# **SAFETY DATA SHEET**



Date of issue/Date of revision 6 April 2024 Version 1

Section 1. Identification		
Product code	: 000001201607	
Product name	: SIGMARINE 28 (MULTIPRIMER) GREY	
<b>Other means of identificat</b> 00476613; 00476614	ion	
Product type	: Liquid.	
<u>Relevant identified uses or</u> Product use	<ul> <li>f the substance or mixture and uses advised against</li> <li>Coating. Professional applications, Used by spraying.</li> </ul>	
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

: FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A CARCINOGENICITY - Category 1B SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3
uding precautionary statements
: Danger
: Flammable liquid and vapour. Causes skin irritation. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation. May cause cancer.

### Section 2. Hazards identification

Precautionary statements	
Prevention	: Do not handle until all safety precautions have been read and understood. 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. Avoid breathing vapour. Wash thoroughly after handling.
Response	: IF exposed or concerned: Get medical advice or attention. IF INHALED: Call a POISON CENTER or doctor if you feel unwell. Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. IF 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 result in classification	: Prolonged or repeated contact may dry skin and cause irritation.

### Section 3. Composition/information on ingredients

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Substance/mixture
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: Mixture

#### **CAS number/other identifiers**

CAS number	: Not applicable.
EC number	: Mixture.

Ingredient name	%	CAS number
xylene Talc , not containing asbestiform fibres ethylbenzene Quaternary ammonium compounds, C12-14 (even-numbered)-	20 - <25 5 - <10 3 - <5 0.3 - <1	1330-20-7 14807-96-6 100-41-4 1474044-65-9
alkylethyldimethyl, ethyl sulphates 2-butanone oxime	0.1 - <0.3	96-29-7

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

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

SUB codes represent substances without registered CAS Numbers.

### Section 4. First aid measures

Description of necess	ary first aid measures
Eye contact	<ul> <li>Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.</li> </ul>
Inhalation	<ul> <li>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.</li> </ul>
Skin contact	: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

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### Section 4. First aid measures

Ingestion

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

#### Most important symptoms/effects, acute and delayed

Potential acute health effe	ects
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.
Over-exposure signs/sym	<u>ptoms</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.
	dical attention and special treatment needed, if necessary
Notes to physician	<ul> <li>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</li> </ul>
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

#### See toxicological information (Section 11)

### Section 5. Firefighting measures

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

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### Section 5. Firefighting measures

Specific hazards arising from the chemical	: Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon oxides 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	<ul> <li>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.</li> </ul>

### 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). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. 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.
		Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be stored in purpose-built containers or in metal containers with tight-fitting, self-closing lids. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside.
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 (short term): 651 mg/m <sup>3</sup> 15 minutes. PEL (short term): 150 ppm 15 minutes. PEL (long term): 434 mg/m <sup>3</sup> 8 hours. PEL (long term): 100 ppm 8 hours.		
Talc , not containing asbestiform fibres	Workplace Safety and Health Act (Singapore, 2/2006).		

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## Section 8. Exposure controls/personal protection

ethylbenzene			PEL (long term): 2 mg/m <sup>3</sup> 8 hours. <b>Workplace Safety and Health Act</b> <b>(Singapore, 2/2006).</b> PEL (short term): 543 mg/m <sup>3</sup> 15 minutes. PEL (short term): 125 ppm 15 minutes. PEL (long term): 434 mg/m <sup>3</sup> 8 hours. PEL (long term): 100 ppm 8 hours.
Recommended monitoring procedures	-	Reference should be made to appropriational guidance documents for methors substances will also be required.	ate monitoring standards. Reference to ods for the determination of hazardous
Appropriate engineering controls	:		s to keep worker exposure to airborne d or statutory limits. The engineering controls concentrations below any lower explosive
Environmental exposure controls	:		
Individual protection measur	res		
Hygiene measures	:	eating, smoking and using the lavatory Appropriate techniques should be used	d to remove potentially contaminated clothing. using. Ensure that eyewash stations and
Eye/face protection	:	Chemical splash goggles.	
Skin protection			
Hand protection	:	be worn at all times when handling che this is necessary. Considering the para check during use that the gloves are st should be noted that the time to breakt	ers. In the case of mixtures, consisting of
Gloves	:	For prolonged or repeated handling, us	e the following type of gloves:
		May be used: nitrile rubber Recommended: butyl rubber, natural ru	ubber (latex), polyvinyl alcohol (PVA), Viton®
Body protection	:	being performed and the risks involved	

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### Section 8. Exposure controls/personal protection

Other skin protection	<ul> <li>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.</li> </ul>
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.

