Silicon Dioxide



Section 1 Product Description

Product Name: Silicon Dioxide

Recommended Use: Science education applications

Synonyms: Sand

Distributor: Carolina Biological Supply Company

2700 York Road, Burlington, NC 27215

1-800-227-1150

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)

Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

WARNING



Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure.

GHS Classification:

Carcinogenicity Category 2, Specific Target Organ Systemic Toxicity (STOT) - Repeated Exposure Category 2

Other Safety Precautions: IF exposed or concerned: Get medical advice/attention.

Section 3 Composition / Information on Ingredients

 Chemical Name
 CAS #
 %

 Silicon Dioxide
 7631-86-9
 100

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Eyes: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Section 5 Firefighting Procedures

Extinguishing Media: Use media suitable to extinguish surrounding fire.

Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained

breathing apparatus.

Fire and/or Explosion Hazards: None Known

Hazardous Combustion Products: Carbon dioxide, Carbon monoxide

Section 6 Spill or Leak Procedures

Steps to Take in Case Material Is

No health affects expected from the clean-up of this material if contact can be avoided.

Released or Spilled:

Follow personal protective equipment recommendations found in Section 8 of this (M)SDS

No special spill clean-up considerations. Collect and discard in regular trash.

Silicon Dioxide Page 1 of 4

Section 7 Handling and Storage

Handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Do not breathe dust/fume/gas/mist/vapors/spray. Use personal protective equipment as required. Avoid creating

and inhaling dust.

Storage: Store locked up. Suitable for any general chemical storage.

Storage Code: Green - general chemical storage

Section 8 Protection Information

ACGIH OSHA PEL

Chemical Name(TWA)(STEL)(TWA)(STEL)No data availableN/AN/AN/AN/A

Control Parameters

Eve Protection:

Engineering Measures: No exposure limits exist for the constituents of this product. General room ventilation

might be required to maintain operator comfort under normal conditions of use.

Personal Protective Equipment (PPE): Lab coat, apron, eye wash, safety shower.

Respiratory Protection: Respiratory protection may be required to avoid overexposure when handling this

product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms. Wear chemical splash goggles when handling this product. Have an eye wash station

available

Skin Protection: Avoid skin contact by wearing chemically resistant gloves, an apron and other protective

equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving

work.

Gloves: No information available

Section 9 Physical Data

Formula: SiO2

Molecular Weight: 60.09

Appearance: Colorless to White Crystals

Odor: None

Odor Threshold: No data available

pH: No data available

Melting Point: No data available 1610 C

Boiling Point: 2230 C Flash Point: No data available Flammable Limits in Air: N/A Vapor Pressure: N/A Evaporation Rate (BuAc=1): N/A

Vapor Density (Air=1): N/A
Specific Gravity: Approx. 2.2

Solubility in Water: Practically Insoluble Log Pow (calculated): No data available Autoignition Temperature: No data available Decomposition Temperature: No data available

Viscosity: No data available Percent Volatile by Volume: 0%

Section 10

Reactivity Data

Reactivity: Not generally reactive under normal conditions.

Chemical Stability: Stable under normal conditions.

Conditions to Avoid:Hazardous Polymerization:
None known.
Will not occur

Section 11 Toxicity Data

Routes of Entry Inhalation, contact with Eyes.

Symptoms (Acute): Respiratory Irritation, Eye Irritation

Delayed Effects: Respiratory disorders

Acute Toxicity:

Silicon Dioxide

Chemical NameCAS NumberOral LD50Dermal LD50Inhalation LC50Silicon Dioxide7631-86-9Oral LD50 RatNot determinedNot determined

3160 mg/kg

Page 2 of 4

Carcinogenicity:

 Chemical Name
 CAS Number
 IARC
 NTP
 OSHA

 No data available
 7631-86-9
 Not listed
 Not listed
 Not listed

Chronic Effects:

Mutagenicity: No evidence of a mutagenic effect.

Teratogenicity: No evidence of a teratogenic effect (birth defect).

Sensitization: No evidence of a sensitization effect.

Reproductive: No evidence of negative reproductive effects.

Target Organ Effects:

Acute: No data available

Chronic: Listed by NTP as a probable carcinogen., Respiratory system

Section 12

Ecological Data

Overview: This material is not expected to be harmful to the ecology.

Mobility:No dataPersistence:No dataBioaccumulation:No dataDegradability:No dataOther Adverse Effects:No data

Chemical Name CAS Number Eco Toxicity

Silicon Dioxide 7631-86-9 96 HR LC50 BRACHYDANIO RERIO 5000 MG/L [STATIC]

48 HR EC50 CERIODAPHNIA DUBIA 7600 MG/L

72 HR EC50 PSEUDOKIRCHNERIELLA SUBCAPITATA 440

MG/L

Section 13

Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always

contact a permitted waste disposer (TSD) to assure compliance. This material is not considered to be a RCRA hazardous waste.

Section 14

Waste Disposal Code(s):

Transport Information

Ground - DOT Proper Shipping Name:

Not regulated for transport by DOT

Air - IATA Proper Shipping Name:

Not regulated for air transport by IATA.

Section 15

Regulatory Information

TSCA Status: All components in this product are on the TSCA Inventory.

Chemical Name CAS § 313 Name § 304 RQ CERCLA RQ § 302 TPQ CAA 112(2)

Number TQ

No data available 7631-86-9 No No No No No

Section 16

Additional Information

Revised: 09/09/2015 Replaces: 09/03/2014 Printed: 10-29-2015

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

Silicon Dioxide Page 3 of 4

ACGIH	American Conference of Governmental Industrial Hygienists	NTP OSHA	National Toxicology Program Occupational Safety and Health Administration
CAS	Chemical Abstract Service Number	PEL	Permissible Exposure Limit
CERCLA	Comprehensive Environmental Response,	ppm	Parts per million
	Compensation, and Liability Act	RCRA	Resource Conservation and Recovery Act
DOT	U.S. Department of Transportation	SARA	Superfund Amendments and Reauthorization Act
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
N/A	Not Available	TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health

Silicon Dioxide Page 4 of 4