

## 1. IDENTIFICATION

### 1.1 Product Identifiers

Product Name: Sand Mixture  
Alternative names: Majority Silicon dioxide, Quartz, Crystalline silica.  
Product Number: F80101, 442-B01E, 442-B02E, 442-B03E, EDCE-B002, IAES-P028(xx), IAES-P030(xx).

**1.2 Relevant identified uses of the substance or mixture and uses advised against**  
Identified uses: For laboratory and educational use only

### 1.3 Details of the supplier of the safety data sheet

Company: LAB-AIDS®, Inc, 17 Colt Ct., Ronkonkoma, NY 11779, USA  
Telephone: +1 800 381 8003.  
Fax: +1 631 820 8268.

**1.4 Emergency telephone number:** Emergency number: CHEMTREC 1 800 424-9300

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

#### GHS classification

Carcinogenicity, Lungs (Category 1A), H350  
Specific Target Organ Toxicity, Repeated Exposure, Lungs (Category 1), H372

### 2.2 Label elements, including precautionary statements

Signal word: Danger  
Hazards statements: H350 - May cause cancer, H372 - Causes damage to organs, (lungs) through prolonged or repeated exposure.  
Precautionary statements: P264 - Wash exposed skin thoroughly after handling, P280 - Wear protective gloves, eye protection, P285 - In case of inadequate ventilation wear respiratory protection.



Pictogram:

### 2.3 Hazards not otherwise classified: None

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substance:** Not applicable

### 3.2 Mixture

Chemical Name	Product identifier	%	GHS-US classification
Quartz ( Silicon dioxide)	CAS# 14808-60-7	95-99.9%	Carcinogenicity 1A, Lungs H350; STOT RE 1, H372

**3.3 Chemicals where a trade secret is claimed:** Any concentration shown as a range is to protect confidentiality, or is it due to batch variation.

## 4. FIRST AID MEASURE

### 4.1 Description of the first aid measure:

**INGESTION:** First aid is not generally required. Never give anything by mouth to unconscious person. Rinse mouth and get a conscious person drink a glass of milk or water. Do NOT induce vomiting unless directed to do so by medical personnel. Get medical attention if necessary.

**INHALATION:** Remove to fresh air. Get medical attention if necessary.

**EYE CONTACT:** Wash immediately with plenty of water, and continue washing for at least 15min., occasionally lifting upper and lower eyelids. Seek medical attention if irritation develops.

**SKIN CONTACT:** First Aid is not required. Flush thoroughly with mild soap and water if needed. Remove contaminated clothing. Get medical attention if necessary.

**4.2 Most important symptoms and effects, both acute and delayed:** Refer to section 11.

**4.3 Indication of any immediate medical attention and special treatment needed:** Immediate medical attention is not required.

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media:

Suitable extinguishing media: Use TriClass, dry chemical extinguisher for surrounding fires.

**5.2 Special hazard arising from the substance or mixture:** Not applicable.

**5.3 Advice for firefighters:** Not required.

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions:** Wear laboratory grade gloves, eye protection and a lab coat.

**6.2 Emergency procedures:** Restrict unprotected personnel from the area. Avoid generating airborne dust during clean-up.

**6.3 Methods and material used for containment and cleanup procedure:** Recover for use if not contaminated. Sweep up or vacuum and place in a suitable container for a proper disposal. Do not use compressed air to clean spilled sand or ground silica. Wash spill area with soap and water.

## 7. HANDLING AND STORAGE

**7.1 Precaution for safe handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Use only under adult supervision. Avoid breathing dust. Use with an adequate ventilation. Wash hands thoroughly after handling.

**7.2 Storage:** Store in closed container in a dry area. Avoid moisture.

**7.3 incompatibility:** Refer to section 10.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters:** ACGIH: TWA: 0.025 mg/m<sup>3</sup> (respirable dust)

**8.2 Exposure controls:** Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits.

**Respiratory protection:** Non should be needed if normal laboratory handling at room temperature.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:** Solid.

**Appearance:** Red-pink, tan, black crystals or granules.

**Odor:** No odor

**pH:** Neutral

**Vapor Pressure ( mm Hg):** Not available

**Vapor Density:** Not available

**Evaporation Rate:** Not available

**Viscosity:** N/A

**Flash point:** N/A

**Autoignition:** N/A

**Boiling point:** 2230°C (4046°F)

**Melting point:** 1710°C (3110°F)

**Freezing point:** Not available

**Decomposition temp:** Not available

**Solubility:** Not available

**Specific gravity (H<sub>2</sub>O = 1):** ≈ 2.65g/cc

**Percent volatile (%):** N/A

**Molecular formula:** SiO<sub>2</sub>

**Molecular weight:** 60.09

## 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable

**Conditions to Avoid:** Incompatible materials.

**Incompatibilities:** Powerful oxidizing agents such as fluorine, chlorine trifluoride, oxygen difluoride, hydrofluoric acid.

**Hazardous decomposition:** Silica will dissolve in hydrofluoric acid and produce the corrosive gas silicon tetrafluoride.

**Hazardous polymerization:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

**Acute effects:** Eyes: Dust and granules may cause eye mechanical irritation. Skin: Not expected to cause irritation. Inhalation: Inhalation of the dust may cause coughing, sneezing, sore throat, nasal congestion and shortness of breath. Pre existing respiratory conditions may be affected by dust. Ingestion: Not expected to cause acute reaction.

**Chronic effects:** Prolonged inhalation of respirable crystalline silica may cause lung disease, silicosis, lung cancer

Crystalline silica is a basic component of soil, sand, granite, and many other minerals. Quartz is the most common form of crystalline silica. Cristobalite and tridymite are two other forms of crystalline silica. All three forms may become respirable size particles when workers chip, cut, drill, or grind objects that contain crystalline silica. Crystalline silica is a cancer suspect in humans from occupational sources and in manufacturing environments under prolonged exposure.


**Toxicological data**

Acute oral toxicity ORAL LD<sub>50</sub>: >22,500mg/kg

Acute vapor toxicity IHL-LC<sub>50</sub>: Not available

DERMAL LD<sub>50</sub>: Not available

**Carcinogenicity:** IARC concluded that crystalline silica in the form of quartz or cristobalite dust is carcinogenic to humans (Group 1)

 California prop 65: This product can expose you to chemicals crystalline silica which is known to The State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## 12. ECOLOGICAL INFORMATION

Not known to have adverse consequences on environment.

## 13. DISPOSAL CONSIDERATION

Disposal of in accordance with all local, state, and federal regulations, or contact with a licensed chemical disposal agency.

## 14. TRANSPORT INFORMATION

**UN number:** N/A

**Shipping name:** N/A

**Hazard Class:** N/A

**Packing group:** N/A

**Exceptions:** Ltd Qty. N/A

## 15. REGULATORY INFORMATION

TSCA-listed, EINECS-listed (238-878-4).

## 16. OTHER INFORMATION

**Disclaimer:**

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