SCHOTT
glass made of ideas

B 270® Thin

Revision date:	**03.03.2022**	Revision No:	**1,1**
Print date:	**03.03.2022**	Replaces version:	1,0

Material Data Sheet

according to Regulation (EC) No 1907/2006 & UK REACH Regulation

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

B 270® Thin

Further trade names

none

REACH-registration status: This substance is exempted according to REACH Article 2 (7) and Annex V.

Substance name:	specialty glass, chemical, oxide
CAS No:	65997-17-3
EC No:	701-387-5

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

Glass. Reserved for industrial and professional use.

Uses advised against

Do not use for private purposes (household).

1.3. Details of the supplier of the Material Data Sheet

Company name:	SCHOTT AG
Street:	Hüttenstr. 1
Place:	D-31073 Grünenplan
Telephone:	+49 (0)5187 / 771-0
Contact person:	Dr. Andreas Helmstedt
e-mail:	andreas.helmstedt@schott.com
Internet:	www.schott.com
Responsible Department:	Site Home Tech Grünenplan: Telefon: +49 (0)5187 / 771 831

1.4. Emergency telephone number:

+49 (0)6132 / 84463, 24-hour & 7-day service, GBK GmbH

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

This substance is not classified as hazardous in accordance with GB CLP Regulation.

2.2. Label elements

Additional advice on labelling

Labelling according to Regulation (EC) No. 1272/2008 [CLP]: none

2.3. Other hazards

This substance does not meet the criteria for classification as PBT or vPvB.
In case of inhalation (particulates and dust):
Irritation to respiratory tract. A repeated, excessive dust exposure can cause pneumoconiosis.
After eye contact (particulates and dust): Do not subject to friction. Risk of serious damage to eyes.

SECTION 3: Composition/information on ingredients

3.1. Substances

Material Data Sheet

according to Regulation (EC) No 1907/2006 & UK REACH Regulation

Chemical characterization

specialty glass, chemical, oxide
CAS No.: 65997-17-3
EC No.: 701-387-5

As the substance glass is not included in the candidate list of substances of very high concern, currently there are no information duties according to article 33 of REACH. However for the production of glass we may use substances, which are on the candidate list and had been included in Annex XIV of the REACH regulation or could be included in future. These powdery substances are not present as such in the final glass; they are fully integrated into the glass matrix through the melting process. Thus they lose their original characteristics. With unintended use, some of these substances may be released from the matrix and become bioavailable.

The main components of the glass batch are listed as additional information in chapter 16.

Further Information

Substance is complex UVCB.

Composition of mixture according to raw materials, based on the oxides.: SECTION 16: Other information

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice.

After inhalation

particulates and dust: Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

particulates and dust: In case of skin reactions, consult a physician.

After contact with eyes

particulates and dust: Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist.

After ingestion

particulates and dust: Get medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed

In case of inhalation (particulates and dust):
Irritation to respiratory tract. A repeated, excessive dust exposure can cause pneumoconiosis.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

The product itself does not burn. In case of fire may be liberated: Metal oxide smoke, toxic

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Knock down dust with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Provide adequate ventilation. Use personal protection equipment. Avoid dust formation. Do not breathe dust.

For non-emergency personnel

Use personal protection equipment.

For emergency responders

Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

For containment

Measures to prevent aerosol and dust generation

For cleaning up

Take up mechanically. Do not subject to friction. Treat the recovered material as prescribed in the section on waste disposal.

Other information

Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Provide adequate ventilation. Use personal protection equipment. Avoid dust formation. Do not breathe dust.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink. Avoid dust formation. Do not breathe dust. Avoid contact with skin, eyes and clothes.

Further information on handling

No information available.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Provide adequate ventilation. Store in a dry place.

Hints on joint storage

Do not store together with: Strong acid, hydrofluoric acid, phosphoric and phosphorous acid, Alkali (lye),

concentrated

Further information on storage conditions

Protect from moisture.

