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Effective Date: 09/10/99

Product Name: Ascorbic Acid

Chemical Formula: C₆H₈O₆

CAS No.: 50-81-7

Hazardous Ingredients and Toxicological Data:

Relevant routes of exposure: inhalation, ingestion, skin, eyes

Target Organs: respiratory system, gastrointestinal system, renal system.

General acute effects: May cause mucous membrane, skin, and eye irritation. May cause nausea, vomiting, diarrhea, constipation, cramps, and loss of appetite.

Chronic general effects: May cause increased blood calcium levels, kidney stones, and bladder stones.

Conditions aggravated: hemochromatosis, thalassemia, sideroblastic or sickle cell anemia.

Toxicity: 11290 mg/kg, acute oral, single dose, rat

Physical Data:

Appearance and Odor:	White, crystalline, odorless powder
Molecular Weight:	176.13
pH	2.00 at 10% aqueous solution
Melting point (range) Approx.:	190-192 °C
Solubility in Water:	40% soluble in water at 45°C & 80% soluble at 100°C
Decomposition temp.:	190°C
Shelf life:	6 months, <25°C

Fire and Explosion Information:

Extinguishing media to be recommended:	water, carbon dioxide, dry chemical, foam
Special fire and explosions precautions:	dust explosion hazard

Reactivity Data: Stable X Unstable

Stable normally, even under fire exposure conditions and is not water reactive.

Hazardous Decomposition: When heated to decomposition emits acrid smoke and irritating fumes.

Hazardous Polymerization: Will not occur

Incompatibilities: oxidizing agents, strong acids, aluminum, iron, zinc, copper, potassium bromate, potassium nitrate.

Leak/Spill Information: Shut off source of spill or leak if it is safe. Eliminate ignition sources. Sweep up and retain.

Disposal Information: Dispose according to regulations.

Handling and Storage Information: Keep away from light and moisture. Do not heat above 100°C. Do not generate dust or expose to ignition sources. Ground and bond all transfer equipment. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Do not breathe dust. Keep container tightly closed when not in use. Store in well ventilated area, out of direct sunlight.

Health Hazard Information:

A. First Aid

Inhalation: Remove to fresh air.

Ingestion: If ingested in very large doses seek medical advice. Do not induce vomiting unless directed by medical personnel.

Skin Contact: Wash with soap and water.

Eye contact: Immediately flush eyes with plenty of water. Get medical attention if irritation occurs.

Chronic Exposures: Irritation of mucus membranes.

Exposure limit: 10.0 mg/m³ time weighted average

Aggravation of pre-existing conditions: Any upper respiratory disorders.

Occupational Control Measures:

Personal Respirators: NIOSH/U.S. Bureau of Mines approved dust mask. General room ventilation is adequate unless process generates airborne dust or fumes.

Skin Protection: Plastic or rubber gloves.

Eye Protection: Chemical goggles

Ecological information:

Concentration lethal to 50% of organisms, trout: 1020 mg/L

Transport Information:

Not a DOT regulated material.