SAFETY DATA SHEET

1. Identification

Name of the substance or mixture (trade name)  Blank
Product code  Part #: 930001
Major recommended uses for the substance or mixture  Sample.
Specific restrictions for use of the substance or mixture  Not available.
Manufacturer/Importer/Distributor information
Manufacturer
Suppliers Evident Scientific
Address 48 Woerd Ave. Waltham, MA 02453, USA
Telephone +1 781-419-3900
Emergency telephone number CHEMTREC
US: 1-800-424-9300, International: +1 703-527-3887

2. Hazards identification

Classification of the substance or mixture
Physical hazards  Not classified.
Health hazards  Carcinogenicity (inhalation) Category 1A
Specific target organ toxicity, repeated exposure (inhala- tion) Category 2 (Lung, Respiratory system)
Environmental hazards  Not classified.

GHS labeling elements, including precautionary statements
Hazard symbol(s)

Signal word  Danger
Hazard statement(s)  May cause cancer by inhalation. May cause damage to organs (Lung, Respiratory system) through prolonged or repeated exposure by inhalation.
Precautionary statement(s)
Prevention  Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Wear protective gloves/protective clothing/eye protection/face protection.
Response  IF exposed or concerned: Get medical advice/attention.
Storage  Store locked up.
Disposal  Dispose of contents/container in accordance with local/regional/national/international regulations.
Other hazards which do not result in classification  None known.
Supplemental information  None.

3. Composition/information on ingredients

Substance  CAS number  Concentration or concentration range
Silicon dioxide  7631-86-9  100

Composition comments  All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.
4. First-aid measures

**First-aid measures**

**Inhalation**
Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact**
Wash off with soap and water. Get medical attention if irritation develops and persists.

**Eye contact**
Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.

**Ingestion**
Rinse mouth. Get medical attention if symptoms occur.

**Most important symptoms/effects, acute and delayed**
Dusts may irritate the respiratory tract, skin and eyes. Coughing. Discomfort in the chest. Shortness of breath.

**Personal protection for first-aid responders**
IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

**Notes to physician**
Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

5. Fire-fighting measures

**Means of fire extinguishing**
Use fire-extinguishing media appropriate for surrounding materials.

**Suitable extinguishing media**
None known.

**Unsuitable extinguishing media**
During fire, gases hazardous to health may be formed.

**Special fire fighting procedures**
Use water spray to cool unopened containers.

**Protective measures taken by firefighting crews**
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Specific measures**
Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards**
No unusual fire or explosion hazards noted.

6. Control measures for spills and leaks

**Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation. Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Do not breathe dust. For personal protection, see section 8 of the SDS.

**To be taken by those who are not involved in rendering emergency services**
Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

**Environmental precautions**
Avoid discharge into drains, water courses or onto the ground.

**Methods and materials for containment and cleaning up**
Avoid the generation of dusts during clean-up. Collect dust using a vacuum cleaner equipped with HEPA filter. Collect in containers and seal securely. Containers with collected spillage must be properly labeled with correct contents and hazard symbol. For waste disposal, see section 13 of the SDS.

7. Handling and storage

**Precautions for safe handling**
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Should be handled in closed systems, if possible. Minimize dust generation and accumulation. Do not breathe dust. Provide appropriate exhaust ventilation at places where dust is formed. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities**
Store locked up. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

**Control parameters**
Follow standard monitoring procedures.
### Occupational exposure limits

#### US. ACGIH Threshold Limit Values

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<tr>
<th>Material</th>
<th>Type</th>
<th>Value</th>
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<tbody>
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<td>TWA</td>
<td>0.025 mg/m³</td>
<td>Respirable fraction.</td>
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- **Argentina. OELs. Law 19587 (Establishing the Conditions for Health and Safety in the Workplace) and Decree 351/79 Article 61, Annex III, as amended**

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- **Chile. OELs. Decree No. 594, arts. 61 & 66: Regulating Basic Health and Environmental Conditions in the Workplace and Setting Permissible Levels of Exposure to Chemical and Physical Agents**

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- **Paraguay. Decree No. 14.390/92 that approves the General Technical Regulation of Safety, Hygiene and Medicine in the Workplace**

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- **Peru. OELs. Decreto Supremo 015-2005-SA (Reglamento sobre Valores Límites Permisibles para Agentes Químicos en el Ambiente de Trabajo)**

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- **Venezuela. OELs. (COVENIN 2253: Permissible Environmental Concentration Limits for Chemical Substances in Workplaces and Biological Exposure Indices)**

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#### Biological limit values

No biological exposure limits noted for the ingredient(s).

#### Appropriate engineering controls

- Should be handled in closed systems, if possible. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn.

#### Personal protective measures

- **Eyes and face protection**
  - Risk of contact: Wear safety glasses with side shields (or goggles).

- **Skin protection**
  - **Hand protection**
    - No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals.
  - **Other**
    - No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.

- **Respiratory protection**
  - Wear respirator with dust filter.

