

MSDS**Material Safety Data Sheet**24 hour Emergency Telephone:
Chemtrec: 1-800-424-9300

Outside U.S. and Canada Chemtrec: 202-483-7616

From: Vinquiry, Inc.
7795 Bell Road
Windsor, CA 95492**VINQUIRY****NOTE:** CHEMTREC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

All Non-emergency questions should be directed to Customer Service (1-707-838-6312) for assistance.

Ascorbic Acid Powder

ASCORBIC ACID

MSDS Number: AA014 ---Effective Date: 01/01/04

1. Product Identification

Synonyms: L-ascorbic acid; vitamin C; L-3-Ketothreohexuronic acid lactone**CAS No.:** 50-81-7**Molecular Weight:** 176.13**Chemical Formula:** C₆H₈O₆**Vinquiry Product Codes:** 10-014-0000, 10-014-0010, 10-014-0100, 10-014-0250, 10-014-0400

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
L-Ascorbic Acid	50-81-7	100%	Yes

3. Hazards Identification

Emergency Overview

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

Vinquiry Safety Data Ratings (Provided here for your convenience)

Health Rating: 1 – Slight

Flammability Rating: 1 – Slight

Reactivity Rating: 0 – None

Contact Rating: 1 – Slight

Lab Protective Equip: GOGGLES; LAB COAT
Storage Color Code: Orange (General Storage)

Potential Health Effects

Ascorbic acid is relatively non-hazardous in routine industrial situations. It is not expected to present significant health risks to the workers who use it.

Inhalation:

May cause mild irritation to the respiratory tract.

Ingestion:

Large oral doses may cause gastrointestinal disturbances.

Skin Contact:

May cause mild irritation.

Eye Contact:

May cause mild irritation.

Chronic Exposure:

No information found.

Aggravation of Pre-existing Conditions:

No information found.

4. First Aid Measures

Inhalation:

If inhaled, remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion:

Give several glasses of water to drink to dilute. If large amounts were swallowed, get medical advice.

Skin Contact:

Wash exposed area with soap and water. Get medical advice if irritation develops.

Eye Contact:

Wash thoroughly with running water. Get medical advice if irritation develops.

5. Fire Fighting Measures

Fire:

As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source.

Explosion:

Not considered to be an explosion hazard.

Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust.

7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from any source of heat or ignition. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

- OSHA Permissible Exposure Limit (PEL):

15 mg/m³ total dust, 5 mg/m³ respirable fraction for nuisance dusts.

- ACGIH Threshold Limit Value (TLV):

10 mg/m³ total dust containing no asbestos and < 1% crystalline silica for Particulates Not Otherwise Classified (PNOC).

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):

If the exposure limit is exceeded and engineering controls are not feasible, a half facepiece particulate respirator (NIOSH type N95 or better filters) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece particulate respirator (NIOSH type N100 filters) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator.

WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear protective gloves and clean body-covering clothing.

Eye Protection:

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance:

White crystals.

Odor:

Odorless.

Solubility:

33g/100g water.

Density:

1.65

pH:

3 for 5mg/L aqueous solution; 2 for 50mg/L aqueous solution.

% Volatiles by volume @ 21C (70F):

0

Boiling Point:

Not applicable.

Melting Point:

192C (378F) Slightly decomposes.

Vapor Density (Air=1):

No information found.

Vapor Pressure (mm Hg):

No information found.

Evaporation Rate (BuAc=1):

No information found.

10. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage. Aqueous solutions are rapidly oxidized by air.

Hazardous Decomposition Products:

May produce acrid smoke and irritating fumes when heated to decomposition.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Strong oxidizers and alkali hydroxides, alkalis, iron, copper, sodium salicylate, sodium nitrite, theobromine and methenamine.

Conditions to Avoid:

No information found.

11. Toxicological Information

Oral (rat) LD50 11,900 mg/kg . Investigated as a tumorigen, mutagen, and reproductive effector.

Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
L-Ascorbic Acid (50-81-7)	No	No	None

12. Ecological Information

Environmental Fate:

No information found.

Environmental Toxicity:

No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Not regulated.

15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----				
Ingredient	TSCA	EC	Japan	Australia
L-Ascorbic Acid (50-81-7)	Yes	Yes	Yes	Yes

-----\Chemical Inventory Status - Part 2\-----				
Ingredient	Korea	DSL	NDSL	Phil.
L-Ascorbic Acid (50-81-7)	Yes	Yes	No	Yes

-----\Federal, State & International Regulations - Part 1\-----				
Ingredient	-SARA 302- RQ	TPQ	-SARA 313- List	Chemical Catg.
L-Ascorbic Acid (50-81-7)	No	No	No	No

-----\Federal, State & International Regulations - Part 2\-----			
Ingredient	CERCLA	-RCRA- 261.33	-TSCA- 8(d)
L-Ascorbic Acid (50-81-7)	No	No	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No
SARA 311/312: Acute: No Chronic: No Fire: No Pressure: No
Reactivity: No (Pure / Solid)

Australian Hazchem Code: None allocated.

Poison Schedule: None allocated.

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. Other Information

NFPA Ratings: Health: 1 Flammability: 0 Reactivity: 0

Label Hazard Warning:

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

Label Precautions:

None.

Label First Aid:

Not applicable.

Product Use:

Laboratory Reagent.

Disclaimer

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