

Common Name: **SILICA, TRIPOLI**

Synonyms: Silica, Crystalline-Tripoli; alpha-Quartz

CAS No: 1317-95-9

Molecular Formula: SiO₂

RTK Substance No: 1664

Description: Colorless, odorless mineral solid

HAZARD DATA

Hazard Rating	Firefighting	Reactivity
4 - Health 0 - Fire 0 - Reactivity DOT#: None ERG Guide #: None Hazard Class: None	Extinguish fire using an agent suitable for type of surrounding fire. Silica, Tripoli itself does not burn.	Silica, Tripoli reacts with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE). Silica, Tripoli is not compatible with STRONG ACIDS (such as HYDROCHLORIC, SULFURIC and NITRIC); ACETYLENE; and AMMONIA.

SPILL/LEAKS

Isolation Distance:

Spill: 25 meters (75 feet)

Fire: 800 meters (1/2 mile)

Moisten spilled material first or use a HEPA-filter vacuum for clean-up and place into sealed containers for disposal.

PHYSICAL PROPERTIES

Odor Threshold:	Odorless
Flash Point:	Nonflammable
Vapor Pressure:	0 mm Hg at 68°F (20°C)
Specific Gravity:	2.2 to 2.65 (water = 1)
Water Solubility:	Insoluble
Boiling Point:	4,046°F (2,230°C)
Melting Point:	2,984° to 3,105°F (1,640° to 1,707°C)
Molecular Weight:	60.1

EXPOSURE LIMITS

ACGIH: 0.025 mg/m³ (as the *respirable fraction*)

The Protective Action Criteria values are:

PAC-1 = 0.3 mg/m³

PAC-2 = 0.3 mg/m³

PAC-3 = 50 mg/m³

(All of the above as *Silica, Crystalline-Quartz*)

PROTECTIVE EQUIPMENT

Gloves:	Nitrile and Natural Rubber
Coveralls:	Tyvek®
Respirator:	APR with high <i>efficiency filters</i> >25 mg/m ³ - SCBA

HEALTH EFFECTS

Eyes:	Irritation
Skin:	No information
Inhalation:	Nose and lung irritation with cough, and shortness of breath (<i>Silicosis</i>)
Chronic:	<i>Crystalline Silica</i> causes cancer (lung) in humans

FIRST AID AND DECONTAMINATION

Remove the person from exposure.
Flush eyes with large amounts of water for at least 15 minutes. Remove contact lenses if worn.
Remove contaminated clothing and wash contaminated skin with soap and water.
Begin artificial respiration if breathing has stopped and CPR if necessary.
Transfer promptly to a medical facility.