- **Thermal hazards**
  - No protection is ordinarily required under normal conditions of use.

#### Hygiene measures

- Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
9. Physical and chemical properties

Appearance

- Physical state: Solid.
- Form: Powder.
- Color: White.
- Odor: Odorless.
- Odor threshold: Not available.
- pH: Not applicable.
- Melting point/freezing point: 3110 °F (1710 °C)
- Initial boiling point and boiling temperature range: 4046 °F (2230 °C)
- Flash point: Not applicable.
- Evaporation rate: Not applicable.
- Flammability (solid, gas): Non flammable.

Upper/lower flammability or explosive limits

- Flammability limit - lower (%): Not applicable.
- Flammability limit - upper (%): Not applicable.
- Explosive limit - lower (%): Not available.
- Explosive limit - upper (%): Not available.

Vapor pressure: Not applicable.

10. Stability and reactivity

Reactivity: Stable at normal conditions.

Chemical stability: Material is stable under normal conditions.

Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.

Conditions to avoid: Avoid dust formation. Contact with incompatible materials.


Hazardous decomposition products: No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

- Inhalation: Dust may irritate respiratory system. Prolonged inhalation may be harmful.
- Skin contact: Dust or powder may irritate the skin.
- Eye contact: Dust may irritate the eyes.
- Ingestion: Expected to be a low ingestion hazard.

Symptoms: Dusts may irritate the respiratory tract, skin and eyes. Coughing. Shortness of breath. Discomfort in the chest. Prolonged exposure may cause chronic effects.
Acute toxicity
Not expected to be acutely toxic.

Skin irritation and corrosion
Dust or powder may irritate the skin.

Serious eye damage/eye irritation
Dust may irritate the eyes.

Respiratory or skin sensitization
Respiratory sensitization
Due to partial or complete lack of data the classification is not possible.

Skin sensitization
This product is not expected to cause skin sensitization.

Germ cell mutagenicity
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity
May cause cancer by inhalation.

ACGIH Carcinogens
Silicon dioxide (CAS 7631-86-9) A2 Suspected human carcinogen.

Colombia. OELs. Resolution No. 02400: Norms Concerning Working Conditions, Health and Safety in the Workplace
Silicon dioxide (CAS 7631-86-9) A2 Suspected human carcinogen.

Silicon dioxide (CAS 7631-86-9) Group A2 Suspected human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity
Silicon dioxide (CAS 7631-86-9) 1 Carcinogenic to humans.

Paraguay. Decree No. 14.390/92 that approves the General Technical Regulation of Safety, Hygiene and Medicine in the Workplace
Silicon dioxide (CAS 7631-86-9) A2 Suspected human carcinogen.

Toxic to reproduction
This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure
Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity - repeated exposure
May cause damage to organs (Lung, Respiratory system) through prolonged or repeated exposure by inhalation.

Aspiration hazard
Due to the physical form of the product it is not an aspiration hazard.

Chronic effects
Chronic lung disease (silicosis) and/or lung cancer may result from prolonged/repeated breathing of the dust of this material.

12. Ecological information
Ecotoxicity
Not expected to be harmful to aquatic organisms.

Persistence and degradability
Not applicable.

Bioaccumulative potential
The product is not bioaccumulating.

Partition coefficient n-octanol / water (log Kow)
Not available.

Bioconcentration factor (BCF)
Not available.

Mobility in soil
The product is insoluble in water.

Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Considerations on final disposal
Recommended methods for final destination
Residual waste
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging
Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Local disposal regulations
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Dispose of contents/container in accordance with local/regional/national/international regulations. When your own wastewater treatment plant is not available, collect entire waste and then charge to a licensed industrial waste management professional with manifests for industrial waste.
14. Transport information

National regulations
ANTT
Not regulated as dangerous goods.

International regulations
IATA
Not regulated as dangerous goods.
IMDG
Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable.

15. Regulatory information

Federal regulations
This chemical product safety data sheet was prepared in accordance with the Brazilian Standard (ABNT NBR 14725-4: (Safety data sheet for chemicals (SDS))). The Chemicals Safety Information Card of the hazardous chemical can be obtained from a supplier.

International regulations
Montreal Protocol
Not applicable.
Stockholm Convention
Not applicable.
Rotterdam Convention
Not applicable.
Kyoto protocol
Not applicable.
Basel Convention
Not applicable.

16. Other information

Significant information, yet not specifically related to the previous sections
Not available.

References
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices
HSDB® - Hazardous Substances Data Bank
IARC Monographs. Overall Evaluation of Carcinogenicity
National Toxicology Program (NTP) Report on Carcinogens
Korea. Accidental Release Prevention Substances (Presidential Decree of Toxic Chemical Control Law, Executive Order No. 19203)

Legends and abbreviations
DNEL: Derived No Effect Level.
PNEC: Predicted No Effect Concentration.
PBT: Persistent, bioaccumulative, toxic.

Disclaimer
Evident Scientific cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user’s responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.