GHS Safety Data Sheet

SDS No. : SIO01PAEG

Date Issued : 2012/11/09
Last updated : 2019/08/20

Section 1. Identification of the substance or mixture and of the supplier

Product Information

Product name: SiO_2 Silicon dioxide(quartz)

Product	Purity	Form	Size or Shape
SIO07PB	99.9%(3N)	fine powder	ca.0.8 μm
SIO08PB	3N	fine powder	ca.4 μm
SIO09PB	3N	powder	63 μm pass

Company Information:

Manufacturer : Kojundo Chemical Laboratory Co., Ltd.
1-28, 5-chome, Chiyoda, Sakado-shi, Saitama Japan 350-0284
Phone: +81-49-284-1511 Fax: +81-49-284-1351
Emergency Phone : +81-49-284-1511

Recommended uses and restrictions on use: For research purposes

Section 2. Hazards identification

GHS Classification

Health Hazards	Environmental Hazards	Physical Hazards
Germ cell mutagenicity : Category 2 **Carcinogenicity : Category 1A** **Specific target organ toxicity, repeated exposure: Category1**	No data available	**Flammable solids : Not classified** **Pyrophoric solids : Not classified** **Self-heating substances and mixtures : Not classified** **Substances and mixtures which, in contact with water, emit flammable gases : Not classified**

GHS Label: C

Pictograms or symbols:

Warning word: DANGER

Hazard information	Description of precaution
Suspected of causing genetic defects **May cause cancer** **Causes damage to organs (respiratory tract, immune system, kidney) through prolonged or repeated exposure**	Obtain special instructions. Read and understand all safety precautions before handling. Wear protective gloves/protective clothing/eye protection/respiratory protection/face protection during handling. Avoid breathing dust/mist/gas/fume/vapors/spray. Do not eat, drink or smoke when using this product, and wash hands thoroughly after handling. Call a POISON CENTER or doctor/physician if you feel unwell. Store locked up. Dispose of contents/ container in accordance with local/national regulations.

Section 3. Composition / information on ingredients

Chemical or common name: Silicon dioxide
Synonyms: Quartz
Chemical formula: SiO_2
Single Substance or Compound: Single substance

Composition:	100%
CAS #:	14808-60-7
RTECS#:	VV7330000
TSCA inventory :	Listed
EINECS:	2388784

Section 4. First aid measures

Eye contact: Promptly wash eyes with plenty of water while lifting the eye lids.
Continue to rinse for at least 15 minutes and get medical attention.

Skin contact: Promptly flush contaminated skin with soap or mild detergent and water.
Contact physician if irritation continues.

Inhalation: Remove the exposed person immediately and provide fresh air.
Get medical attention.

Ingestion: Rinse mouth and throat with water. Get medical attention immediately.

Section5. Fire fighting measures

Extinguishing media:
Use media appropriate for surrounding fire.

Fire fighting: The product is not combustible.
Self-contained breathing apparatus and full protective clothing should be used, if the material is involved in fire.

Section 6. Accidental release measures

Personal Precautions:
Workers should use protective wears to prevent contact with the spilt adhesive and inhalation of its vapor/dusts.

Environmental hazard precautions:
Shut off leak if without risk.
Prevent flow out to river, etc. so as not to badly affect.

Method for containment and cleaning up:
Indoor leakage: Ventilate as much as possible until the cleaning is completed.
Outdoor leakage: Work from the windward and evacuate the leeward crowd.
Gather up, pack in closed DOT-approved waste container as much as possible.
Carefully collect remnant and move to a safe place.

Section 7. Handling and storage

Precautions to be taken in handling:

Safe handling: Use protective wears and local ventilation equipment, if inhalation or skin contact is foreseen.
Avoid prolonged or repeated exposure.

Precautions to be taken in storage:

General precautions: Store the material in a sealed container.
Store in a cool, dry, well ventilated and dark place away from incompatible materials.

Section 8. Exposure controls / personal protection

Exposure guideline:

Chemical Name	ACGIH(2019) TLV-TWA mg/m^3	OSHA(2006) PEL-TWA mg/m^3
Silica, quartz	0.025(R)	0.098(R), 0.29(T)

R : Respirable fraction, T :Total dust

Facility measures: Local ventilation of closed work room or total proper ventilation to prevent inhalation.

Protective ware: Wear appropriate NIOSH/MSHA-approved respirator, safety goggles, impervious gloves, protective wear, protective boots.

Section 9. Physical and chemical properties

Appearance: Transparent to white solid, odorless

Chemical formula: SiO_2

Formula weight: 60.1

Melting point: 1550~1713 ℃

Boiling point: 2950 ℃

Density: 2.65 g/cm^3

Solubility: Insoluble ; water
Soluble ; hydrofluoric acid

Flammable: Non-combustible substance

Oxidation: No data available

Section10. Stability and reactivity

Stability: Stable in closed container.

Reactivity:

Incompatibility: Hydrogen fluoride, strong oxidizing agent

Section11. Toxicological information

Acute toxicity: GHS : No data available

Skin corrosive / irritation: GHS : No data available

Serious eye damage / irritation: GHS : No data available

Respiratory sensitization: GHS : No data available

Skin sensitization: GHS : No data available

Germ cell mutagenicity: GHS : Category 2 ; Suspected of causing genetic defects

Carcinogenicity: GHS : Category 1A ; May cause cancer

Carcinogenicity:

Chemical Name	ACGIH (2019)	IARC (2018)	NTP (2016)
Silica, crystalline	A2	1	K

ACGIH A1 Suspected human carcinogen.
IARC 1 The agent is carcinogenic to humans.
NTP K Known to be human carcinogens.

Reproductive toxicity: GHS : No data available

Specific target organ toxicity

−single exposure: GHS : No data available

−repeated exposure: GHS : Category 1 ;
Causes damage to organs (respiratory tract, immune system, kidney) through prolonged or repeated exposure

Aspiration hazard: GHS : No data available

Section12. Ecological information

Ecotoxicity:

Hazardous to the aquatic environment

−acute toxicity: GHS : Not classified.; Falls below the lowest level.
Crustacea (Daphnia magna) LL50(24hr) > 10000 mg/L (SIDS(2013))
Fish (Danio rerio) LL0(24hr) = 10000 mg/L (SIDS(2013))

−chronic toxicity: GHS : No data available

Hazardous to the ozone layer	GHS : No data available No Freon or Halon
Fish toxicity:	See above
Degradability:	No data available
Bioaccumulative potential:	No data available
Mobility in soil:	No data available

Section13. Disposal considerations

Disposal method: User of the product should contract with the local government or licensed 'Industrial Waste Haulers' for disposal of waste.

Section 14. Transport information

UN classification:	Non-hazards
UN number:	None
HS code:	2506.10
Marine pollution:	None
Precautions:	Container should be transported in a secure position, in a well-ventilated vehicle.

Section 15. Regulatory information

TSCA inventory: listed.

Please refer to any other local / national measures that may be relevant.

Section 16. Other information

The information described above is believed to be correct. However, Kojundo Chemical Lab. makes no representation, warranty nor guarantee of any kind with respect to the information on this data sheet or any use of the product based upon this information.