7.3. Specific end use(s)

Glass. Reserved for industrial and professional use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
-	Antimony and compounds except stibine (as Sb)	-	0.5		TWA (8 h)	WEL
-	Barium compounds, soluble (as Ba)	-	0.5		TWA (8 h)	WEL
1305-78-8	Calcium oxide	-	2		TWA (8 h)	WEL
-	Dust, inhalable	-	10		TWA (8 h)	WEL
-	Dust, respirable	-	4		TWA (8 h)	WEL
-	Silica, amorphous, inhalable dust	-	6		TWA (8 h)	WEL
-	Silica, amorphous, respirable dust	-	2.4		TWA (8 h)	WEL
13463-67-7	Titanium dioxide, respirable	-	4		TWA (8 h)	WEL
13463-67-7	Titanium dioxide, total inhalable	-	10		TWA (8 h)	WEL

8.2. Exposure controls


Appropriate engineering controls

Provide adequate ventilation as well as local exhaustion at critical locations. Technical measures and the application of suitable work processes have priority over personal protection equipment.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection.

Hand protection

Wear suitable gloves. (cut-resistant)

Skin protection

Wear suitable protective clothing. Disposal of contaminated protective clothing separately, do not reuse.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Thermal hazards

In case of melting: Wear protective gloves/protective clothing. (heat-resistant)

Environmental exposure controls

Do not allow to enter into surface water or drains.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	solid
Colour:	No information available.
Odour:	odourless
Odour threshold:	not determined

		Test method
Changes in the physical state		
Melting point/freezing point:	not determined	
Boiling point or initial boiling point and boiling range:	not determined	
glass transition temperature:	525-545 °C	ISO 7884-8
Flash point:	not applicable	
Flammability		
Solid/liquid:	not applicable	
Gas:	not applicable	
Explosive properties		
The product is not: Explosive.		
Lower explosion limits:	not applicable	
Upper explosion limits:	not applicable	
Auto-ignition temperature:	not applicable	
Self-ignition temperature		
Solid:	not applicable	
Gas:	not applicable	
Decomposition temperature:	> 525 °C	
pH-Value:	10,7	OECD 122
Viscosity / dynamic:	not applicable (solid)	
Viscosity / kinematic:	not applicable (solid)	
Water solubility:	not applicable	
Solubility in other solvents		
Fat: not applicable		
Partition coefficient n-octanol/water:	The substance is not soluble in water.	
Vapour pressure:	up to Tg no significant vapor pressure is to be expected	
Density:	2,5 g/cm³	
Relative vapour density:	not applicable	

9.2. Other information

Information with regard to physical hazard classes

Oxidizing properties

Not oxidising.

Other safety characteristics

Evaporation rate: not applicable

Further Information

softening point: 716 °C

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Reacts with: Strong acid, hydrofluoric acid, phosphoric and phosphorous acid, Alkali (lye), concentrated

10.4. Conditions to avoid

Humidity
Temperature > glass transition temperature (Formation of: Metal oxide smoke, toxic)

10.5. Incompatible materials

Strong acid, hydrofluoric acid, phosphoric and phosphorous acid, Alkali (lye), concentrated

10.6. Hazardous decomposition products

Metal oxide smoke, toxic (Temperature > glass transition temperature)

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

Based on available data, the classification criteria are not met.
The toxicological potential of glasses results from the bioavailability of individual components when used improperly. This is determined by the bioaccessibility test according to Fraunhofer. It is a leaching method of the material performed in 5 artificial body fluids.

Acute oral toxicity: no bioaccessibility detected

Acute dermal toxicity: no bioaccessibility detected

Acute inhalation toxicity: no bioaccessibility detected

Irritation and corrosivity

Based on available data, the classification criteria are not met.
After eye contact (particulates and dust): Irritant effect on the eye:
pH: Test results: refer to section 9.
at pH 5,6 - < 7,3 & > 9,7 - 10,5: Potential hazards: Irritation (GHS/CLP criteria are not met.)
at pH > 2 - < 5,6 & > 10,5 - < 11,5: Potential hazards: Risk of serious damage to eyes. (GHS/CLP criteria are not met.)

