

Section 1: Identification

Common Name/Trade Name	ASCORBIC ACID USP	
Supplier Information	Letco Medical, LLC 1316 Commerce Drive NW Decatur, AL 35601 1 (800) 239-5288 +1 (734) 843-4693	IN CASE OF EMERGENCY: Chemtrec 1 (800) 424-9300 (24 hours)
Distributor Name	Bella Corp Trading Pty Ltd 6/34 Dominions Road, Ashmore QLD 4214, Australia Telephone: 07 5597 4169 Email: bellacorp@bellacorp.com.au	
Product Synonym(s)	L-Ascorbic acid; Vitamin C; L-Threo-2,3,4,5,6-pentahydroxy-1-hexenoic acid-4-lactone	
Relevant Use(s) of Product	Manufacture or Compounding of Substances	

Section 2: Hazards Identification

Classification of Substance or Mixture	Not a hazardous substance or mixture.
Signal Word	None
Hazard Statement(s)	N/A
Pictogram(s)	N/A
Precautionary Statement(s)	N/A
Hazards Not Otherwise Classified	May form combustible dust concentrations in air. Heavy inhalation may cause asphyxia. Risk of dust explosion.
Ingredient(s) with Unknown Toxicity	No data available

Section 3: Composition/Information on Ingredients

Chemical Name	L (+)- Ascorbic Acid
Common Name	Ascorbic Acid
CAS Number	50-81-7
Impurities and/or Stabilizing Additives	No data available

Section 4: First Aid Measures

General Advice	No hazards which require special first aid measures.
If Inhaled	If inhaled, move to fresh air. If not breathing, give artificial respiration. If symptoms persist, call a physician.
In Case of Skin Contact	Flush skin with water while removing contaminated clothing. Wash affected area with soap and water followed by thorough rinsing. If irritation persists or if rash develops, seek medical attention.
In Case of Eye Contact	Do not rub eyes. Remove contact lenses and immediately flush eyes with large amounts of water for 15 minutes, occasionally lifting the upper and lower lids. Protect unharmed eye. If symptoms persist, call a physician.
If Swallowed	Rinse mouth thoroughly with water if the victim is conscious. Remove dentures, if present. Do not give milk or alcoholic beverages. Obtain medical attention, especially if a large amount is swallowed.
Most Important Symptoms and Effects	Heavy inhalation may cause asphyxia. Advice to doctor and hospital personnel: Treat symptomatically and supportively

Section 5: Fire Fighting Measures

Suitable Extinguishing Media	Suitable methods of extinction: Dry chemical; water; Foam. Unsuitable methods of extinction: None known
Special Hazards Arising From the Substance/Mixture	Explosion hazards: May form explosive dust concentrations in the air, especially in confined spaces
Special PPE and/or Precautions for Firefighters	Full protective equipment including self-contained breathing apparatus should be used. Water may be used to cool closed containers to prevent pressure buildup and possible auto ignition or explosion when exposed to extreme heat.

Section 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures	Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.
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Methods and Materials Used for Containment	Avoid dispersal of spilled material or runoff and prevent contact with soil and entry into drains, sewers or waterways.
Cleanup Procedures	Approach spill from upwind direction. Cover drains and contain spill. Avoid dust generation during cleanup. Collect material and place into an approved container for proper disposal. Dispose should be in accordance with federal, state and local regulations.
Section 7: Handling and Storage	
Precautions for Safe Handling	Wear all appropriate personal protective equipment specified in Section 8.2. Do not get in eyes or on skin or clothing. Do not breathe dust.
Conditions for Safe Storage	Store in dry, cool, well-ventilated areas away from incompatible materials (see Section 10.5), food and drink. Light sensitive. Keep container tightly closed when not in use. Keep out of reach of children. Storage temperature should be <25°C (<77°F).

Section 8: Exposure Controls/Personal Protection	
Components with Workplace Control Parameters	Contains no substances with occupational exposure limit values.
Appropriate Engineering Controls	Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Use adequate ventilation. Local exhaust is preferable. Refer to Section 7.1. General industrial hygiene practice.
PPE - Eye/Face Protection	Safety glasses
PPE - Skin Protection	Glove material: for example nitrile rubber. Lightweight protective clothing
PPE - Body Protection	Lightweight protective clothing. Wear protective boots if the situation requires.
PPE - Respiratory Protection	In case of high dust concentration use a dust mask applicable to local conditions.

Section 9: Physical and Chemical Properties	
Appearance	White or slight yellowish crystalline or crystal powder
Upper/Lower Flammability or Explosive Limits	No data available
Odor	Odorless.
Vapor Pressure	< 0.001 Pha (at 25°C; calculated (citation from literature))
Odor Threshold	No information available.
Vapor Density	Not applicable.
pH	2.1 - 2.6 (5% as aqueous solution)
Relative Density	Not applicable.
Melting Point/Freezing Point	Melting point/range: ca. 190°C (with decomposition)
Solubility	Water solubility: ca. 330 g/l (24°C). Other solvents: Ethanol: ca.20 g/l, Ether: practically insoluble, Glycerol: ca. 10 g/l.
Initial Boiling Point and Boiling Range	Not determined.
Flash Point	Not applicable.
Evaporation Rate	Not applicable
Flammability (Solid, Gas)	Non-flammable. May form combustible dust concentrations in the air. Combustibility index for deposited dust: 2 (23°C); 2 (100°C).
Partition Coefficient	-2.15
Auto-Ignition Temperature	380°C
Decomposition Temperature	No data available
Viscosity	No data available

Section 10: Stability and Reactivity	
Reactivity	No special reactivity has been reported.
Chemical Stability	This product is stable under recommended storage conditions.
Possibility of Hazardous Reactions	Hazardous polymerization does not occur and dust may form explosive mixture in air.
Conditions to Avoid	Contact with incompatible materials; exposure to light, heat and humidity; dust generation and accumulation.
Incompatible Materials	Oxidizing agents, bases, metals, metal salts
Hazardous Decomposition Products	No decomposition if used as directed.

