Vitamin C (L-ascorbic acid), USP

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / March 26, 2012 / Rules and Regulation

Revision Date: 27-Feb-2024
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1 PRODUCT & COMPANY IDENTIFICATION

Product Name: Vitamin C (L-ascorbic acid), USP
Synonyms: Ascorbic acid, L-xylo-ascorbic acid
INCI Name: L-Ascorbic Acid
CAS Number: 50-81-7
Formula: No data available
Product Form: Liquid
Product Use: Cosmetic use

Distributor: MakingCosmetics Inc.
Address: 10800 231st Way NE
Redmond, WA 98053 (USA)
Phone / Fax: 425-292-9502 / 425-292-9601
Web: **www.makingcosmetics.com**

Emergency Telephone Number: 1-800-424-9300 (Chemtrec)

2 HAZARDS IDENTIFICATION

GHS Classification: Not classified.
GHS Labeling: Not classified.
GHS Hazard Pictograms: None.
GHS Hazard Statements: None.
GHS Precautionary Statements: None.
Potential Health Hazards: No known hazard.
Inhalation: May cause irritation of the respiratory tract.
Skin: No known hazard.
Ingestion: May cause gastrointestinal irritation

NFPA Ratings (704):

Health	N/A	N/A
Flammability	N/A	N/A
Reactivity	N/A	N/A
Specific Hazard	N/A	

3 COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Weight %	Molecular Weight
L-Ascorbic Acid	50-81-7	99% - 100%	Not Available

4 FIRST AID MEASURES

Eyes: In case of eye contact, rinse with plenty of water for 10 minutes-open eyelids forcibly and seek medical attention if necessary
Inhalation: Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention if necessary.
Skin: Remove contaminated clothes, wash affected skin with water and soap (do not use any solvents). Get medical attention if necessary.
Ingestion: Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. Get medical attention if necessary.

5 FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media: May be combustible at high temperature. Use appropriate media (water spray jet, dry powder, foam, carbon dioxide) for adjacent fire. No unsuitable extinguish media found.
Special protective equipment & precautions for firefighters: Use standard firefighting procedures and consider the hazards of other involved materials. Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots. Precipitate gases, vapors, and mists with water spray.
Flash Points: No data available.
Specific hazards arising from the Severe dust explosion hazard. See also Stability and Reactivity section.

chemical:

6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment & emergency procedures:	Collect solids (avoid dust formation) and hand over to appropriate waste removal facility. Rinse with plenty of water. See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions:	No data available.
Methods and material for containment and cleaning up:	Sweep up and place in suitable, closed containers for disposal. Avoid generation of dusts. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

7 HANDLING & STORAGE

Precautions for safe handling:	Provide appropriate exhaust equipment where dust is generated. General fire protection measures. Processing in closed systems, if possible superposed by inert gas (e.g. nitrogen) local exhaust ventilation necessary take precautionary measures against electrostatic charging avoid dust formation; high dust explosion hazard. See section 8 for recommendations on the use of personal protective equipment. Keep container closed when not in use.
Conditions for safe storage, incl. any incompatibilities:	Store in cool, dry well-ventilated area. Tightly closing packing material should be used, such as polyethylene. Keep away from light and incompatible materials (see section 10 for incompatibilities).

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Component	Exposure Limits	Basis	Entity
L-Ascorbic Acid	Not available		

TWA: Time Weighted Average over 8 hours of work.
TLV: Threshold Limit Value over 8 hours of work.
REL: Recommended Exposure Limit
PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.
IDLH: Immediately Dangerous to Life or Health
WEEL: Workplace Environmental Exposure Levels
CEIL: Ceiling

Personal Protection:

Eyes:	Wear safety glasses or goggles.
Inhalation:	In case of high dust concentrations: wear particle mask or respirator with independent air supply.
Body:	Wear protective gloves and clean body covering clothing.
Other:	Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Powder	**Vapor Pressure:**	No data available
Odor:	Almost odorless	**Vapor Density:**	No data available
Odor Threshold:	No data available	**Evaporation Rate:**	No data available
Color:	White to pale yellow	**Flammability:**	No data available
Molecular Mass:	176.12 g/mol	**Upper/lower Explosive Limit:**	No data available
pH:	No data available	**Flash Point:**	No data available
Boiling Point:	No data available	**Specific Gravity:**	No data available
Melting Point:	No data available	**Water Solubility:**	176g / L at 20°C (completely dissolved)
Density:	No data available	**Auto-Ignition Temperature:**	No data available
Partition Coefficient: n-octanol/water:	No data available	**Decomposition Temperature:**	No data available
Viscosity:	No data available	**Explosive Limits/Properties:**	No data available

10 STABILITY AND REACTIVITY

Reactivity:	No data available.
Chemical Stability:	Stable at room temperature under exclusion of humidity.

Hazardous Polymerization:	No data available.
Conditions to Avoid:	Humidity and heat.
Incompatible Materials:	Oxidizing agents, atmospheric oxygen, bases, metals, and metal salts.
Hazardous Decomposition Products:	No data available.
Possible Hazardous Reactions:	Severe dust explosion hazard.
Note:	Upon prolonged storage, a yellow discoloration may occur through slow decomposition, which does not noticeably diminish biological activity, however in aqueous solutions ascorbic acid is very susceptible to oxidative decomposition, particularly in the presence of alkali resp. heavy metal ions.

11 TOXICOLOGICAL INFORMATION

Acute Toxicity:	LD50: 11'900 mg/kg (oral, rat) LD50: 8'000 mg/kg (oral, mouse) LD50: 518 mg/kg (mouse)
Skin:	May cause mild irritations; particularly in conjunction with humidity (perspiration).
Eyes:	May cause mild irritations.
Respiratory:	May cause mild irritations to mucous membranes.
Ingestion:	Slightly hazardous in case of ingestion.
Carcinogenicity:	Not carcinogenic.
Chronic Toxicity:	In predisposed individuals, 4-12g per day may cause urinary calculus.
Teratogenicity:	Not teratogenic.
Germ Cell Mutagenicity:	No suspicion of human mutagenicity.
Embryotoxicity:	No data available.
Specific Target Organ Toxicity:	No data available.
Reproductive Toxicity:	Not embryotoxic.
Special Remarks:	Oral uptake of up to 9g per day does not produce any serious toxic effects, however, even lesser quantities may cause diarrhea. RDA (recommended daily allowance): 60mg

12 ECOLOGICAL INFORMATION

Ecotoxicity

Aquatic Vertebrate:	Barely toxic for fish (rainbow trout) LC50 (96h) 1020mg/l (OECD No.203)
Aquatic Invertebrate:	The inhibitory concentration relates to re-attachment to substrate (Dreissena polymorpha) MIC (48h) > 50mg/l (nominal concentration)
Persistence and Degradability:	Well inherently biodegradable 97%, (5 days) 100% (15 days) (Zahn-Wellenstest, OECD No. 302B).
Bioaccumulative Potential:	No data available.
Mobility in Soil:	No data available.
PBT and vPvB Assessment:	No data available.
Other Adverse Effects:	No data available.

13 DISPOSAL CONSIDERATIONS

Waste Residues:	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container. Large amounts: incinerate in qualified installation with flue gas scrubbing
Product Containers:	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.

The information in section 13 is for the product as shipped. Use and/or alterations to the product may change the characteristics of the material and alter the waste classification and proper disposal methods

14 TRANSPORT INFORMATION

Note: Not regulated or classified by transport regulations.

15 REGULATORY INFORMATION

Note: Not regulated or classified by transport regulations.

16 OTHER INFORMATION

Revision Date: 27-Feb-2024

Compliance: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

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