SAFETY DATA SHEET



Date of issue/Date of revision 9 October 2024 Version 1.07

Section 1. Identification		
Product code	: 000001099039	
Product name	: SIGMATHERM 230 BASE PINK	
Other means of identification	on and a second s	
00273015		
Product type	: Liquid.	
<u>Relevant identified uses of</u> Product use	 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 1 SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

GHS label elements, including precautionary statements



Section 2. Hazards identification

Hazard statements	: Flammable liquid and vapor.
	Causes skin irritation.
	May cause an allergic skin reaction.
	Causes serious eye damage.
	Harmful if inhaled.
	May cause respiratory irritation.
	May cause damage to organs through prolonged or repeated exposure.
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. Do not breathe vapor. Wash thoroughly after handling.
Response	: Set medical advice or attention if you feel unwell. 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. Immediately call a POISON CENTER or doctor.
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

CAS number/other identifiers

CAS number EC number	: Not applicable. : Mixture.		
Ingredient name		%	CAS number
Phenol, polymer with formaldehyde, glycidyl ether (MW<=700) xylene Talc, not containing asbestiform fibres 2-methylpropan-1-ol crystalline silica, respirable powder (<10 microns) ethylbenzene Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediam		20 - <25 10 - <20 5 - <10 3 - <5 1 - <3 1 - <3 0.1 - <0.3	28064-14-4 1330-20-7 14807-96-6 78-83-1 14808-60-7 100-41-4 100545-48-0

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	 Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
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		
Eye contact	Causes serious eye damage.	
Inhalation	Harmful if inhaled. May cause respiratory irritation.	
Skin contact	Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction	า.
Ingestion	No known significant effects or critical hazards.	
Over-exposure signs/symp	<u>15</u>	
Eye contact	Adverse symptoms may include the following: pain watering redness	
Inhalation	Adverse symptoms may include the following: respiratory tract irritation coughing	
Skin contact	Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur	
Ingestion	Adverse symptoms may include the following: stomach pains	
Indication of immediate mee	l 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. 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.	ie n

See toxicological information (Section 11)

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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
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

contractor.

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. Do not breathe 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	nt	ainment 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

Section 6. Accidental release measures

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.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. 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 .
Talc , not containing asbestiform	n fibres	PEL (short term) 15 minutes: 150 ppm. Workplace Safety and Health Act (Singapore, 2/2006)
2-methylpropan-1-ol		PEL (long term) 8 hours: 2 mg/m ³ . Workplace Safety and Health Act (Singapore, 2/2006) PEL (long term) 8 hours: 50 ppm. PEL (long term) 8 hours: 152 mg/m ³ .
crystalline silica, respirable powder (<10 microns)		ACGIH TLV (United States, 7/2023) [Silica, crystalline] A2. TWA 8 hours: 0.025 mg/m ³ . Form: Respirable fraction.
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 . PEL (short term) 15 minutes: 543 mg/m ³ . PEL (short term) 15 minutes: 125 ppm.
Recommended monitoring : procedures		propriate monitoring standards. Reference to methods for the determination of hazardous
Appropriate engineering : controls	ventilation or other engineering c contaminants below any recomm	on. Use process enclosures, local exhaust controls to keep worker exposure to airborne nended or statutory limits. The engineering controls dust concentrations below any lower explosive lation equipment.
Environmental exposure : controls	they comply with the requirement cases, fume scrubbers, filters or	rk process equipment should be checked to ensure ts of environmental protection legislation. In some engineering modifications to the process educe emissions to acceptable levels.
ndividual protection measures Hygiene measures :	Wash hands, forearms and face eating, smoking and using the la Appropriate techniques should be Contaminated work clothing shou	thoroughly after handling chemical products, before vatory and at the end of the working period. e used to remove potentially contaminated clothing. uld not be allowed out of the workplace. Wash using. Ensure that eyewash stations and safety ation location.

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Section 8. Exposure controls/personal protection

Eye/face protection	hemical splash goggles and face shield.	
Skin protection	1 0 00	
Hand protection	hemical-resistant, impervious gloves complying with a e worn at all times when handling chemical products i is is necessary. Considering the parameters specifie neck during use that the gloves are still retaining their hould be noted that the time to breakthrough for any g fferent for different glove manufacturers. In the case everal substances, the protection time of the gloves c stimated.	f a risk assessment indicates d by the glove manufacturer, protective properties. It love material may be of mixtures, consisting of
Gloves	ıtyl rubber	
Body protection	ersonal protective equipment for the body should be seing performed and the risks involved and should be a efore handling this product. When there is a risk of ig ear anti-static protective clothing. For the greatest pr scharges, clothing should include anti-static overalls,	approved by a specialist nition from static electricity, otection from static
Other skin protection	opropriate footwear and any additional skin protection elected based on the task being performed and the ris oproved by a specialist before handling this product.	
Respiratory protection	espirator selection must be based on known or antici azards of the product and the safe working limits of th orkers are exposed to concentrations above the expo opropriate, certified respirators. Use a properly fitted, spirator complying with an approved standard if a risl ecessary.	e selected respirator. If sure limit, they must use air-purifying or air-fed