Section 11: Toxicological Information

Acute Toxicity - LD50 Oral	LD50 11900 mg/kg (oral, rat); LD50 8000mg/kg (oral, mouse); LD50 518 mg/kg (iv, mouse).
Acute Toxicity - Inhalation	Heavy inhalation may cause asphyxia.
Acute Toxicity - Dermal	Acute toxicity estimate: > 5,000 mg/kg (Calculation method)
Acute Toxicity - Eye	No eye irritation (Rabbit, OECD Test Guideline 405); Dust contact with the eyes can lead to mechanical irritation.
Skin Corrosion/Irritation	No skin irritation (Rabbit, OECD Test Guideline 404, 4 h)
Serious Eye Damage/Irritation	No eye irritation (Rabbit, OECD Test Guideline 405); Dust contact with the eyes can lead to mechanical irritation.
Respiratory or Skin Sensitization	Did not cause sensitization
Germ Cell Mutagenicity	No data available. No indication for human genotoxicity known.
Carcinogenicity IARC	No data available
Carcinogenicity ACGIH	No data available
Carcinogenicity NTP	No data Available
Carcinogenicity OSHA	No data available
Reproductive Toxicity	No data available.
Specific Target Organ Toxicity - Single Exposure	No data available
Specific Target Organ Toxicity - Repeated Exposure	No data available
Aspiration Hazard	No aspiration toxicity classification.

Section 12: Ecological Information

Toxicity	Toxicity to fish: Oncorhynchus mykiss (rainbow trout) LC50 (96 h) 1,020 mg/l (OECD Test Guideline 203)
Persistence and Degradability	This material is readily biodegradable. 100 % (15 d) and 97 %, (5 d) (OECD Test Guideline 302B).
Bio-accumulative Potential	Bioaccumulation is unlikely.
Mobility in Soil	The Koc of L-ascorbic acid is estimated as 10(SRC), using a log Kow of -1.85 and a regression-derived equation. According to a classification scheme, this estimated Koc value suggests that L-ascorbic acid is expected to have very high mobility in soil. The pKa of L-ascorbic acid is 4.70, indicating that this compound will exist almost entirely in the anion form in the environment and anions generally do not adsorb more strongly to soils containing organic carbon and clay than their neutral counterparts.
Other Adverse Effects	Do not allow material to run into surface waters, wastewater or soil. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13: Disposal Considerations

Waste Treatment Methods Product	The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.
Waste Treatment Methods Packaging	Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.
Special Precautions Landfill or Incinerations	No data available
Other Information	No data available

Section 14: Transport Information

UN Number	Not dangerous goods.
UN Proper Shipping Name	N/A
Transport Hazard Class(es)	N/A
Packaging Group	N/A
Environmental Hazards	N/A

Section 15: Regulatory Information

Safety, health and environmental regulations/legislation specific for substance or mixture OSHA Hazard Communication Standard: This material is not classified as highly hazardous in accordance with OSHA 29 CFR 1910.1200. OSHA Process Safety Management Standard: This product is not regulated under OSHA PSM Standard 29 CFR 1910.119. EPA Risk Management Planning Standard: This product is not regulated under EPA RMP Standard (RMP) 40 CFR Part 68. EPA Federal Insecticide, Fungicide and Rodenticide Act: Not listed. Toxic Substance Control Act (TSCA) Inventory: Not relevant Drug Enforcement Administration (DEA) List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.4(f)(2)) and Chemical Code Number: Not listed Department of Homeland Security (DHS) Chemical Facility Anti-Terrorism Standards (CFATS) Chemicals: Not listed. SARA 313 Information: None of the chemicals in this product are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to Know Act of 1986. SARA 302/304 Extremely Hazardous Substance: None of the chemicals in this product are subject to reporting requirements of these sections of Title III of SARA. SARA 302/304 Emergency Planning & Notification: None of the chemicals in this product are subject to reporting requirements of these sections of Title III of SARA. Comprehensive Response Compensation and Liability Act (CERCLA): This product contains no CERCLA reportable substances. Clean Air Act (CAA) This product does not contain any substances that listed as Hazardous Air Pollutants (HAPs) designated in CAA Section 112 (b). This product does not contain any Class 1 Ozone depleters. This product does not contain any Class 2 Ozone depleters. Clean Water Act (CWA) None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA. California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986 This product contains no chemical(s) known to the State of California to cause cancer, birth defects or reproductive harm.

Section 16: Other Information

Additional Information	HMIS Hazard Rating: Health 0, Flammability 2, Physical Hazard 1, Personal Protection E. NFPA: Health 0, Flammability 2, Instability 1.
Prepared By	Scarlotte Smith
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