AERCHEM INC.

320 North Walnut Bloomington, IN 47404

Telephone: 812.334.9996 Fax: 812.334.1960 Emergency: 800.424.9300

Effective Date: 06/14/95 Product Name: Calcium Ascorbate Chemical Formula: C12H14012Ca.2H2O **CAS No.:** 5743-28-2 Hazardous Ingredients: N/A **Physical Data:** Melting point (range) Approx.: 165 □ C 426.35 Molecular Weight: Pure/Mixture Pure рΗ ^.8-7.4 at 10% aqueous solution Boiling point: N/A Decomposition temperature: Solubility in water: 500g/l; Completely soluble Odor: Practically odorless Physical form: White to yellow powder Tap density: N/A **Fire and Explosion Information:** Flash point: N/A (Auto) Ignition temperature: **Explosion Hazards:** Weak dust explosion or dust fire hazard Extinguishing media to be recommended: Water, Carbon Dioxide, Dry Chemical, Foam. Special fire and explosions precautions: wear NIOSH/MSHA approved positive pressure. self contained breathing apparatus and full protective turn out gear. Use water to keep containers cool. Use caution in approaching fire. exposed **Reactivity Data:** Unstable Stable Conditions to Avoid: Temperatures >100°C, light, humidity **Incompatability:** Avoid oxidizing agents, Potassium Bromate, Potassium Nitrate. **Decomposition**: Temperature: 165° C. Produces Carbon Dioxide, Carbon Monoxide. **Handling and Storage Information:**

Starage Temperature: < 25°C

Shelf Life: 12 months

Special Sensitivity: Do Not heat above 100° C. Light. Moisture. Heat.

Handling and Storage Precautions: Do not generate dust or expose to ignition sources. Ground and bond all transfer equipment. Milling /mixing/ drying should be performed in devices equipped with explosion relief or suppression systems, or under inert conditions. Use with adequate ventilation. Avoid contact with eves, skin and clothing. Avoid brething dust. When handling use proper personal protective equipment. Wash thoroughly after handling. Keep container tightly closed when not in use. Store out of direct sunlight in a cool, well ventilated place.

Leak/Spill Information: Shut off source of the spill or leak if it is safe to do so. Scoop or shovel spilled material into a suitable labeled open head drum. Secure the drum coverand move the container to a safe holding area. Clean spill area thoroughly.

Disposal Information: Dispose of in accordance with recommendations in Disposal reccomendations.

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Disposal Recommendations: This material is suitable for incineration. these recommendations are based on the product as shipped. Use, processing, alteration, or contamination may affect these disposal recommendations. state, local or site restrictions affecting the available proper disposal options may vary.

Empty Containers: Empty containers must be triple rinsed prior to disposal, recycling, or reuse.

Health Hazard Information:

A. Exposure/Health Effects

Relevant Routes of Exposure: Inhalation, Ingestion, Skin contact, Eye contact

Target Organs: Respiratory System, Gastrointestinal System, Renal system, Skeletal System

Acute Effects

General: May cause mucous membrane irritation (inflammation). May cause gastrointestinal effects sush as nausea,

vomiting, disrrhea, constipation, cramps, and loss of appetite.

Skin Contact: May cause skin irritation Eye contact: May cause irritation

Chronic Exposures:

General: May increase blood calcium levels. May cause muscle weakness and pain. May cause Kidney stones. May cause bladder stones.

Aggravation of pre-existing conditions: Hemachromatosis, thalassemia, sideroblasstic or sickle cell anemia.

B. First Aid:

Inhalation: Remove to fresh air. If discomfort persists, get medical attention.

Ingestion: If large quantities of this material are swallowed, get medical attention immediately. Do not induce vomiting unless directed by medical personnel. Never give anything by mouth to an unconcious person.

Skin Contact: Remove any contaminated clothing. Wipe off excess from skin. Wash skin with soap and water for at least 15 minutes. Get medical attention if irritation develops or persists.

Eye Contact: Immediately flush eyes with plenty of water. If irritation persists, get medical attention.

C. Toxicity Data

Acute oral, Single Dose, Rat; 14500mg/kg

Summary: Acute oral LD50 (rat) is 14,500mg/kg body weight which classifies this material as practically non toxic under the study conditions utilized.

Occupational Control Measures:

Engineering Controls: General room ventilation is adequate unless the process generates airborne dust or fumes. **Resirator Types:** Half face, nontoxic Dust/Mist filter.

Conditions for use: Under normal conditions of use, respiratory protection is not expected to be necessary. Respiratory protection os recommended under excessively dusty conditions. OSHA considers effective engineering controls to be the primary means to control worker exposure. Respiratory protection should not substitute for feasable engineering controls.

Glove Materials: Any plastic or rubber glove.

Conditions for Use: Gloves recommended if there is any potential skin contact.

Skin Protection: Use protective clothing (lab coats, disposable coveralls, etc.) in bothproduction and laboratory areas.

Eye Protection: Safety glasses required, safety goggles recommended.

Additional Protective Measures: Provide safety showers and eyewash stations in the work area. Prevent the accumulation

of dust in the work area by thorough periodic cleaning.

Exposure Limits: 10.0mg/m3 Time weighted average

Transportation Information

Enforcement Agency: US department of transportation

Country/ Community: International **Prop. Shipping name:** Non regulated

Enforcement Agency: International Air Transport Association

Transportation Mode: Air

Country Community: International **Prop shipping Name:** Non regulated

Regulatory Information

Law/Regulation: Hazardous Chemical Reporting: Community Right-To-Know 40CFR370

Common Name: SARA title III Section 312-Hazardous Chemical Inventory

Enforcement Agency: Environmental Protection Agency (EPA)

Governing Authority: USA Criteria Met: Acute, Fire

Other Informnation

Additional Information: NFPA Rating: These Ratings are Based on NFPA Code 704 and are intended for use by emergency personnel to determine the immediate hazards of a material.

Health: 1 Fire: 2 Reactivity: 0