

## 1. Product and company identification

**Product name** Blank  
**Product code** Part #: 930001  
**Supplier** Olympus Australia Pty Ltd  
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### Recommended use and Limitations on use

**Recommended use** Sample.

## 2. Hazards identification

### GHS classification

**Physical hazards** Not classified.  
**Health hazards** Carcinogenicity (inhalation) Category 1A  
 Specific target organ toxicity following repeated exposure (inhalation) Category 2 (Lung, Respiratory system)  
**Environmental hazards** Not classified.

### Label elements

#### Symbols



#### Signal word

Danger

#### Hazard statement

May cause cancer by inhalation. May cause damage to organs (Lung, Respiratory system) through prolonged or repeated exposure by inhalation.

### Precautionary statements

**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.

## 3. Composition/information on ingredients

**Substance or mixture** Substance

Chemical property	CAS Number	Concentration (%)
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

**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.  
**Potential delayed effects** Dusts may irritate the respiratory tract, skin and eyes. Coughing. Discomfort in the chest. Shortness of breath.

<b>Personal protection for first-aid responders</b>	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.
<b>Notes to physician</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

## 5. Fire-fighting measures

<b>Extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Extinguishing media to avoid</b>	None known.
<b>HAZCHEM Code Number</b>	None.
<b>Specific hazards during fire fighting</b>	During fire, gases hazardous to health may be formed.
<b>Special fire fighting procedures</b>	Use water spray to cool unopened containers.
<b>Protection of fire-fighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Hazards from combustion products</b>	None.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	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.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.
<b>Spill cleanup methods</b>	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 labelled with correct contents and hazard symbol. For waste disposal, see section 13 of the SDS.

## 7. Handling and storage

### Handling

<b>Precautions</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimise dust generation and accumulation. Do not breathe dust.
<b>Safe handling advice</b>	Should be handled in closed systems, if possible. Observe good industrial hygiene practices. Use personal protection recommended in Section 8 of the SDS.
<b>Prevention of fire and explosion</b>	Should be handled in closed systems, if possible.
<b>Local and general ventilation</b>	Provide appropriate exhaust ventilation at places where dust is formed.

### Storage

<b>Suitable storage conditions</b>	Store locked up. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).
<b>Incompatible materials</b>	For further information, please refer to section 10.
<b>Safe packaging materials</b>	Store in original tightly closed container.

## 8. Exposure controls/personal protection

### Workplace exposure limits

#### New Zealand. WES. (Workplace Exposure Standards)

Material	Type	Value	Form
Silicon dioxide (CAS 7631-86-9)	TWA	0.1 mg/m <sup>3</sup>	Respirable dust.

#### US. ACGIH Threshold Limit Values

Material	Type	Value	Form
Silicon dioxide (CAS 7631-86-9)	TWA	0.025 mg/m <sup>3</sup>	Respirable fraction.

#### UK. EH40 Workplace Exposure Limits (WELs)

Material	Type	Value	Form
Silicon dioxide (CAS 7631-86-9)	TWA	0.1 mg/m <sup>3</sup>	Respirable.

**Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A)**

Material	Type	Value	Form
Silicon dioxide (CAS 7631-86-9)	TWA	0.1 mg/m <sup>3</sup>	Respirable dust.

**Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)**

Material	Type	Value
Silicon dioxide (CAS 7631-86-9)	TWA	0.1 mg/m <sup>3</sup>

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Engineering controls</b>	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 OEL (occupational exposure limit), suitable respiratory protection must be worn.
<b>Personal protective equipment</b>	
<b>Respiratory protection</b>	Wear respirator with dust filter.
<b>Hand protection</b>	No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals.
<b>Skin protection</b>	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.
<b>Eye/face protection</b>	Risk of contact: Wear safety glasses with side shields (or goggles).
<b>Radioactive or thermal hazards</b>	Follow standard monitoring procedures.
<b>Hygiene measures</b>	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**

