

# Heritage Glass Material Safety Data Sheet

## SECTION I: IDENTIFICATION

Trade Name: HG Aggregate, glass chips, or glass frit. Color: **White** and **Dental White**  
Manufacturer's Name: Heritage Glass Inc. Updated: September 2009  
130 West 700 South Bldg. H 435-563-5585  
Smithfield, UT 84335

## SECTION II: HAZARDOUS INGREDIENTS

Hazardous components:

The glass may contain the following hazardous components in amounts less than and up to the maximum of the following percentages. The following are chemical compounds used in the manufacture of white and dental white glass; changes in the chemical compounds occur during glass formation.

<u>Component</u>	<u>CAS#</u>	<u>Max % on glass</u>	<u>ACGIH-TLV/OSHA PEL</u>
Sodium silicofluoride	16893-85-9	1.25	2.5 mg(F)/m <sup>3</sup>

Additional information:

Because this glass may be ground, polished, fused, reheated, or reformed, toxic substances in this glass may become bio-available. Because Heritage Glass has no control over uses and process, we are listing all toxic substances as if they are all 100% bio-available.

## SECTION III: PHYSICAL DATA

Boiling point: greater than 3000°F Specific gravity: 2.56-2.58  
Melting point: 1300° F softens, 1800-2000° F melts Vapor pressure (mm Hg): N/A  
Vapor Density (air-1): N/A Evaporation rate (butyl acetate =1): N/A  
Solubility in water: negligible  
Appearance and Odor: glass aggregate in various colors and sizes from -40 mesh to 1-2 inch. No odor.

## SECTION IV: FIRE AND EXPLOSION DATA

Flash point (method used): N/A Flammable limits: non-flammable  
LEL: N/A UEL: N/A Extinguishing media: N/A  
Special fire and explosion hazards: may emit toxic fume at sustained temperatures above 1300 ° F

## SECTION V: REACTIVITY DATA

Stability: Stable Conditions to avoid: N/A  
Incompatibility (materials to avoid): hydrofluoric acid  
Silica in the glass will dissolve in hydrofluoric acid and produce a corrosive gas-silicon tetrafluoride. Hydrofluoric acid may also produce highly toxic hydrogen selenide gas from selenium and some selenium compounds.  
Hazardous decomposition or byproducts: N/A Hazardous polymerization: will not occur

## SECTION VI: HEALTH HAZARD DATA

### Routes of Entry

Inhalation: Yes

Skin: Yes

Ingestion: Yes

### Health Hazard Acute and Chronic

#### ACUTE

Skin Contact: sharp edges and slivers of glass may cut or puncture skin.

Ingestion: ground glass or glass particles may cause internal bleeding requiring medical attention.

Inhalation:

Dust—glass dust may cause respiratory irritation. Silica in glass dust is not in a free silica state.

Fume—when glass is reheated or melted hazardous fume may be given off. Can cause nausea, gastric pain, and irritation to the upper respiratory tract.

#### CHRONIC

Inhalation and ingestion: repeated inhalation of irritating glass dust may cause chronic respiratory diseases.

Repeated inhalation or ingestion of glass dust or fume containing small amounts of one or more of the following toxic components—fluoride—may cause or contribute to chronic diseases.

*Carcinogenicity:*

Component

NTP IARC OSHA

None

Symptoms and signs of overexposure: Dust—inhalation of large amounts of dust or powdered glass will cause shortness of breath and reduce pulmonary function. No toxic ingredients should be present in amounts sufficient to produce acute symptoms.

Fume—inhalation of fume from the reheating or melting of the glass can cause Metal Fume Fever; symptoms include metallic taste in mouth, shortness of breath, gastric pain and flu-like symptoms.

Medical conditions aggravated by overexposure: respiratory and cardiovascular disease. Exposure to toxic metal fumes may contribute to kidney dysfunction.

#### **Emergency first aid procedures:**

Eyes: flush with running water. Receive medical attention as necessary.

Ingestion: receive medical attention

Inhalation:

Dust—remove to fresh air. Receive medical attention as necessary.

Fume—drink milk to counteract Metal Fume Fever. Receive medical attention

Cut: stop bleeding, clean wound and apply a bandage. See doctor if necessary

As in all medical emergencies report to your supervisor and receive follow-up medical attention for treatment, observation, and support as needed.

## SECTION VII: SAFE HANDLING AND USE

Steps to be taken if material is released or spilled: sweep; use measures to avoid creating dust

Waste disposal methods: follow federal, state and local regulations for disposal of glass and mirror

Precautions in handling and storage: take precautions against bag breakage or spillage, avoid creating dust.

Other precautions: Use adequate ventilation and dust collection as needed. When cutting or grinding glass in a recycled-water-cooled system, small amounts of sodium may dissolve and become concentrated in the water as sodium hydroxide. When using a water-cooled or grinding system wear rubber gloves to protect hands and wear safety splash goggles.

### **SECTION VIII: CONTROL MEASURES**

Respiratory protection: use conventional particulate respiratory protection based on considerations of airborne concentrations and duration of exposure.

Ventilation: local exhaust—to meet PEL requirements; mechanical (general)—to meet PEL requirements

Protective gloves: recommended

Eye protection: safety glasses, face shield

Other protective clothing: as appropriate in light of specific application

Work hygienic practices: avoid creating dust. Change clothes and shoes, shower at end of work day.

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. The information set forth herein is based on technical data that Heritage Glass believes to be reliable, but Heritage Glass extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of this information for any purchaser's use or for any consequence of its use in various processes.