

# MATERIAL SAFETY DATA SHEET

## N-51A GLASS

### Section I: Chemical Product and Company Information

Product Name: N-51A Glass      Chemical & Common Names: Borosilicate Glass  
Manufacturer's Name: Gerresheimer Glass Inc.      Emergency #: 856-692-3600  
Address: 537 Crystal Ave.      Date Prepared: January 9, 2002  
Vineland, NJ 08360

Signature of Preparer:



### Section II: Composition and Information on Ingredients

<b>Hazardous Component</b>	<b>CAS #</b>	<b>PEL(mg/m<sup>3</sup>)</b>	<b>TLV(mg/m<sup>3</sup>)</b>	<b>% (optional)</b>
Silicon Dioxide	14808-60-7	N/A	N/A	72
Boron Oxide	1303-86-2	15	10	12
Aluminum Oxide	1344-28-1	N/A	10	7
Potassium Oxide	12136-45-7	N/A	N/A	2
Sodium Oxide	12401-86-4	N/A	N/A	6
Calcium Oxide	1305-78-8	5	2	1

### Section III: Physical and Chemical Characteristics

Boiling Point: N/A      Specific Gravity: 2.3 g/cc  
Vapor Pressure (mmHg): N/A      Melting Point: N/A  
Vapor Density: N/A      Evaporation Rate: N/A  
Solubility in Water: N/A      Appearance and odor: clear glass, no odor

### Section IV: Fire and Explosion Hazard Data

Flash Point: N/A      Flammable Limits - LEL: N/A      UEL: N/A  
Extinguishing Media: Not Combustible. Use same as for surrounding area.  
Special Fire Fighting Procedures: Wear pressure-demand self-contained breathing apparatus in conjunction with appropriate protective equipment.  
Unusual Fire and Explosion Hazards: None

## **Section V: Stability And Reactivity**

Stability: Stable

Incompatibility (Materials to avoid):

Hazardous Decomposition of Byproducts:

Hazardous Polymerization: Will not occur

Conditions to avoid: None

Avoid contact with hydrofluoric acid.

If contacted by hydrofluoric acid, silicon tetrafluoride is generated, which is a corrosive gas.

Although the individual chemicals that make up this product may be reactive, they present no physical hazard when in the form of glass.

## **Section VI: Health Hazard Data**

Health Hazards (Acute and Chronic): Although the individual chemicals that make up this product may be toxic, they present no health hazards when in the form of glass. Manufacture of glass involves high temperature fusion, which renders ingredients inert. This product does contain silica in the form of Silicon Dioxide; grinding and polishing may create free silica dust. Repeated, prolonged exposure to free silica may cause cancer and silicosis. Silicosis will produce symptoms of coughing and shortness of breath, developing gradually. Free silica particles on contact with the eye may cause a reaction that could damage vision. Symptoms would include a gradual clouding of vision. See First Aid below on how to avoid.

Routes of Entry: If grinding/polishing – skin & eye contact; inhalation

Carcenogenicity (of product):	NTP:	No
	IARC Monographics:	No
	OSHA Regulated:	No

Signs and Symptoms of Exposure: Silicosis generally develops after years of repeated high exposure.

Medical Conditions Generally Aggravated by Exposure: None, unless heavy dust exposure is involved, in which case lung disease may be aggravated.

Emergency First Aid Procedures: If dust or particles contact eye, flush with water, but do not attempt to remove particles. Seek immediate medical attention.

## **Section VII: Precautions for Safe Handling and Use**

Steps to be taken in case material is released or spilled: Sweep, shovel, or vacuum spilled material into a closed container. Avoid generation of dust.

Waste Disposal Method: Dispose of in accordance with local, state, and/or Federal Regulations.

Precautions to be taken in handling and storing: Store in dry, cool location.

Other Precautions: None

## **Section VIII: Control Measures**

**Respiratory Protection:** If necessary, wear NIOSH approved respiratory protection for dusts, mists, or fumes. In almost any conditions of use (except heavy dust production), none is required.

**Ventilation:** Local Exhaust: General ventilation recommended under normal conditions of use.

Special: If active dust and/or fume generation occurs, local ventilation is recommended.

Mechanical (General): None

Other: None

**Protective Gloves:** Recommended to prevent skin irritation if dust is involved or activity involves risk of breakage and cuts.

**Eye Protection:** Required if dust is generated or a risk of breakage exists.

**Other Protective Clothing or Equipment:** Consider exposed skin protection of arms to prevent cuts in event of breakage.

**Hygienic Work Practices:** Avoid inhalation of dusts/fumes. Prohibit consumption of food, beverages, and smoking in work areas, as general good practice.