# **SAFETY DATA SHEET**



Date of issue/Date of revision 16 May 2024 Version 1.04

Section 1. Identification		
Product code	: 00463616	
Product name	: PHENGUARD 985 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

SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 SKIN SENSITISATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory trac irritation) - Category 3	:t
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**GHS label elements, including precautionary statements** 

Hazard pictograms

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Signal word	: Danger
Hazard statements	: Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Harmful if inhaled. May cause respiratory irritation.

#### **Precautionary statements**

### Section 2. Hazards identification

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 vapour. Wash thoroughly after handling.
Response	: 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 skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 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

: Mixture

CAS	numbe	r/other	identifiers	5

CAS number	: Not applicable.		
EC number	: Mixture.		
Ingredient name		%	CAS number
<ul> <li>Phenol, polymer with formaldehyde, glycidyl ether (MW&lt;=700)</li> <li>Talc , not containing asbestiform fibres</li> <li>xylene</li> <li>2-methylpropan-1-ol</li> <li>ethylbenzene</li> </ul>		20 - <25 10 - <20 10 - <20 3 - <5 1 - <3	28064-14-4 14807-96-6 1330-20-7 78-83-1 100-41-4

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	<ul> <li>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.</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	<ul> <li>Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.</li> </ul>
Ingestion	<ul> <li>If swallowed, seek medical advice immediately and show the container or label.</li> <li>Keep person warm and at rest. Do NOT induce vomiting.</li> </ul>

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# Section 4. First aid measures

Most important symptoms/	effects, acute and delayed
Potential acute health effe	<u>cts</u>
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.
<u>Over-exposure signs/sym</u>	<u>otoms</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 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. 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.
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.

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# Section 5. Firefighting measures

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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	<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. Do not breathe 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 cor	<u>ita</u>	inment 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 spilt 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 vapour 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 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
📕 alc , not containing asbestiform fibres	Workplace Safety and Health Act
	(Singapore, 2/2006).
	PEL (long term): 2 mg/m <sup>3</sup> 8 hours.
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.
2-methylpropan-1-ol	Workplace Safety and Health Act
	(Singapore, 2/2006).
	PEL (long term): 152 mg/m <sup>3</sup> 8 hours.
	PEL (long term): 50 ppm 8 hours.
ethylbenzene	Workplace Safety and Health Act

## Section 8. Exposure controls/personal protection

		(Singapore, 2/2006). 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 appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances 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, vapour 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	res				
Hygiene measures	:	ash hands, forearms and face thoroughly after handling chemical products, before ting, smoking and using the lavatory and at the end of the working period. oppropriate techniques should be used to remove potentially contaminated clothing. ontaminated work clothing should not be allowed out of the workplace. Wash ntaminated clothing before reusing. Ensure that eyewash stations and safety owers are close to the workstation location.			
Eye/face protection	:	Chemical splash goggles and face shield.			
Skin protection					
Hand protection	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.			
Gloves	:	butyl rubber			
Body protection	:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.			
Other skin protection	:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.			

Product name PHENGUARD 985 BASE GREY

# Section 8. Exposure controls/personal protection

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

Appearance				
Physical state	Liquid.			
Odour	Characteristic.			
рН	bluble in water.			
Boiling point	′.78°C (>100°F)			
Flash point	sed cup: 26°C (78.8°F)			
Evaporation rate	Highest known value: 0.84 (ethylbenzene) Weighted average: 0.75compared with butyl acetate			
Flammability (solid, gas)	liquid			
Vapour pressure	Highest known value: <1.6 kPa (<12 mm Hg) (at 20°C) (2-methylpropan-1-ol). Weighted average: 1.05 kPa (7.88 mm Hg) (at 20°C)			
Vapour density	hest known value: 3.7 (Air = 1) (xylene). Weighted aver	rage: 3.46 (Air = 1)		
Relative density	9			
0 - 1 - 1 - 11 (	dia Result			
Solubility(ies)	d water Not soluble			
Auto-ignition temperature	vest known value: 415°C (779°F) (2-methylpropan-1-ol).			
Viscosity	ematic (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: oxidising 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

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# Section 11. Toxicological information

#### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
<b>xy</b> lene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
2-methylpropan-1-ol	LC50 Inhalation Vapour	Rat	24.6 mg/l	4 hours
	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 mg/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	-

**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	e itself.		
Eyes :	There are no data available	on the mixture	e itself.		
Respiratory :	There are no data available	on the mixture	e itself.		
Sensitisation					
Conclusion/Summary					
Skin :	There are no data available	on the mixture	e itself.		
Respiratory :	There are no data available	on the mixture	e itself.		
Mutagenicity					
Conclusion/Summary :	There are no data available	on the mixtur	e itself.		
<b>Carcinogenicity</b>					
Conclusion/Summary :	There are no data available	on the mixtur	e itself.		
Reproductive toxicity					
Conclusion/Summary :	There are no data available	on the mixtur	e itself.		
<b>Teratogenicity</b>					
Conclusion/Summary :	There are no data available	on the mixtur	e itself.		
Specific target organ toxici	ty (single exposure)				

#### <u>Specific target organ toxicity (single exposure)</u>

Name	Category	Route of exposure	Target organs
Talc , not containing asbestiform fibres	Category 3	-	Respiratory tract irritation
xylene	Category 3	-	Respiratory tract irritation
2-methylpropan-1-ol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects

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## Section 11. Toxicological information

Specific tar	rget organ	toxicity	(repeated	exposure)

Name		Route of exposure	Target organs
ethylbenzene	Category 2	-	hearing organs

#### **Aspiration hazard**

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

Information on likely routes of exposure	: Not available.
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 phy	sical, 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

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: Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur
: Adverse symptoms may include the following: stomach pains

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.

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### Section 11. Toxicological information

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. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.</li> </ul>
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
☑ermal	8803.34 mg/kg
Inhalation (vapours)	22.65 mg/l
Inhalation (dusts and mists)	2.91 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**

Product/ingredient name	Result	Species	Exposure
P-methylpropan-1-ol ethylbenzene	Acute EC50 1100 mg/l Acute EC50 1.8 mg/l Fresh water Chronic NOEC 1 mg/l Fresh water	Daphnia Daphnia Daphnia - Ceriodaphnia dubia	48 hours 48 hours -
Conclusion/Summary	Summary : There are no data available on the mixture itself.		

#### Persistence/degradability

Product/ingredient name	Test	Result		Dose	Inoculum
ethylbenzene	-	79 % - Readily - 10	days	-	-
Conclusion/Summary	: There are no data available on the mixture itself.				
Product/ingredient name	Aquatic half-life		Photolysis	S	Biodegradability
xylene ethylbenzene	-		-		Readily Readily

#### **Bioaccumulative potential**

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### Section 12. Ecological information

Product/ingredient name	LogPow	BCF	Potential
<b>x</b> ylene	3.12	7.4 to 18.5	Low
2-methylpropan-1-ol	1	-	Low
ethylbenzene	3.6	79.43	Low

#### Mobility in soil

Soil/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 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.
	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.

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### Section 14. Transport information

IMDG : None identified.

IATA : None identified.

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	: 16 May 2024	
Date of previous issue	: 1/25/2024	
Version	: 1.04	
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>	
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Indicates information that has changed from previously issued version.

Notice to reader

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.

### 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.