

## Material Safety Data Sheet

### 1. Chemical Product and Company Identification

Glass type: ECO-550

Glass manufacturer: HIKARI

### 2. Ingredients Data

CHEMICAL NAME	PERCENT BY WGT.	OSHA	ACGIH
P <sub>2</sub> O <sub>5</sub>	40-50	(PEL)	(TLV)
R <sub>2</sub> O	0-10 R=Na, K		
R'O	10-20 R'=Ca, Ba		
ZnO	15-25		
Sb <sub>2</sub> O <sub>3</sub>	10-20		

### 3. Physical Data

Boiling Point: Not applicable  
Vapor Pressure: Not applicable  
Vapor Density: Not applicable  
Solubility in Water: Not applicable  
Specific Gravity: 3.32 g/cc  
Melting Point (At): deg c  
Physical state: Transparent solid  
Appearance and Odor: Clear solid, odorless

### 4. Fire and Explosion Hazard Data

Flash Point: Not applicable  
Auto Ignition Temperature: Not applicable  
Flammable Limits/% Volume in air: Not applicable  
Extinguishing media: Not combustible  
Special Fire and Explosion Hazards: None  
Appearance and Odor: Clear solid, odorless

### 5. Health Hazard Data

Route(s) of Entry Effects of overexposure  
Inhalation: (dust particles) Accute: respiratory irritant  
Chronic: possible pneumoconiosis effects  
Ingestion: (dust particles) Accute: irritation of G.I. Tract  
Chronic: nausea and vomiting  
Skin: (dust particles) May cause itching; with repeated exposure  
Eye: (dust particles) May cause eye irritation

First Aid: Inhalation: Remove to fresh air.  
Ingestion: Seek medical attention  
Skin: Wash with soap and water  
Eye: Flush well with clear water

#### **6. Spill, Leak, and Disposal**

Spill or Leak Procedures: No special precautions. Avoid generating dust.  
Waste Disposal: Follow all federal, state, and local regulations.

#### **7. Special Protection Information**

Engineering Controls: Avoid production of dust particles, ventilate work spaces well.

Personal Protective Equipment: Wear appropriate respirator if dust levels exceed OSHA limits. Wear safety glasses and gloves.

#### **8. Special Precaution and Comments**

Reactivity: Glass is very stable material but may react to hot strong acids or alkaline solutions. May emit metal oxide fumes when heated to high temperatures.

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