

# MATERIAL SAFETY DATA SHEET



## Nexterion® Slide E

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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E-Mail: [coatedsubstrate@schott.com](mailto:coatedsubstrate@schott.com)  
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### 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 E  
**Chemical Name:** Epoxysilane 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> epoxy 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 Other information

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