ed clothing.	
Eye/face protection	hemical splash goggles.		
Skin protection			
Hand protection	hemical-resistant, impervious gloves complying with an approved standa e worn at all times when handling chemical products if a risk assessmer is is necessary. Considering the parameters specified by the glove mar neck during use that the gloves are still retaining their protective properti hould be noted that the time to breakthrough for any glove material may fferent for different glove manufacturers. In the case of mixtures, consist everal substances, the protection time of the gloves cannot be accurated stimated.	nt indicates nufacturer, ies. It be sting 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 spec- efore handling this product. When there is a risk of ignition from static e ear anti-static protective clothing. For the greatest protection from static scharges, clothing should include anti-static overalls, boots and gloves.	cialist electricity, c	
Other skin protection	opropriate footwear and any additional skin protection measures should elected based on the task being performed and the risks involved and sh oproved by a specialist before handling this product.	be	

Singapore Englis	(US)	Page: 6/13
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Product name SIGMADUR 550 BASE GREY

Section 8. Exposure controls/personal protection

 Respiratory protection Respirator selection must be based on known or anticipated exposure levels, hazards of the product and the safe working limits of the selected respirator. workers are exposed to concentrations above the exposure limit, they must us appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates necessary. 	lf se
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Section 9. Physical and chemical properties

<u>Appearance</u>			
Physical state	.iquid.		
Color	Gray.		
рН	nsoluble in water.		
Boiling point	•37.78°C (>100°F)		
Flash point	Closed cup: 33°C (91.4°F)		
Evaporation rate	lot available.		
Flammability (solid, gas)	quid		
Vapor pressure	lot available.		
Vapor density			
Relative density	.34		
Solubility/ios)	Media Result		
Solubility(ies)	cold water Not soluble		
Auto-ignition temperature	lot available.		
Viscosity	Øynamic (room temperature): Not available. Kinematic (room temperature): >400 mm²/s (>400 cSt) Kinematic (40°C (104°F)): >21 mm²/s (>21 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: oxidizing 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
Singapore English (US)		Page: 7/13

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	-
n-butyl acetate	LC50 Inhalation Vapor	Rat	>21.1 mg/l	4 hours
-	LC50 Inhalation Vapor	Rat	2000 ppm	4 hours
	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10.768 g/kg	-
ethylbenzene	LC50 Inhalation Vapor	Rat	17.8 mg/l	4 hours
-	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
bis(1,2,2,6,6-pentamethyl-	LD50 Oral	Rat	3.125 g/kg	-
4-piperidyl) sebacate				
toluene	LC50 Inhalation Vapor	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	on the mixtur	e itself.		
Eyes :	There are no data available	on the mixtur	e itself.		
Respiratory :	There are no data available	on the mixtur	e itself.		
Sensitization					
Conclusion/Summary					
Skin :	There are no data available	on the mixture	e itself.		
Respiratory	There are no data available	on the mixture	e itself.		
<u>Mutagenicity</u>					
Conclusion/Summary	: There are no data available	e on the mixtu	re itself.		
Carcinogenicity					
Conclusion/Summary	There are no data available	e on the mixtu	re itself.		
Reproductive toxicity					
Conclusion/Summary	There are no data available	e on the mixtu	re itself.		
Teratogenicity					
Conclusion/Summary	There are no data available	e on the mixtu	re itself.		
Specific target organ toxic	ity (single exposure)				

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 the likely routes of exposure	: Not available.
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.
Commércies veloted to the view	
Symptoms related to the phy	sical, 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 and also chronic effects from short and long term exposure

Singapore	English (US)	Page: 9/13
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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	<u>ects</u>
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 (vapors)	7150.07 mg/kg 28.33 mg/l 3.64 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
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

Singapore	English (US)	Page: 10/13
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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	ary : There are no data available on the mixture itself.			
Product/ingredient name	Aquatic half-lif	fe Photo	vsis	Biodegradability

Product/ingredient name	Aquatic half-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 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 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
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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

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	: 7/1/2024
Version	: 5.11
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

112.4

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.