SECTION 1  PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: Silicon (IV) Oxide
PRODUCT NUMBER: 3199
CAS NUMBER: 14808-60-7
SYNONYMS: Silicon dioxide, Crystalline Silica, Quartz

MANUFACTURER:
Prochem, Inc.
826 Roosevelt Road
Rockford, IL 61109

PHONE: 815-398-1788
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TOLL FREE: 800-795-8788

IN CASE OF TRANSPORTATION EMERGENCY CONTACT CHEM-TREC: 1-800-424-9300

SECTION 2  HAZARDS IDENTIFICATION

CLASSIFICATION OF SUBSTANCE OR MIXTURE

Pictogram

Signal Word  Warning

Hazard Statements

H373  May cause damage to the lung and the respiratory system through prolonged or repeated exposure.
H350  May cause cancer.

Precautionary Phrases

P201  Obtain special instructions before use.
P202  Do not handle until all safety precautions have been read and understood.
P260  Do not breathe dust or mist.
P270  Do not eat, drink, or smoke when using this product.
P280  Wear protective gloves/protective clothing/eye protection/face protection.
P314  Get medical advice/attention if you feel unwell.

HMIS CLASSIFICATION:
Health: 1  Fire: 0  Reactivity Hazard: 0

NFPA RATING:
Health: 1  Flammability: 0  Reactivity Hazard: 0

EYE CONTACT: May cause eye irritation.
SKIN CONTACT: May be harmful if absorbed through the skin. Causes skin irritation.
INHALATION: May be harmful if inhaled. Causes respiratory tract irritation.
INGESTION: May be harmful if swallowed.
SECTION 3  COMPOSITION / INFORMATION ON INGREDIENTS

Formula: SiO₂
Molecular Weight: 60.08

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS#</th>
<th>%</th>
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<tr>
<td>Silicon dioxide</td>
<td>7631-86-9</td>
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SECTION 4  FIRST AID MEASURES

**EYE EXPOSURE:** Immediately flush the eyes with copious amounts of water for at least 15 minutes. Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open. Get immediate competent medical attention.

**SKIN EXPOSURE:** Wash the affected area with soap and plenty of water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

**INHALATION:** Remove to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention if necessary.

**INGESTION:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention if necessary.

SECTION 5  FIREFIGHTING MEASURES

**FLASH POINT:** Product is not flammable

**AUTO IGNITION TEMPERATURE:** Not available

**EXPLOSION LIMITS:** Not available

**EXTINGUISHING MEDIUM:** Use fire fighting measures that suit the surrounding fire.

**SPECIAL FIRE FIGHTING PROCEDURES:** Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

**HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:** None

SECTION 6  ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS:** Wear all appropriate equipment when using this material. Ensure adequate ventilation. Avoid the formation of dust. Avoid breathing vapors, mist, gas, or dust.

**ENVIRONMENTAL PRECAUTIONS:** Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.

**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:** Small spills can be mixed with vermiculite or sodium carbonate and swept up.

SECTION 7  HANDLING AND STORAGE

**PRECAUTIONS FOR SAFE HANDLING:** Wear appropriate personal protective equipment. Avoid contact with skin and eyes. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of dusts and aerosols.

**CONDITIONS FOR SAFE STORAGE:** Store in cool, dry, and well-ventilated area. Keep container tightly sealed.

SECTION 8  EXPOSURE CONTROLS AND PERSONAL PROTECTION

**EXPOSURE CONTROLS:** Contains no substances with occupational exposure limit values.

<table>
<thead>
<tr>
<th>Component</th>
<th>Exposure Limits</th>
<th>Basis</th>
<th>Entity</th>
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<tr>
<td>Silicon Dioxide</td>
<td>10 mg/m³</td>
<td>PEL</td>
<td>OSHA</td>
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<td>0.025 mg/m³</td>
<td>TLV</td>
<td>ACGIH</td>
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<tr>
<td></td>
<td>0.05 mg/m³</td>
<td>REL</td>
<td>NIOSH</td>
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</table>

PEL: Permissible Exposure Limit  TLV: Threshold Limit Value over 8 hours of work  REL: Recommended Exposure Limit

**EYE PROTECTION:** Wear chemical safety glasses or goggles and face shield.

**SKIN PROTECTION:** Wear nitrile or rubber gloves, and a complete suit protecting against chemicals.

**VENTILATION:** Provide local exhaust, preferably mechanical.

**RESPIRATOR:** Use an approved respirator.
SECTION 9  PHYSICAL AND CHEMICAL PROPERTIES

COLOR AND FORM:  White powder  
ODOR:  None  
MOLECULAR WEIGHT:  60.09  
BOILING POINT:  2230° C  
MELTING POINT:  1610° C  
SPECIFIC GRAVITY:  2.65 gm/ml  
SOLUBILITY:  Insoluble  

SECTION 10  STABILITY AND REACTIVITY

STABILITY:  Stable  
HAZARDOUS POLYMERIZATION:  Will not occur  
CONDITIONS TO AVOID:  Excess heat  
INCOMPATIBILITY:  Strong oxidizing agents, hydrogen fluoride, wet fluoride, manganese trioxide, and chlorine trifluoride.  
DECOMPOSITION PRODUCTS:  None  

SECTION 11  TOXICOLOGICAL DATA

ACUTE TOXICITY:  LD50 Oral – rat – >22,500 mg/kg.  
CARCINOGENIC EFFECTS:  Carcinogenicity – rat – Inhalation – Tumorigenic. Carcinogenic by RTECS critieria. Lungs, Thorax, or Respiration: Tumors. According to ACGIH, NTP, and OSHA, No components of this product present at levels greater than or equal to 0.1% is identified a carcinogen. According to IARC this product is not classifiable as to its carcinogenicity to humans.  
MUTAGENIC EFFECTS:  Rat – Unscheduled DNA synthesis.  
TETRATOGENIC EFFECTS:  Not available  
CHRONIC TOXICITY:  May cause damage to the lung and the respiratory system through prolonged of repeated exposure.  
RTECS:  VV7565000  

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.  

SECTION 12  ECOLOGICAL DATA

Silica: LC50 carp >10,000 mg/L/72hr.  

SECTION 13  DISPOSAL CONSIDERATIONS

Dispose of in accordance to local, state, and federal regulations.  

SECTION 14  TRANSPORTATION DATA

Not a dangerous good.  

SECTION 15  REGULATORY INFORMATION

TSCA:  Listed in the TSCA inventory  
DSCL (EEC):  Listed on the DSCL inventory  
SARA 302/304:  Not Listed  
SARA 311/312:  Acute Health Hazard, Chronic Health Hazard.  
SARA (TITLE 313):  Not Listed  
CALIFORNIA PROP. 65:  Not Listed  
MASSACHUSETTS RIGHT TO KNOW COMPONENTS:  Silicon Dioxide  
NEW JERSEY RIGHT TO KNOW COMPONENTS:  Silicon Dioxide  
PENNSYLVANIA RIGHT TO KNOW COMPONENTS:  Silicon Dioxide  

SILICON (IV) OXIDE
SECTION 16 OTHER INFORMATION

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DATE PREPARED: 05/14
SDS DEPT.