



# Material Safety Data Sheet

## Section 1 - Product Identification and Use

Product Identifier: **SILICA SAND**  
Various sizes, including silica flour, play sand, traction sand

Description: Odourless, granular sand

Product Use: Water filtration & treatment, sand blasting abrasive

Manufacturer's Name:  
Unimin Corporation  
258 Elm Street  
New Canaan, CT 06840  
Emergency Phone: [203] 966-8880

Supplier's Name:  
AWI (Anthratech Western Inc.)  
4450- 46 Avenue, SE  
Calgary, Alberta T2B 3N7  
Emergency Phone: [403] 255-7377

\* Silica Sand is manufactured by Unimin Corporation and is distributed by AWI.

## Section 2 - Hazardous Ingredients

Crystalline Silica in the form of Quartz	87-99.9%		
C.A.S. Number:	14808-60-7	LD50: N/A	LC50: N/A
EINECS Number:	238-878-4	EU Classification:	Xn R48/20

## Section 3 - Physical Data

Physical State:	Solid	Odour & Appearance:	Odourless, granular sand, white powder
Odour Threshold:	N/A	Specific Gravity:	2.65 (Approximate)
Vapour Pressure:	N/A	Vapour Density:	N/A
Evaporation Rate:	N/A	Boiling Point:	2230 °C
Freezing Point:	N/A	pH:	N/A
Coefficient of Water/Oil Distribution:	N/A	Melting Point:	1610 °C

## Section 4 - Fire and Explosion Data

Conditions of Flammability:	N/A	Means of Extinguishing:	N/A
Flash Point:	Fully oxidized, will not burn	Upper Flammable Limit:	N/A
Lower Flammable Limit:	N/A	Auto-Ignition Temperature:	N/A
Explosion Data (Mechanical Impact):	N/A	Explosion Data (Static Impact):	N/A

## Section 5 - Reactivity Data

Conditions under which the product is chemically unstable:	N/A
Substance or class of substance with which the product is incompatible:	Strong oxidizers (ex. Fluorine)
Conditions of reactivity:	N/A
Hazardous decomposition products:	Will dissolve in hydrofluoric acid producing a corrosive gas, silicon tetrafluoride.

## Section 6 - Toxicological Properties

Skin Contact:	No effect initially but prolonged contact may cause irritation of the skin and mucous membranes.
Skin Absorption:	No effect
Eye Contact:	No long-term effect other than dust discomfort
Ingestion:	No effect
Inhalation Acute Exposure:	No immediate effect
Chronic Exposure:	Respiratory diseases may develop such as silicosis, pneumoconiosis, pulmonary fibrosis which can increase the risk of Tuberculosis. Is a known carcinogen. Can cause scarring of the skin and internal organs (Leroderma). * Can aggravate individuals with lung diseases such as Bronchitis, Emphysema or Chronic Obstructive Pulmonary Disease.
Exposure Limits:	OSHA Permissible Exposure Limit for Crystalline Silica, Quartz $\frac{10\text{mg}}{\text{m}^3}$ (Respirable measured as an 8-hour Time Weighted Average) % Silica + 2 TLV-0.025 mg/m <sup>3</sup> 8-hour TWA (respirable fraction)
ACGIH ILV:	Crystalline Quartz

TLV-TWA = 0.05 mg/cubic M (respirable dust) See threshold limit value and biological exposure indices for 1987-1988 American Conference of Governmental Industrial Hygienists, be changed to 50 micrograms respirable free silica per cubic meter of air (50 ug/cubic M) averaged over a work shift of up to 10 hours per day, 40 hours per week. The NIOSH Criteria document of Crystalline Silica should be consulted for more detailed information.

Acute Toxicity Values: Silica – LD50 oral rat >22,500 mg/kg.

## Section 7 - Preventative Measures

Use local exhaust to control dust dispersion. For respiratory protection, use an air-supplied respirator or other conventional particulate respiratory protection based on considerations of airborne concentrations and duration of exposure. For more information contact the following standards:

- 1) American National Standard Institute (ANSI Z.88.2)
- 2) Occupational Safety and Health Administration (OSHA -29CFR Part 1910.134)
- 3) Mine Safety and Health Administration (MSHA - 30CFR Part 56 and 57)
- 4) NIOSH Respirator Decision Logic

Protective gloves and safety glasses should be worn to prevent dust in eyes.

Waste Disposal: In case of spill; vacuum spillage and dispose of waste in containers or slurry to avoid re-dispersion.

Storage Requirement: None

Special Shipping Information: None

Accidental Release: Wear appropriate equipment. If uncontaminated, collect using a dustless

## Section 8 - First Aid Measures

Eye Contact:	Flush eyes immediately with large amounts of running water, lifting the upper and lower eyelids occasionally. If irritation persists contact a physician.
Inhalation:	Remove from contaminated area. If shortness of breath or other breathing problems persist, consult a physician.
Ingestion:	If large amounts are swallowed, get immediate attention.
Skin Contact:	A water wash will remove particles. Wash skin with soap and water before breaks and at the end of a shift.

## **Section 9 - Preparation & Date of MSDS**

Prepared by: Kellsie Donaldson (Safety Officer)  
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Date Prepared: January 13, 2010

The information contained herein is accurate to the best of our knowledge. However, data, safety standards and government regulations are subject to change, and conditions of handling, use or misuse of this product are beyond our control. Users should satisfy themselves that they are aware of all of the current data relevant to their particular use.