

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name	Silicon Dioxide Amorphous
CAS number	7631-86-9

Synonyms Silicon dioxide, synthetic amorphous silica.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses Laboratory chemicals.

1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

2.2 GHS Label elements, including precautionary statements

Pictogram None.

Signal Word None.

Hazard statements No information available

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS None identified. WARNING. Cancer - https://www.p65warnings.ca.gov/.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Silicon Dioxide Amorphous	Silicon dioxide, synthetic amorphous silica	7631-86-9	100%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled	Remove to fresh air. Get medical attention immediately if symptoms occur.
In case of skin contact	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.
In case of eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
If swallowed	Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

- **4.2 Most important symptoms and effects, both acute and delayed** None reasonably foreseeable.
- **4.3 Indication of any immediate medical attention and special treatment needed** Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

- **5.2** Specific hazards arising from the substance or mixture Non-combustible. Hazardous combustion products: silicon dioxide.
- **5.3** Special protective equipment and precautions for firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

5.4 Further information

Flash Point

No information available

Autoignition Temperature

No information available

Explosion limits

Upper Lower Sensitivity to Mechanical Impact Sensitivity to Static Discharge NFPA No information available No information available No information available No information available

Health	Flammability	Instability	Physical hazards
2	0	0	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

6.2 Environmental precautions

Should not be released into the environment. See Section 12 for additional ecological information.

6.3 Methods and materials for containment and cleaning up Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

. . .

6.4 Reference to other sections

See section 2 for full list of hazard and precaution statements.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible materials.

Incompatibilities

Strong oxidizing agents. Strong acids. Strong bases.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Туре	Value
Silicon dioxide amorphous	(Vacated) TWA	6 mg/m3

US. ACGIH Threshold Limit Values

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Туре	Value
Silicon dioxide amorphous	IDLH	3000 mg/m3
Silicon dioxide amorphous	TWA	6 mg/m3

Biological occupational exposure limits

No information available

8.2 Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, espicially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye/face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Control of environmental exposure

No information available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Powder solid
Appearance	White
Odor	Odorless
Odor Threshold	No information available
рН	No information available
Melting Point/Range	1710 °C / 3110 °F
Boiling Point/Range	No information available
Evaporation Rate	No information available
Flammability (solid)	No information available
Flammability or explosive limit	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	No information available
Density	2.2 g/cm3
Solubility	No information available
Partition coefficient; n-octanol/water	No information available
Autoignition Temp	No information available
Decomposition Temp	No data available
Viscosity	No information available
Molecular Formula	O2Si
Molecular Weight	60.08
VOC Content(%)	No information available
Oxidizing properties	No information available

9.2 Other safety information

No information available

SECTION 10: Stability and reactivity

10.1 Reactivity

None known, based on information available

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions None under normal processing.

10.4 Conditions to avoid

Incompatible products, excess heat. Avoid dust formation.

10.5 Incompatible materials

Strong oxidizing agents, strong acids, strong bases.

10.6 Hazardous decomposition products Silicon dioxide.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Silicon dioxide amorphous	>5000 mg/kg (rat)	>2000 mg/g (rabbit)	-

Skin corrosion/irritation

Irritating to skin

Serious eye damage/eye irritation

Irritating to eyes.

Respiratory or skin sensitization

Irritating to respiratory system.

Germ cell mutagenicity

No information available

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Silicon dioxide amorphous	7631-86-9	Not listed				

Specific target organ toxicity - single exposure None known

Specific target organ toxicity - repeated exposure None known

Reproductive toxicity

No information available

Chronic effects

No information available

11.2 Additional Information

No information available

SECTION 12: Ecological information

12.1 Toxicity

Product		Species	Test Results
	EC50	Freshwater Algae	440 mg/L 72h
Silicon dioxide amorphous	LC50	Freshwater Fish	5000 mg/L 96h
	EC50	Water Flea	7600 mg/L 48h

12.2 Persistence and degradability

Insoluble in water

12.3 Bio accumulative potential

No information available

12.4 Mobility in soil

Is not likely mobile in the environment due to its low water solubility.

12.5 Results of PBT and vPvB assessment No information available

12.6 Endocrine disrupting properties No information available

12.7 Other adverse effects

The toxicological properties have not been fully investigated.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US)

Not regulated

IMDG Not regulated

IATA Not regulated

SECTION 15: Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not listed

CERCLA Hazardous Substance List (40 CFR 302.4) Not listed

SARA 304 Emergency release notification Not listed

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) Listed, 50 µg/m3 TWA, 25 µg/m3 Action Level.

Superfund Amendments and Reauthorization Act of 1986 (SARA) SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous See section 2 for more information.

SARA 313 (TRI reporting)

Not regulated

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List Not regulated

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated.

Safe Drinking Water Act Not regulated

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace Not listed

US state regulations

US. Massachusetts RTK - Substance List

Listed.

US. New Jersey Worker and Community Right-to-Know Act Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law Listed.

California Proposition 65 Listed, Carcinogen.

SECTION 16: Other information

Issue date: 08/19/2024 Revision 1: 07/03/2025

SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.