SAFETY DATA SHEET: CALCIUM OXIDE

1. IDENTIFICATION

Product Name: CALCIUM OXIDE
Synonyms: Lime; Quicklime; Calcium monoxide
Formula and Formula Weight: CaO 56.08
Integra numbers beginning with: C098.10; C098.50
Recommended Use: Commercial/industrial use
Restrictions on Use: No information available

INTEGRA Chemical Company
24 Hour Emergency Response: CHEMTREC 800-424-9300 (Outside USA 703-527-3887)
1216 6th Ave N
Kent WA 98032
Phone: 253-479-7000

2. HAZARDS IDENTIFICATION

OSHA Classification:

<table>
<thead>
<tr>
<th>Component</th>
<th>Hazard Category</th>
<th>Hazard Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Corrosion/Irritation</td>
<td>2</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>Eye Damage/Irritation</td>
<td>1</td>
<td>Causes serious eye damage.</td>
</tr>
<tr>
<td>Specific Target Organ Toxicity (single exposure)</td>
<td>3</td>
<td>May cause respiratory irritation.</td>
</tr>
</tbody>
</table>

Signal Word: DANGER

Precautionary Statements

Prevention:

Avoid breathing dust, fume, gas, mist, vapors, spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear eye protection, face protection. Wear protective gloves.

Response

If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice, attention.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a poison center, doctor.
Specific treatment (see first aid section on this label)
Take off contaminated clothing and wash it before reuse.

Storage

Store locked up in a well ventilated place. Keep container tightly closed.

Disposal

Dispose of contents, container in accordance with all governmental regulations.

Hazards Not Otherwise Classified: No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>Synonyms</th>
<th>CAS #</th>
<th>% Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium oxide</td>
<td>Lime; Quicklime; Calcium monoxide</td>
<td>01305-78-8</td>
<td>100</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Inhalation: Remove person to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult administer oxygen. Seek medical attention.
Eye Contact: Flush eyes with water for at least 15 minutes. Seek immediate medical attention.
Skin Contact: Flush skin with plenty of water. Seek medical attention.
Ingestion: Do not induce vomiting. If victim is conscious, rinse mouth, give water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.
Additional notes: Symptoms and effects include eye, skin, upper respiratory tract irritation or burns; coughing, difficulty in breathing, chest pains; ulcerated, perforated nasal septum; pneumonitis, pulmonary edema (may be delayed); lacrimation, spasmodic blinking; brittle nails, irritant contact dermatitis.

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Water spray, carbon dioxide, dry chemical or foam.
Special Equipment and Precautions: Use water to cool nearby containers and structures. Wear full protective equipment, including suitable respiratory protection.
Specific Hazards: Contact with moisture or water may generate sufficient heat to ignite combustible materials.
Hazardous combustion products: Oxides of calcium

6. ACCIDENTAL RELEASE MEASURES
Spill Procedures: Prevent spread of spill. Wear suitable protective equipment. Sweep or scoop into clean, dry disposal container.
Flush spill area with water.

7. HANDLING AND STORAGE
Storage and Handling: Store locked up in a cool, dry, well-ventilated area away from incompatible materials. Keep containers tightly closed and protect them from physical damage. Material reacts with water or moisture to produce excess heat.
Avoid breathing dust, fume, gas, mist, vapors, spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear eye protection, face protection. Wear protective gloves.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION
OSHA & ACGIH Exposure Limits:
Calcium oxide OSHA TWA: 5 mg/m³  ACGIH TWA: 2 mg/m³
Engineering Controls: Use general or local exhaust ventilation to meet TLV and PEL requirements.
Respiratory Protection: Respiratory protection required if airborne concentrations exceed PEL or TLV. Use a NIOSH approved respirator with a particulate filter.
Skin/Eye Protective Equipment: Safety goggles, protective clothing and gloves appropriate for the risk of exposure. Rubber gloves are recommended.
Facilities storing or utilizing this material should have readily accessible eyewash stations and safety showers. Select respirators and other safety equipment in accordance with regulations and based upon the particular conditions of use and risk of exposure. Always use safe chemical-handling and good industrial hygiene practices.

9. PHYSICAL AND CHEMICAL PROPERTIES
Apearance: White powder
Odor: Odorless
Odor Threshold: Not available
pH: 12.5 to 12.8 at 25°C
Melting/Freezing Point: 2572 °C
Initial Boiling Point and Boiling Range: 2850 °C
Flash Point: Not available
Evaporation Rate: Not available
Flammability: Not available
Flammable or Explosive Limits (% by volume in air) Upper: Not available Lower: Not available
Vapor Pressure: Not available
Vapor Density: Not available
Relative Density: 3.34  g/cc
Solubility: Insoluble in water
Partition Coefficient: n-octanol/water Not available
Auto-Ignition Temperature: Not available
Decomposition Temperature: Not available
Viscosity: Not available

10. STABILITY AND REACTIVITY
Reactivity: No information available
Stability: Stable
Possibility of Hazardous Reactions: Hazardous polymerization will not occur
Incompatibilities: Incompatible with strong acids and strong oxidizers. Water, fluorine.
Decomposition Products: Oxides of calcium

11. TOXICOLOGICAL INFORMATION
Effects of Over Exposure:
Inhalation: Harmful if inhaled. Irritating to the nose and throat and respiratory system. Overexposure may cause coughing, difficulty in breathing and chest pains. May cause pneumonitis, pulmonary edema.
Skin Contact: Contact may cause severe irritation or burns. May cause brittle nails, irritant contact dermatitis.
Eye Contact: Contact may burn or damage the eyes. May cause lacrimation, spasmotic blinking.
Ingestion: May be harmful if swallowed. May cause burns to the mouth, throat and gastrointestinal tract.
Chronic Effects: Serious tissue damage
Target Organs: Eyes, skin, respiratory system. Kidneys, prostate, blood.
Additional Effects: May aggravate pre-existing skin conditions, respiratory conditions.
**Reproductive Effects:** None identified

**Carcinogenicity:** None identified

**Toxicity Data:**
- **Calcium oxide**
  - No information available.

### 12. ECOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Aquatic Toxicity Data</th>
<th>Terrestrial Toxicity Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium oxide</td>
<td></td>
</tr>
<tr>
<td>LC50 Carp: 1070 mg/L - 96h</td>
<td>No information available</td>
</tr>
</tbody>
</table>

**Persistence and degradability:** No information available

**Bioaccumulative potential:** No information available

**Mobility in soil:** No information available

**Other adverse effects:** No information available

### 13. DISPOSAL CONSIDERATIONS

**Disposal Procedures:** Dispose of material and containers in accordance with all local, state and federal regulations.

### 14. TRANSPORTATION INFORMATION

This product is not a regulated material for domestic ground transportation.

- **Proper Shipping Name:** *** Regulated via air shipment only ***
- **Environmental hazards:** No information available
- **Special precautions:** No information available
- **Bulk transport:** No information available

### 15. REGULATORY INFORMATION

Calcium oxide is listed in the TSCA inventory.

### 16. OTHER INFORMATION


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NE = Not established, NA = Not applicable or Not available

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***** END OF SDS *****