Section 9. Physical and chemical properties

<u>Appearance</u>			
Physical state	Liquid.		
Color	Reddish-white.		
Odor	Aromatic.		
рН	insoluble in water.		
Boiling point	>37.78°C (>100°F)		
Flash point	Closed cup: 23°C (73.4°F)		
Evaporation rate	Not available.		
Flammability (solid, gas)	liquid		
Vapor pressure	Not available.		
Vapor density			
Relative density	1.78		
Colubility/ico)	Media Result		
Solubility(ies)	cold water Not soluble		
Auto-ignition temperature	Not available.		

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Section 9. Physical and chemical properties

Viscosity

 ∫ynamic (room temperature): Not available. Kinematic (room temperature): >400 mm²/s (>400 cSt) Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt)

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

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	-
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	-
ethylbenzene	LC50 Inhalation Vapor	Rat	17.8 mg/l	4 hours
5	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
Octadecanoic acid,	LC50 Inhalation Dusts and mists	Rat	5.05 mg/l	4 hours
12-hydroxy-, reaction			Ū	
products with				
ethylenediamine				
-	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	

Conclusion/Summary

Skin

: There are no data available on the mixture itself.

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Section 11. Toxicological information

Eves : There are no data available on the mixtur

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

Sensitization

- **Product/ingredient name Route of Species** Result exposure Octadecanoic acid, skin Guinea pig Sensitizing 12-hydroxy-, reaction products with ethylenediamine **Conclusion/Summary** Skin : There are no data available on the mixture itself. : There are no data available on the mixture itself. Respiratory **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.
- <u>Teratogenicity</u> 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-methylpropan-1-ol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects

Specific target organ toxicity (repeated exposure)

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

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Section 11. Toxicological information

Potential acute health effects

Eye contact	: Causes serious eye damage.
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 watering redness
Inhalation	 Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur
Ingestion	: Adverse symptoms may include the following: stomach pains

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

Short term exposure	
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	: 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. 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

Section 11. Toxicological information

Route	ATE value
Inhalation (vapors)	8315.66 mg/kg 24.53 mg/l 3.15 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
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
,	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	Acute EC50 >100 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
,	Acute EC50 >10 mg/l Acute LC50 >10 mg/l	Daphnia - <i>Daphnia magna</i> Fish - <i>Oncorhynchus mykiss</i>	48 hours 96 hours

Conclusion/Summary

: There are no data available on the mixture itself.

Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
	- 301D Ready Biodegradability - Closed Bottle Test	79 % - Readily - 10 days 22 % - 28 days	-	-

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

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
xylene ethylbenzene Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	-	-	Readily Readily Inherent

Bioaccumulative potential

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Section 12. Ecological information

Product/ingredient name	LogPow	BCF	Potential
xylene 2-methylpropan-1-ol ethylbenzene Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	3.12 1 3.6 >5.86	7.4 to 18.5 - 79.43 -	Low Low Low High

Mobility in soilSoil/water partition: Not available.coefficient (Koc)

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 or with the requirements of environmental protection and waste disposal legisla any regional local authority requirements. Dispose of surplus and non-recycl products via a licensed waste disposal contractor. Waste should not be disput untreated to the sewer unless fully compliant with the requirements of all autivity with jurisdiction. Waste packaging should be recycled. Incineration or land should only be considered when recycling is not feasible. This material and container must be disposed of in a safe way. Care should be taken when has emptied containers that have not been cleaned or rinsed out. Empty contain liners may retain some product residues. Vapor from product residues may highly flammable or explosive atmosphere inside the container. Do not cut, grind used containers unless they have been cleaned thoroughly internally. dispersal of spilled material and runoff and contact with soil, waterways, dra sewers.	omply ation and lable bosed of chorities ill its andling hers or create a weld or Avoid

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	Ш
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

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Section 14. Transport information

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.
ΙΑΤΑ	: None identified.
Special pred	cautions 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	: 9 October 2024
Date of previous issue	: 7/4/2024
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

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Section 16. Other information

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.