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Information on likely routes of exposure

oral, dermal, inhalative, Eye contact

11.2. Information on other hazards

Endocrine disrupting properties

No information available.

Other information

In case of inhalation (particulates and dust):
Irritation to respiratory tract. A repeated, excessive dust exposure can cause pneumoconiosis.

SECTION 12: Ecological information

12.1. Toxicity

The ecotoxicological effect of glasses is determined by the ecological accessability of hazardous substances that can be released under environmental conditions from the glass matrix. For characterization, the test from the German landfill regulation (Dep-VO) is used. In the evaluation, the leachable hazardous substance content, in relation to the total amount of the per se non-hazardous glass, is treated as a standard mixture proportion and classified accordingly.

Result / evaluation: The product is not: Ecotoxic.

12.2. Persistence and degradability

Inorganic product which is not eliminable from water through biological cleaning processes. The methods for determining the biological degradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of UK REACH.

12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms.

12.7. Other adverse effects

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Neither the product nor the residues from the processing.
Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

101112 WASTES FROM THERMAL PROCESSES; wastes from manufacture of glass and glass products; waste glass other than those mentioned in 10 11 11

List of Wastes Code - used product

101112 WASTES FROM THERMAL PROCESSES; wastes from manufacture of glass and glass products; waste glass other than those mentioned in 10 11 11

Contaminated packaging

Dispose of waste according to applicable legislation.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

14.7. Maritime transport in bulk according to IMO instruments

not relevant

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulatory information

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Water hazard class (D): - - non-hazardous to water

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,2,3,6,8,9,11,12,16.

Abbreviations and acronyms

CLP: Classification, labelling and Packaging
REACH: Registration, Evaluation and Authorization of Chemicals
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN: United Nations
CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Regulations concerning the international carriage of dangerous goods by rail
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
IMDG: International Maritime Code for Dangerous Goods
EmS: Emergency Schedules
MFAG: Medical First Aid Guide
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
SVHC: Substance of Very High Concern
For abbreviations and acronyms, see table at http://abbrev.esdscom.eu

Further Information

Composition of mixture according to raw materials, based on the oxides.:

Substance name: SILICON DIOXIDE
CAS No.: 7631-86-9
weight fraction in %: 65 - 75
SVHC substance.: No.
Carcinogenicity: No.

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Substance name: SODIUM OXIDE
CAS No.: 1313-59-3
weight fraction in %: 5 - 15
SVHC substance.: No.
Carcinogenicity: No.

Substance name: POTASSIUM OXIDE
CAS No.: 12136-45-7
weight fraction in %: 4 - 10
SVHC substance.: No.
Carcinogenicity: No.

Substance name: CALCIUM OXIDE
CAS No.: 1305-78-8
weight fraction in % 5 - 11
SVHC substance.: No.
Carcinogenicity: No.

Substance name: BARIUM OXIDE
CAS No.: 1304-28-5
weight fraction in % < 4
SVHC substance.: No.
Carcinogenicity: No.

Substance name: ZINC OXIDE
CAS No.: 1314-13-2
weight fraction in %: < 6
SVHC substance.: No.
Carcinogenicity: No.

Substance name: TITANIUM DIOXIDE
CAS No.: 13463-67-7
weight fraction in %: < 2
SVHC substance.: No.
Carcinogenicity: No. (nano= Carc. 2)

Substance name: ANTIMONY TRIOXIDE
CAS No.: 1309-64-4
weight fraction in %: < 1
SVHC substance.: No.
Carcinogenicity: Yes. (Carc. 2)

Occupational exposure limit values, air limit values, Biological limit values: For further specification, refer to section 8 of the SDS.

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.