MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND CONTACT INFORMATION

Product Name: Quartz Glass Products


Alpha Resources, Inc.
P.O. Box 199
Stevensville, MI 49127
Phone: 269-465-5559

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS NO.</th>
<th>%W</th>
<th>CHEMICAL NAMES</th>
<th>OSHA</th>
<th>ACGIH</th>
</tr>
</thead>
<tbody>
<tr>
<td>60676-86-0</td>
<td>100</td>
<td>Amorphous Fused Silica</td>
<td>0.1</td>
<td>0.1</td>
</tr>
</tbody>
</table>

3. HAZARD IDENTIFICATION

POTENTIAL HEALTH EFFECTS
EYES: May cause irritation through mechanical abrasion.
SKIN: Can dry skin.
INHALATION: Causes moderate respiratory irritation.
INGESTION: None expected.
CHRONIC OVEREXPOSURE: Silicosis has been associated with an increased risk of lung cancer. Crystalline silica should be considered a possible human carcinogen based on this association. Fused silica has not been identified as a carcinogen.
ACUTE OVEREXPOSURE: N/A
MEDICAL CONDITIONS AGGRAVATED: Pulmonary disorders.
CARCINOGENICITY: None.

4. FIRST AID MEASURES

EYES: Flush with large amounts of water. Seek medical attention if irritation continues.
INHALATION: Removed to fresh air immediately. If necessary, aid with breathing and seek medical help.
SKIN: Wash skin with plenty of soap and water.
INGESTION: No emergency care anticipated.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES
Non-flammable
Flash Point: Not available
Flammable Limits: (% by Volume in Air): Lower: None  Upper: None

AUTO-IGNITION TEMPERATURE: N/A
HAZARDOUS COMBUSTION PRODUCTS: None.
EXTINGUISHING MEDIA: All standard firefighting media.
FIREFIGHTING INSTRUCTIONS: Nothing specific.

6. ACCIDENTAL RELEASE MEASURES

SMALL/LARGE SPILL: Sweep or gather up material and place in proper container for disposal or recovery.

7. HANDLING AND STORAGE

HANDLING: No special precautions.
STORAGE: No special precautions.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: No specific engineering controls normally required.
VENTILATION: General room ventilation is normally adequate.
RESPIRATORY PROTECTION: A NIOSH approved dust respirator is required if TLV is exceeded.
SKIN AND HAND PROTECTION: N/A.
EYE AND FACE PROTECTION: Safety glasses are recommended.
OTHER PROTECTIVE EQUIPMENT: None required.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Solid, colorless tubing/rod.
BOILING POINT: 2230 C (4045 F)
FREEZE-MELT POINT: 1710 C (3110 F)
VAPOR PRESSURE: N/A
VAPOR DENSITY: N/A
SOLUBILITY IN WATER: Insoluble.
SPECIFIC GRAVITY: 2.65
pH: N/A
ODOR: None
PERCENT VOLATILES: N/A
EVAPORATION RATE: N/A

10. STABILITY AND REACTIVITY
CHEMICAL STABILITY: Stable.
INCOMPATIBILITY: Hydrofluoric Acid.
HAZARDOUS DECOMPOSITION PRODUCTS: None.
HAZARDOUS POLYMERIZATION: Will not occur.
CONDITIONS TO AVOID: Grinding, sawing, sanding, abrading or otherwise dispersing in air.
Fused silica can convert to crystalline silica if held at high temperatures for extended periods of time.

11. TOXICOLOGICAL INFORMATION

None reported.

12. ECOLOGICAL INFORMATION

None available.

13. DISPOSAL CONSIDERATION

Dispose of in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

USA DOT: Not regulated

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS
TSCA STATUS: On toxic Substance Control Inventory
CERCLA Reportable Quantity: None
RCRA Status: Not regulated
SARA TITLE III:
Section 302 Extremely Hazardous Substances: None
Section 311/312 Hazardous Categories: None
Section 313 Toxic Chemicals: None

CANADAIN REGULATIONS
WHMIS: D2B Toxic Materials

16. OTHER INFORMATION

Hazard Index: (0-4, 4= Extreme)
   Health: 1  Fire: 0  Reactivity: 0

SUPPLEMENTAL INFORMATION

The data and information as stated was furnished by the manufacturer/vendor &/or supplier of this product. Alpha Resources, Inc. cannot warrant the accuracy of this information and shall not be responsible or liable for any damage that may result, should any of the information be erroneous.

Date Prepared: January 14, 2013

Prepared by: Ken Mantei