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**Effective Date:** 07/22/94  
**Product Name:** Calcium Nitrate  
**Chemical Formula:** Ca(NO<sub>3</sub>)<sub>2</sub>·4H<sub>2</sub>O  
**CAS No.:** 1347-34-4 (Hydrated)

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**Hazardous Ingredients:** N/A

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**Physical Data:**

Melting point (range) Approx.:	45°C
Boiling point:	N/A
Decomposition temperature:	N/A
pH (depends on quality):	N/A
Solubility in water:	N/A
Odor:	None
Physical form:	Colorless crystals, deliquescent
Tap density:	N/A

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**Fire and Explosion Information:**

Fire:	Oxidizing agent. Not combustible but enhances the combustion of other substances.
Explosion:	Can cause explosions in contact with combustible dusts or vapors; occasionally explosive by shock or friction.
Fire Extinguishing Media:	Use any means suitable for extinguishing surrounding fire.
Special Information:	In the event of a fire, wear full protective clothing and NIOSH-approved self-breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode. Water spray may be used to keep fire exposed containers cool.

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**Reactivity Data:**      **Stable**     X                          **Unstable**                     

**Hazardous Decomposition:** Toxic oxides of Nitrogen.  
**Hazardous Polymerization:** This substance does not polymerize.  
**Incompatibilities:** Ammonia, hydrazine, other reducing agents.

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**Handling and Storage Information:**

DANGER STRONG OXIDIZING. CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE. CAUSES BURNS. HARMFUL IF SWALLOWED OR INHALED. Keep from contact with clothing and other combustible materials. Do not store near combustible materials. Store in a tightly closed container. Protect container from physical damage. Isolate from flammable materials. Do not store on wooden floors. Wash thoroughly after handling.

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**Leak/Spill Information:**

Ventilate area of leak or spill. Clean-up personnel may require respiratory protection from dust. Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

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**Disposal Information:**

Whatever can not be saved for reclamation may be delivered to an approved waste disposal facility. Small amounts of residue may be flushed to sewer with plenty of water. Ensure compliance with local, state and federal regulations.

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**Health Hazard Information:****A. Exposure/Health Effects**

- Inhalation:** May be irritating to the respiratory tract, cause sore throat, coughing, possibly labored breathing.
- Ingestion:** Irritant, corrosive, can produce abdominal pain, stricture, nausea, vomiting and diarrhea. Faintness, blood disorders and bluish skin are also symptoms of acute ingestion.
- Skin Contact:** Irritant, possibly corrosive on prolonged contact with moist skin, producing redness, pain and burns.
- Eye contact:** Irritant and possibly abrasive. Can cause redness, tears and possibly blurred vision.
- Chronic Exposures:** Weakness, faintness and headache may occur followed by depression or mental impairment in acute cases.
- Aggravation of pre-existing conditions:** Persons with pre-existing skin disorders or eye problems or impaired respiratory function may be more susceptible to the effects of the substance.

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**B. First Aid:**

- Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
- Ingestion:** If swallowed, induce vomiting immediately by giving two glasses of water and sticking finger down throat. Never give anything by mouth to an unconscious person. Call a physician immediately.
- Skin Contact:** Remove any contaminated clothing. Wash skin with mild soap or mild detergent and water for at least 15 minutes. Get medical attention if irritation develops or persists.
- Eye Contact:** Wash eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

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**C. Toxicity Data**

Oral rat LD50: 3900 mg/kg.  
Irritation eye rabbit 500 mg/24 H severe.

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**Occupational Control Measures:**

- Airborne Exposure Limits:** None established
- Ventilation Systems:** A local exhaust system which captures the contaminant at its source is recommended to prevent dispersion of the contaminant into the workroom air.
- Personal Respirators:** For conditions of use where exposure to the dust is apparent, a dust/mist respirator may be worn. For emergencies, a self-contained breathing apparatus may be necessary.
- Skin Protection:** Wear protective gloves and clean body-covering clothing.
- Eye Protection:** Use chemical safety goggles. Contact lenses should not be worn when working with this material. Maintain eye foundation and quick-drench facilities in work area.
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