



532 Point Lawrence Rd.
Olga, WA 98279
Tel: 360-376-8008

MSDS - L-Ascorbic Acid Ultra Fine Powder

1. Product and Company Identification

Product Name: Ascorbic Acid, Ultra Fine Powder
Common Chemical Name: L-Ascorbic Acid
Description/Use: Personal Care, Food Additive, Vitamin preparations

Distributor: Lotioncrafter LLC
532 Point Lawrence Rd.
Olga, WA 98279

2. Composition/Information on Ingredients

Characterization: Water soluble vitamin C of defined particle size class
CAS OR CHEMICAL NAME
L(+)-Ascorbic Acid
CAS Number: 50-81-7
EINECS Number: 200 066 2
Empirical Formula: C₆H₈O₆

3. Hazards Identification

Most Important Hazards: No particular hazards known.

4. First Aid Measures

Skin contact: Remove contaminated clothes, wash affected skin with soap and water. Do not use any solvents.
Eye contact: Rinse immediately with tap water for 10 minutes – open eyelids forcibly..
Inhalation: Remove the casualty to fresh air and keep him/her calm.
Ingestion: Wash out mouth with water. Obtain medical attention if irritation develops.

Note to physician: Treat symptomatically.

5. Fire Fighting Measures

Suitable Extinguishing Media: Water, foam, dry chemical, or carbon dioxide.
Specific Hazards: Severe dust explosion hazard
Protection of Firefighters: Precipitate gases/vapors/mists with water spray

6. Spill or Leak Procedures

Personal Precautions:	Use gloves and goggles
Environmental Precautions:	Biodegradable product
Methods of Cleanup:	Collect solids (avoid dust formation) and hand over to waste removal Rinse with plenty of water

7. Handling and Storage

Handling:	Keep work area clean. Wash hands frequently. Use according to criteria of good industrial practice, avoid dispersion in the environment. Avoid dust formation; high dust explosion hazard. This product is not considered dangerous.
Storage:	Keep container tightly closed when not in use. Protect from humidity, store below 25°C (77°C)

8. Exposure Controls/Personal Protection

Ventilation:	Additional ventilation beyond that of general exhaust is not normally required. No exposure limits exist for the constituents of this product.
Threshold Value Air:	IOEL: 10 mg/m ³ (defined as 8-hour time-weighted average)

Protective Equipment for Routine Use of Product

Respiratory Protection:	In case of high dust concentrations: particle mask or respirator with independent air supply.
Skin Protection:	Wear suitable clothing.
Eye Protection:	Use safety glasses with side shields.
Hand Protection:	Protective gloves

Exposure Limit Data

<u>CHEMICAL NAME</u>	<u>CAS#</u>	<u>Name of Limit</u>	<u>Exposure</u>
No Data Found			

9. Physical and Chemical Properties

Physical State:	Very fine powder
Color:	White to slightly yellow
Odor	Almost odorless, with sharp acidic, pleasant taste
Sieve Analysis:	100 % through USP standard sieve no. 100 (Ø 150 µm) ≥ 95 % through USP standard sieve no. 200 (Ø 75 µm)
Solubility:	~ 300'000 mg/l, water (20 °C) ~ 400'000 mg/l, water (40 °C) ~ 50'000 mg/l, propylene glycol ~ 20'000 mg/l, ethanol absolute (20 °C) ~ 10'000 mg/l, glycerine > 1'000 mg/l, acetone (23 °C) virtually insoluble, diethyl ether virtually insoluble, chloroform virtually insoluble, petroleum ether virtually insoluble, oils and fats
Partition Coefficient:	log Pow -2.15 (octanol/water 23 °C)
pH Value:	3 (0.5 % aqueous solution)

Dissociation Constant:	2 (5 % aqueous solution) pK ₁ = 4.17 pK ₂ = 11.57 (water)
Melting Temperature	190 to 192 °C (with partial decomposition)

10. Stability and Reactivity

Stability:	Stable under the conditions mentioned in Section 7
Conditions to avoid:	Humidity, warming
Materials to avoid:	Oxidizing agents, atmospheric oxygen, bases, metals, metal salts
Note:	On 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)
Local effects:	
Skin:	May cause irritations; particularly in conjunction with humidity (perspiration)
Mucous Membranes:	May cause irritations
Eye:	May cause irritations
Chronic Toxicity:	In predisposed individuals 4-12 g/d may cause urinary calculus
Mutagenicity:	No suspicion of human mutagenicity
Carcinogenicity:	Not carcinogenic (several species)
Reproduction Toxicity:	Not teratogenic, not embryotoxic
Note:	Oral uptake of up to 9 g per day does not produce any serious toxic effects, however, even lesser quantities may cause diarrhea RDA (recommended daily allowance): 60 mg

11. Ecological Information

Inherent biodegradability:	Well inherently biodegradable 97 %, 5 d 100 %, 15 d (Zahn-Wellens test, OECD No. 302 B)
Ecotoxicity:	Barely toxic for fish (rainbow trout) LC50 (96 h) 1020 mg/l (OECD No. 203) The inhibitory concentration relates to re-attachment to substrate (Dreissena polymorpha) MIC (48 h) > 50 mg/l (nominal concentration)
Air Pollution:	Observe local/national regulations

12. Disposal Considerations

Waste from Residues:	Observe local/national regulations regarding waste disposal Drain very small quantities into wastewater treatment plant Large amounts: incinerate in qualified installation with flue gas scrubbing
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13. Transport Information

Road (U.S. DOT):	Not regulated
Air (IATA):	Not regulated

14. Regulatory Information

Note:

No classification and labelling according to EU directives

Water Hazard Class (Germany): 1: weakly hazardous for water (according to annex 1 or 2 of directive VwVwS of 17.05.1999)

15. Other information

Biological activity:

1 I.U. (international unit) of vitamin C corresponds to the activity of 50 µg of pure ascorbic acid

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