

# MATERIAL SAFETY DATA SHEET



## Nexterion® Slide AL

Author:	SCHOTT Technical Glass Solutions GmbH, Germany
Document	LS6-HCF-S-003
Version:	1.2
Seite:	1/6
Datum:	© April 2009

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## 1 General Information

### Manufacturer

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Germany

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E-Mail: [coatedsubstrate@schott.com](mailto:coatedsubstrate@schott.com)  
[www.schott.com/nexterion](http://www.schott.com/nexterion)

### Distributor for US, Canada, Mexico

Microarray Solutions  
SCHOTT North America Inc.  
5530 Shepherdsville Road  
Louisville, KY 40228  
USA

Phone: +1-502-6957-4417  
Fax: +1-502-966-4976  
E-Mail: [coatedsubstrate@us.schott.com](mailto:coatedsubstrate@us.schott.com)  
[www.us.schott.com/nexterion](http://www.us.schott.com/nexterion)

**Product Name:** Nexterion Slide AL  
**Chemical Name:** Aldehyde Coated Borosilicate Glass  
**C.A.S. Number:** None

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## 2 Composition / information on ingredients

Chemical Name	Percent	Reg.* (Y/N)	Cas#	OSHA (PEL)	ACGIH (TLV)	Carc. (Y/N)
Silica	75 – 85	Y	014808607	0.1mg/m <sup>3</sup>	0.1mg/m <sup>3</sup>	N
Boron Oxide	10 – 20	Y	001303862	15mg/m <sup>3</sup>	10mg/m <sup>3</sup>	N
Alumina	1 – 5	Y	001344281	15mg/m <sup>3</sup>	10mg/m <sup>3</sup>	N
Sodium Oxide	1 – 5	N	1313593	N/A	N/A	N
Potassium Oxide	0 – 2	N	12136457	N/A	N/A	N

\*Regulated as per lists: OSHA 29CFR 1910 Subpart Z: ACGIH; NTP and IARC

One glass slide contains approximately 4 to 5 x10<sup>14</sup> aldehyde groups per cm<sup>2</sup> surface area.

## 3 Physical data

Boiling Point:	not applicable
Vapor Pressure:	not applicable
Vapor Density:	not applicable
Solubility in Water:	not applicable
Specific gravity:	2.2 – 2.3 g/cm <sup>3</sup>
Melting Range:	510 – 550°C
Physical State:	solid with a density between 2.2 to 2.3 g/cm <sup>3</sup>
Appearance and odor:	in plates with various thickness, no odor

## 4 Fire and explosion hazard data

Flash Point:	not applicable
Auto Ignition Temperature:	not applicable
Flammable Limits % Vol. in Air:	not applicable
Extinguishing Media:	non-combustible material
Special Fire Fighting Procedures:	Use extinguishing media that is appropriate for the classification of surrounding fire. Inorganic glass is non-combustible.
Unusual Fire and Explosion Hazards:	There is the possibility of flying glass fragments if hot glass comes in contact with water or carbon dioxide extinguishing media.

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## 5 Health hazard data

Inhalation:	Acute: Respiratory irritation. Chronic: Possible pneumoconiosis effects
Ingestion:	Ingestion's may cause vomiting, diarrhea, depressed circulation and in severe cases shock, coma, paralysis and cyanosis.
Skin:	Ground glass particles and dust may cause irritation.
Eye:	May cause irritation.
First Aid:	Inhalation: Remove to fresh air. Seek medical attention.  Ingestion: Seek medical attention.  Skin: Wash wit soap and water. Seek medical attention if irritation permits.  Eye: Flush well with running water. Seek medical attention if irritation permits.

## 6 Spill, leak and disposal

Spill or Leak Procedures:	No special precautions.
Waste Disposal:	Follow Federal State and local regulations.

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## 7 Special protection information

Engineering Controls: Use local exhaust ventilation, hood or equipment enclosure to avoid dispersal of fibrous or other glass particulars into the workplace air.

Personal Protective Equipment: Respiratory - if glass dust or particulars are above the OSHA permissible exposure limits use a NIOSH approved respirator for dust and fibers. Eye protection – industrial safety glasses that meet ANSI Z87 standards. Protective gloves – recommended gloves for protection from sharp edges.

## 8 Special precautions and comments

Reactivity: Borosilicate glass is a stable material. As a particular chemically resistant glass it is inert to many chemicals (including acidic and basic solutions), but it may react to hot, strong alkaline solutions and – like all glasses - with concentrated very aggressive hydrofluoric and phosphoric acids. Hazardous decomposition or byproducts may emit metal oxide fumes when heated to high temperatures.

Comments: Inorganic borosilicate glass is an amorphous, inorganic, usually transparent or translucent substance, consisting of a mixture of silicates, alkaline components, and/or borates formed by fusion of silica and various types of oxides with a flux and a stabilizer into a mass that cools to a rigid condition without crystallization.

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## 9 Special precautions and comments

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

### Abbreviations used:

ACGIH: American Conference of Governmental Industrial Hygienists

CERCLA: Comprehensive Environmental Response, Compensation and Liability Act

CFR: Code of Federal Regulations

DSL: Canadian Domestic Substance List

EPA: Environmental Protection Agency

HEPA: high Efficiency Particulate Air

HMIS: Hazardous Material Identification System

IARC International Agency for Research on Cancer

NDSL: Non Canadian Domestic Substance List

NFPA: National Fire Protection Association

NIOSH: National Institute of Occupational Safety and Health

NTP: National Toxicology Program

OSHA: Occupational Safety and Health Administration

RCRA: Resource Conservation and Recovery Act

RQ: Reportable Quantities

SARA: Superfund Amendments and Reauthorization Act

TLV: Threshold Limit Value

TPQ: Threshold Planning Quantity

TSCA: Toxic Substance Control Act

WHMIS: workplace Hazardous Materials Information System