

# Vitamin C (magnesium ascorbyl phosphate)

## Material Safety Data Sheet (MSDS)

### 1. Product Identification

**Product Name:** Vitamin C (magnesium ascorbyl phosphate)  
**INCI Name:** Magnesium-L-Ascorbyl-2-Phosphate  
**Chemistry:** Organic Pigment  
**CAS Number:** 28874-51-3  
**EINECS Number:**

### 2. Physical & Chemical Properties

**Melting Point:** Not applicable  
**Boiling Point:** Not applicable  
**Non-Volatiles:** Not applicable  
**Viscosity:** Not applicable  
**Specific Gravity:** 1.76/cm<sup>3</sup>  
**Solubility in water:** 154 g/l @20°C  
**Refractive Index:** no data available  
**Appearance & Odor:** Off-white to yellow odorless powder.

### 3. Stability & Reactivity

**Chemical Stability:** Stable under normal conditions of storage and use.  
**Conditions to Avoid:** Heat and lighted areas.  
**Incompatible Materials:** Acids, Bases and Oxidizers.  
**Hazardous Decomposition Products:** CO<sub>x</sub>, PO<sub>3</sub>, MGO<sub>x</sub>  
**Hazardous Polymerization:** Will not occur under normal conditions and storage.

### 4. Handling & Storage

**Handling precautions:** Handle carefully. Wash thoroughly after handling. Do not wear contaminated clothing or shoes. Use good personal hygiene practice.  
**Storage Precautions:** Keep container tightly closed and protected from direct sunlight and moisture. Protect against physical damage. Store away from incompatible materials. Store, (+15 to 25°C), in original sealed containers.  
**Other Precautions:** Avoid generating dust or vapors.

### 5. Accidental Release Measures

**Spill Response:** Evacuate the area of all unnecessary personnel. Wear suitable protective equipment. Eliminate any sources of ignition until the area is determined to be free from explosion or fire hazards. Contain the release and eliminate its source, if this can be done without risk. Take up and containerize for proper disposal. Comply with Federal, State and Local regulations on reporting releases.

### 6. Exposure Controls & Personal Protection

**Respiratory Protection:** Respirators must be worn when applicable threshold limit value or permissible exposure limit is exceeded.  
**Protective Clothing:** Safety goggles or glasses, impervious gloves made of chemically resistant materials and laboratory coat are suggested.  
**Other Protective Measures:** Provide general mechanical and local exhaust ventilation. Eye wash and safety shower should readily be available and wash thoroughly after handling.

### 7. Hazards Identification

**Eye:** Data not available.  
**Skin:** Data not available.  
**Inhalation:** Data not available.  
**Ingestion:** Data not available.  
**Signs and Symptoms:** Data not available.  
**Cancer:** Not known to cause cancer in humans or animals.  
**Target Organs:** No data available.  
**Developmental:** No data available.

**Pre-existing Medical Conditions:** Asthma, emphysema, or other existing lung or respiratory disease.

### 8. First Aid Measures

**Eyes:** Flush with copious amounts of water for fifteen minutes. Get medical attention if symptoms persist.  
**Skin:** Remove excess material and wash affected skin with soap and water. Gently dry area with a clean towel.  
**Inhalation:** Remove to uncontaminated area. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.  
**Ingestion:** Induce vomiting if conscious and as directed by a physician. Never give anything by mouth to an unconscious person. Get medical attention.

### 9. Fire Fighting Measures

**Flash Point:** Not ignitable.  
**Extinguishing Media:** Flood with water. Do not splash or spatter liquid or molten material.  
**Fire Fighting Procedures:** Positive pressure self-contained breathing apparatus and structural firefighters' protective clothing as required for other materials present. Irritating or toxic gases, fumes, smoke, or particulates may be present. Unusual fire and explosion hazards are not expected. Relative hazard is anticipated to be the same as normal combustible materials.

### 10. Toxicological Information

LD<sub>50</sub> (oral, rat) >2000 mg/kg  
LD<sub>50</sub> (dermal, rat) >2000 mg/kg  
Additional data is unavailable.

### 11. Disposal Consideration

Not applicable: material is a non-hazardous and non-regulated solid waste. Send bulk or containerized wastes of this material to a secure industrial landfill or thermal oxidation facility. Incineration is not recommended for inorganics. These methods are drawn from 40 CFR, Protection of Environment, and are to be applied only after thorough review of all applicable Methods of Treatment or Treatment Standards. The waste generator is advised to contract with a licensed Treatment, Storage and Disposal facility when arranging for final disposal and to consult state and local authorities to determine whether any additionally regulatory requirements need to be met.

### 12. Transport Information

**DOT Shipping Name:** not regulated  
**ADR/RIC Code:** not regulated  
**Sea Transport IMDG Code:** not regulated  
**Air Transport IATA:** not regulated

### 13. Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is to be the best of the company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitability & completeness of such information for his own particular use.