**MATERIAL SAFETY DATA SHEET**

**SECTION I NAME**

Product: Calcium Nitrate

**SECTION II INGREDIENTS OF MIXTURES**

Principal Component(s): Calcium nitrate

% TLV Units: 100%

**SECTION III PHYSICAL DATA**

Melting Point (°F): 45°F (113°F)

Boiling Point (°F): Decomposes.

Vapor Pressure (mm Hg): Negligible as solid.

Vapor Density (Air=1): 8.17

Solubility in Water: 121 grams in 100 grams of water.

Appearance & Odor: Colorless crystals, granular, prills, deliquescent; no odor.

**SECTION IV FIRE AND EXPLOSION HAZARD DATA**

Flash Point (Method Used): Not applicable.

Flammable Limits in Air: % by Volume

Extinguisher Media: Water, dry chemical or carbon dioxide.

**SECTION V HEALTH HAZARD DATA**

Threshold Limited Value: None established (ACGIH 2001).

Effects of Overexposure: Inhalation may cause irritation of the respiratory tract, causing sore throat, coughing and possibly labored breathing. Ingestion can produce abdominal pain, stricture, nausea, vomiting and diarrhea. Faintness, blood disorders and bluish skin are also symptoms of acute ingestion. Contact with skin and eyes may cause redness, pain and burns. Target organs: Blood.

Emergency and First Aid Procedures: INGESTION: Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person. EYES: Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. SKIN: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention. INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**SECTION VI REACTIVITY DATA**

Stability: Unstable

Conditions to Avoid: Keep away from combustible materials.

Incompatibility (Materials to Avoid): Ammonia, hydrozine and other reducing agents.

**SECTION VII SPILL OR LEAK PROCEDURES**

Steps to be taken in case material is released or spilled: Sweep up and place in a suitable container for proper disposal.

**SECTION VIII SPECIAL PROTECTION INFORMATION**

Respiration Protection (Specify Type): None should be needed in normal laboratory handling. If dusty conditions prevail, work in a ventilation hood or wear a NIOSH/MSHA-approved dust mask.

Ventilation: Local Exhaust Recommended. Special No. Mechanical (General) Not required. Other No.

Protective Gloves: Rubber.

Eye Protection: Chemical safety glasses.

Other Protective Equipment: Goggles, smock, apron, safety glasses, eye wash station, proper gloves, and fire extinguisher.

**SECTION IX SPECIAL PRECAUTIONS**

Precautions to be Taken in Handling & Storing: Store in a cool, dry place away from combustible materials. Wash thoroughly after handling.

Other Precautions: Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Use with adequate ventilation. Remove and wash contaminated clothing.

**SECTION X SPECIAL HAZARDS**

Strong oxidizer. In contact with other easily oxidizable substances it may react rapidly enough to cause ignition, violent combustion or explosion. Increases the flammability of any combustible substance.

**D.O.T.**

Calcium nitrate, 5.1, UN1454, PG III, Ltd Qty ≤ 5 Kg.

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20