# Section 9. Physical and chemical properties

<u>Appearance</u>		
Physical state	Liquid.	
Colour	Grey.	
Odour	Aromatic.	
рН	Not applicable.	
Boiling point	>37.78°C (>100°F)	
Flash point	Closed cup: 31°C (87.8°F)	
Evaporation rate	Highest known value: 0.84 (ethylbenzene) Weighted average: 0.78compared wit butyl acetate	h
Flammability (solid, gas)	liquid	
Vapour pressure	Highest known value: 1.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene). Weighted average: 0.95 kPa (7.13 mm Hg) (at 20°C)	
Vapour density	Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.7 (Air = 1)	
Relative density	1.48	
Colubility/ico)	Media Result	
Solubility(ies)	cold water Not soluble	
Auto-ignition temperature	Lowest known value: 432°C (809.6°F) (xylene).	
Viscosity	Kinematic (40°C (104°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.
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.

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### Section 10. Stability and reactivity

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 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	-
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	-
Quaternary ammonium compounds, C12-14 (even- numbered)- alkylethyldimethyl, ethyl sulphates	LD50 Dermal	Rabbit	528 mg/kg	-
2-butanone oxime	LD50 Oral LD50 Dermal LD50 Oral	Rat Rabbit Rat	570 mg/kg 1100 mg/kg 100 mg/kg	- - -

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

#### Irritation/Corrosion

Product/ingredient name	Resul	t	Species	Score	Exposure	Observation
xylene	Skin -	Moderate irritant	Rabbit	-	24 hours 500 mg	-
Conclusion/Summary						
Skin	: There a	re no data available	on the mixture	itself.		
Eyes	: There a	re no data available	on the mixture	itself.		
Respiratory	: There a	re no data available	on the mixture	itself.		
<u>Sensitisation</u>						
<b>Conclusion/Summary</b>						
Skin	: There a	re no data available	on the mixture	itself.		
Respiratory	: There a	ire no data available	on the mixture	itself.		
<u>Mutagenicity</u>						
<b>Conclusion/Summary</b>	: There	are no data available	on the mixture	itself.		
<b>Carcinogenicity</b>						
<b>Conclusion/Summary</b>	: There	are no data available	on the mixture	itself.		
Reproductive toxicity						
<b>Conclusion/Summary</b>	: There	are no data available	on the mixture	itself.		
<b>Teratogenicity</b>						

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# Section 11. Toxicological information

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

#### 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-butanone oxime	Category 1	-	upper respiratory tract
	Category 3		Narcotic effects

#### Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
	Category 2 Category 2		hearing organs blood system

#### Aspiration hazard

Name	Result
	ASPIRATION HAZARD - Category 1 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.

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### Section 11. Toxicological information

Delayed and immediate effe	cts as well as chronic effects from short and long-term exposure
Short term exposure	
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	<ul> <li>Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/ or dermatitis.</li> </ul>
Carcinogenicity	: May cause cancer. Risk of cancer depends on duration and level of exposure.
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
Oral	45241.41 mg/kg
Dermal	4989.7 mg/kg
Inhalation (vapours)	20.47 mg/l
Inhalation (dusts and mists)	2.62 mg/l

#### Other information

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

### Section 12. Ecological information

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#### **Toxicity**

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### Section 12. Ecological information

Product/ingredient name	Result	Species	Exposure
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
-	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
Quaternary ammonium compounds, C12-14 (even- numbered)- alkylethyldimethyl, ethyl sulphates	EC50 0.14 mg/l	Algae	72 hours
·	EC50 0.036 mg/l	Daphnia	48 hours
	LC50 13.8 mg/l	Fish	96 hours
	NOEC 10 mg/m <sup>3</sup>	Algae	72 hours
	NOEC 7 mg/m <sup>3</sup>	Daphnia	21 days
	NOEC 3.2 mg/m <sup>3</sup>	Fish	28 days

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

#### Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
ethylbenzene Quaternary ammonium compounds, C12-14 (even- numbered)- alkylethyldimethyl, ethyl sulphates	-	79 % - Readily - 10 days 67.77 % - Readily - 28 days	-	-

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

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
xylene ethylbenzene Quaternary ammonium compounds, C12-14 (even- numbered)- alkylethyldimethyl, ethyl sulphates		-	Readily Readily Readily

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
xylene ethylbenzene Quaternary ammonium compounds, C12-14 (even- numbered)- alkylethyldimethyl, ethyl sulphates 2-butanone oxime	3.12 3.6 3.2	7.4 to 18.5 79.43 -	Low Low Low
z-butanone oxime	0.63	5.01	Low

#### Mobility in soil

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### Section 12. Ecological information

Soil/water partition coefficient (Koc)

: Not available.

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

### Section 13. Disposal considerations

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

# Section 14. Transport information

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

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

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Section 14. Transport information

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	: 6 April 2024
Date of previous issue	: No previous validation
Version	: 1
Prepared by	: EHS
Key to abbreviations	<ul> <li>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</li> </ul>

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.