<b>Appearance</b>	
<b>Physical state</b>	Solid.
<b>Form</b>	Powder.
<b>Colour</b>	White.
<b>Odour</b>	Odourless.
<b>Odour threshold</b>	Not available.
<b>pH</b>	Not applicable.
<b>Melting point/freezing point</b>	1710 °C (3110 °F)
<b>Boiling point, initial boiling point, and boiling range</b>	2230 °C (4046 °F)
<b>Flash point</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Non flammable.
<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit – upper (%)</b>	Not available.
<b>Vapour pressure</b>	Not applicable.
<b>Vapour density</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Relative density</b>	Not available.
<b>Density</b>	2.20 - 2.60 g/cm <sup>3</sup>
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Insoluble in water.
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.

<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not applicable.
<b>Other data</b>	
<b>Explosive properties</b>	Not explosive.
<b>Molecular formula</b>	O <sub>2</sub> Si
<b>Oxidising properties</b>	Not oxidising.

## 10. Stability and reactivity

<b>Reactivity</b>	Stable at normal conditions.
<b>Stability</b>	Material is stable under normal conditions.
<b>Conditions to avoid</b>	Avoid dust formation. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidising agents. Hydrofluoric acid. Magnesium.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Expected to be a low ingestion hazard.
<b>Inhalation</b>	Dust may irritate respiratory system. Prolonged inhalation may be harmful.
<b>Skin contact</b>	Dust or powder may irritate the skin.
<b>Eye contact</b>	Dust may irritate the eyes.
<b>Acute toxicity</b>	Not expected to be acutely toxic.
<b>Routes of exposure</b>	Inhalation. Skin contact. Eye contact.
<b>Symptoms</b>	Dusts may irritate the respiratory tract, skin and eyes. Coughing. Shortness of breath. Discomfort in the chest. Prolonged exposure may cause chronic effects.
<b>Skin corrosion/irritation</b>	Dust or powder may irritate the skin.
<b>Serious eye damage/eye irritation</b>	Dust may irritate the eyes.
<b>Respiratory sensitizer</b>	Due to partial or complete lack of data the classification is not possible.
<b>Skin sensitizer</b>	This product is not expected to cause skin sensitisation.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	May cause cancer by inhalation.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
Silicon dioxide (CAS 7631-86-9)	1 Carcinogenic to humans.
<b>Toxic to reproduction</b>	This product is not expected to cause reproductive or developmental effects.
<b>Specific target organ toxicity - single exposure</b>	Due to partial or complete lack of data the classification is not possible.
<b>Specific target organ toxicity - repeated exposure</b>	May cause damage to organs (Lung, Respiratory system) through prolonged or repeated exposure by inhalation.
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Chronic effects</b>	Chronic lung disease (silicosis) and/or lung cancer may result from prolonged/repeated breathing of the dust of this material.
<b>Relevant negative data</b>	Not available.

## 12. Ecological information

<b>Ecotoxicity</b>	Not expected to be harmful to aquatic organisms.
<b>Persistence and degradability</b>	Not applicable.
<b>Bioaccumulation</b>	The product is not bioaccumulating.
<b>Partition coefficient n-octanol/water (log K<sub>ow</sub>)</b>	Not available.
<b>Bioconcentration factor (BCF)</b>	Not available.
<b>Mobility</b>	The product is insoluble in water.
<b>Other hazardous effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

**Disposal methods/information** 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.

**Special precautions** Dispose in accordance with all applicable regulations.

### 14. Transport information

**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

**Applicable regulations** New Zealand Code of Practice for the Preparation of Safety Data Sheets (SDS) [No. HSNO CoP 8-1 09-06].  
HSNO: 6.7A, 6.9B

**New Zealand Inventory of Chemicals (NZIoC): Registration status**

Silicon dioxide (CAS 7631-86-9)

HSNO Approved

### 16. Other information

**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

**Issued by**

**Company name**

Olympus

**Prepared by**

**Title**

Olympus

**Disclaimer**

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