

# MATERIAL SAFETY DATA SHEET

## SECTION I

PRODUCT NAME OR NUMBER (AS IT APPEARS ON LABEL):

### **AR-2156 Fluor Hibit**

MANUFACTURER: Alpha Resources, Inc.  
P.O. Box 199  
Stevensville, MI 49127

TELEPHONE: 269-465-5559

MANUFACTURER'S DUNNS NO. 08 383 8045

CHEMICAL NAME: FREE SILICA (CRYSTALLINE QUARTZ)  
Formula: SiO<sub>2</sub>, CAS #: 14808-60-7

---

## 2. HAZARDOUS INGREDIENTS

FREE SILICA (CRYSTALLINE QUARTZ), Formula: SiO<sub>2</sub>, CAS #: 14808-60-7, 100%

---

## 3. PHYSICAL DATA

Boiling Point: Not Applicable  
Vapor Pressure: Not Applicable  
Specific Gravity: 2.65  
Melting Point: 1700-1800°C  
Solubility in Water: Negligible  
Percent Volatile: Not Applicable  
Odor and Appearance: White granular or powder, odorless.

---

## 4. FIRE AND EXPLOSION DATA

Non-flammable and non-explosive.

---

## 5. HEALTH HAZARD INFORMATION

OSHA PEL: CRYSTALLINE QUARTZ (Respirable) 0.1mg/m<sup>3</sup> (TWA-TLV)  
ACGIH TLV: CRYSTALLINE QUARTZ (Respirable) 0.1mg/m<sup>3</sup> (TWA-TLV)  
NIOSH TWA: CRYSTALLINE QUARTZ (Respirable) 0.05 mg/m<sup>3</sup>

**HAZARD BY ROUTES OF EXPOSURE:**

**EYE:** Inflammation of eye tissue may occur from overexposure.

**SKIN/CONTACT ABSORPTION:** Inflammation from contact with open cuts may occur.

**SIGNS AND SYMPTOMS ASSOCIATED WITH EXPOSURE OVER THE TLV:** Short Term: Shortness of breath, coughing associated with inhalation of dust. Long Term: May cause silicosis, a chronic disease of the lungs marked by acute fibrosis; may cause cancer.

**INHALATION: WARNING:** These products contain crystalline silica. Repeated, prolonged inhalation of dust may cause delayed lung injury which may result in silicosis or pneumoconiosis. The International Agency For Research On Cancer in its publication, "IARC Monographs On The Evaluation Of The Carcinogenic Risk To Humans - Silica, Some Silicates, Coal Dust and Para-aramid Fibrils" - Volume 68, 1997, has concluded that there is sufficient evidence for the carcinogenicity of crystalline silica in humans, and has, therefore, classified crystalline silica in Group 1, carcinogenic to humans. The National Toxicology Program's ("NTP's") Sixth Annual Report on Carcinogens, 1991, lists crystalline silica (respirable) as a substance which may reasonably be anticipated to be a carcinogen. In humans, a number of studies have found an association between lung cancer and exposure to dust containing respirable crystalline silica. In many of these studies, though not all, lung cancer risks were elevated and could not be explained by confounding factors such as cigarette smoking or arsenic or radon inhalation. While the IARC working group concluded there was sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica in the form of quartz or cristobalite, it noted that carcinogenicity in humans was not detected in all circumstances studied. **NOTE:** The State of California requires the following statement: "Airborne particles of respirable size of crystalline silica are known to the State of California to cause cancer."

**INGESTION:** Nausea may result from accidental ingestion. May cause cancer.

**EMERGENCY/FIRST AID PROCEDURES:**

**INHALATION:** Move to fresh air; consult physician and /or obtain competent medical assistance as necessary.

**INGESTION:** Consult physician and/or obtain competent medical assistance.

**EYE CONTACT:** Flush with water; consult physician and/or obtain competent medical assistance as necessary.

**SKIN CONTACT:** Wash thoroughly with water.

-----

## 6. REACTIVITY DATA

Stability: Silica is a stable material under ordinary conditions.

Incompatibility: None known.

Hazardous Polymerization: Not known to occur.

---

## 7. SPILL OR LEAK PROCEDURES

Steps To Be Taken If Material Is Spilled or Released: If uncontaminated, recover and reuse. If contaminated, collect in suitable containers for disposal. Use appropriate method to avoid creating dust. Avoid breathing dust. Wear a NIOSH/MSHA/OSHA approved respirator.

Waste Disposal Method: May be buried in approved land disposal facility in accordance with Federal, State, and local regulations. Silica is not a hazardous waste under RCRA (40 CFR Part 261). Silica is not regulated by DOT.

---

## 8. CONDITIONS FOR SAFE USE

Ventilation: Local exhaust required for dust removal. Refer to OSHA 1910.24, ASTM, and/or ANSI Standards. Do not exceed OSHA PEL or ACGIH TLV.

Respiratory Protection: Use NIOSH/MSHA/OSHA approved respirator if dust is present.

Eye Protection: Optional, but recommended. NIOSH recommends against wearing contact lenses when working with crystalline silica.

Protective Gloves: Optional, but recommended.

---

## 9. SPECIAL PRECAUTIONS

Do not breathe dust.

Avoid creating dust in closed areas.

Use adequate ventilation as recommended by NIOSH/MSHA/OSHA for crystalline silica.

---

## 10. OTHER RELATED INFORMATION

### 1. NPCA/CPMA HMIS Ratings:

Health (2)

Flammability (0)  
Reactivity (0)  
Personal Protection (E)

2. Silica is not hazardous under DOT Regulations.
3. Government regulations require that personnel working with crystalline silica receive appropriate training in safe work habits, respiratory protection and health risks.

---

#### 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: September 1, 2013

Prepared by: Ken Mantei