

Safety Data Sheet**L-ASCORBIC ACID****EFFECTIVE DATE: 2015-08-27****1 Product and Company Identification**

- 1.1 Product Name:** L-Ascorbic Acid
- 1.2 Catalog Number:** 72132
- 1.3 Product Use:** Laboratory Chemical
- 1.4 Manufacturer/Supplier:** STEMCELL Technologies
Suite 500-1618 Station Street
Vancouver, British Columbia V6A 1B6 Canada
- 1.5 In Case of Emergency Call:** 1-800-667-0322

2 Hazards Identification

- 2.1 Classification of the substance or mixture**
Not a hazardous substance or mixture according to the Globally Harmonized System (GHS).
- 2.2 Label elements**
Not a hazardous substance or mixture.
- 2.3 Other hazards** No data available

3 Composition / Information on Ingredients

- Synonyms** Vitamin C; (+)-Ascorbic Acid; NSC 218455; NSC 33832; (R)-5-((S)-1,2-dihydroxyethyl)-3,4-dihydroxyfuran-2(5H)-one
- Molecular formula** C₆H₈O₆
- Molecular weight** 176.1

Hazardous Components (Chemical Name)	CAS #	Concentration	EC #
L-Ascorbic acid	50-81-7	100%	200-066-2

4 First Aid Measures

- 4.1 Description of first aid measures**
- 4.1.1 If inhaled**
Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.
- 4.1.2 In case of skin contact**
Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.
- 4.1.3 In case of eye contact**
Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined and tested by medical personnel.
- 4.1.4 If swallowed**

Safety Data Sheet

L-ASCORBIC ACID**EFFECTIVE DATE: 2015-08-27**

Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.

4.2 Most important symptoms and effects, both acute and delayed

The toxicological properties of this product have not been fully evaluated.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5 Fire Fighting Measures**5.1 Extinguishing Media****5.1.1 Suitable Extinguishing Media**

Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.

Use water spray to cool fire-exposed containers.

5.1.2 Unsuitable Extinguishing Media

A solid water stream may be inefficient.

5.2 Special hazards arising from the substance or mixture**5.2.1 Flammable Properties and Hazards**

No data available

5.2.2 Flash Pt

No data available

5.2.3 Autoignition Pt

No data available

5.2.4 Explosive Limits

LEL: No data available

UEL: No data available

5.2.5 Hazardous Combustion Products

No data available

5.3 Fire Fighting Instructions

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

6 Accidental Release Measures**6.1 Personal precautions, protective equipment and emergency procedures**

Avoid raising and breathing dust, and provide adequate ventilation.

As conditions warrant, wear a NIOSH approved (or equivalent) self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).

6.2 Environmental precautions

Take steps to avoid release into the environment, if safe to do so.

6.3 Methods and materials for containment and cleaning up

Safety Data Sheet

L-ASCORBIC ACID

EFFECTIVE DATE: 2015-08-27

Contain spill and collect, as appropriate.

Transfer to a chemical waste container for disposal in accordance with local regulations.

7 Handling and Storage

7.1 Precautions for safe handling

Avoid breathing dust/fume/gas/mist/vapours/spray.

Avoid prolonged or repeated exposure.

7.2 Conditions for safe storage

Keep container tightly closed.

Store in accordance with information listed on the product insert.

8 Exposure Controls/Personal Protection

8.1 Exposure limits

Component	CAS #	Value	Control parameters
L-Ascorbic acid	50-81-7	No data available	No data available

8.2 Engineering controls

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

8.3 Personal protective equipment

8.3.1 Eye/face protection

Safety glasses

8.3.2 Skin protection

Compatible chemical-resistant gloves

Lab coat

8.3.3 Respiratory protection

NIOSH (US) or CEN (EU) approved respirator, as conditions warrant.

8.3.4 General hygiene considerations

Do not take internally.

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Wash thoroughly after handling.

8.3.5 Environmental exposure controls

No data available

9 Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance

A crystalline solid

Odour

No data available

Safety Data Sheet**L-ASCORBIC ACID****EFFECTIVE DATE: 2015-08-27**

Odour threshold	No data available
pH	No data available
Melting point/freezing point	No data available
Boiling point/boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Solubility	~3.3 mg/mL in PBS (pH 7.2); ~10 mg/mL in DMSO; ~12.5 mg/mL in DMF
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

10 Stability and Reactivity

10.1 Reactivity	No data available
10.2 Chemical stability	Stable
10.3 Possibility of hazardous reactions	No data available
10.4 Conditions to avoid	No data available
10.5 Incompatible materials	No data available
10.6 Hazardous decomposition products	No data available

11 Toxicological Information

11.1 Acute toxicity	
Oral:	Oral LD50 (rat): 11,900 mg/kg; Oral LD50 (mouse): 3367 mg/kg
Inhalation:	No data available
Dermal:	No data available
Other:	No data available
11.2 Skin corrosion/irritation	No data available
11.3 Serious eye damage/eye irritation	No data available
11.4 Respiratory and/or skin sensitization	No data available
11.5 Germ cell mutagenicity	Investigated as a mutagen.

Safety Data Sheet

L-ASCORBIC ACID**EFFECTIVE DATE: 2015-08-27****11.6 Carcinogenicity**

- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

11.7 Reproductive toxicity

Investigated as a reproductive effector.

11.8 Specific target organ toxicity - single exposure

No data available

11.9 Specific target organ toxicity - repeated exposure

No data available

11.10 Aspiration hazard

No data available

11.11 Potential health effects

- Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
- Ingestion: May be harmful if swallowed.
- Skin: May be harmful if absorbed through skin. May cause skin irritation.
- Eyes: May cause eye irritation.

11.12 Signs and symptoms of exposure

Investigated as a tumorigen.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

11.13 RTECS # C17650000

12 Ecological Information**12.1 Toxicity**

Avoid release into the environment.
Runoff from fire control or dilution water may cause pollution.

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Other adverse effects

No data available

13 Disposal Considerations**13.1 Waste disposal method**

Dispose in accordance with local, provincial/state, and federal regulations.

13.2 Contaminated packaging

Safety Data Sheet

L-ASCORBIC ACID
EFFECTIVE DATE: 2015-08-27

Dispose of as unused product.

14 Transport Information

14.1 UN number	No data available	
14.2 UN proper shipping name	DOT	Not dangerous goods
	ADR/RID	Not dangerous goods
	IMDG	Not dangerous goods
	IATA	Not dangerous goods
14.3 Transport hazard class(es)	No data available	
14.4 Packing group	No data available	
14.5 Environmental hazards	No data available	
14.6 Special precautions	No data available	

15 Regulatory Information

15.1 US EPA SARA Title III

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)
L-Ascorbic acid	50-81-7	No	No	No

15.2 Other US EPA or State Lists

Hazardous Components (Chemical Name)	CAS #	CAA HAP, ODC	CWA NPDES	TSCA	CA PROP.65
L-Ascorbic acid	50-81-7	No	No	Inventory	No

15.3 EU

This SDS was prepared in accordance with Regulation (EC) No.1272/2008.

15.4 Canada

Not WHMIS controlled

This SDS was prepared in accordance with Hazardous Products Regulations (HPR) and WHMIS 2015.

16 Other Information

- 16.1 Prepared by:** Quality Control, STEMCELL Technologies Inc.
- 16.2 Revision:** 1
- 16.3 Notice:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. STEMCELL Technologies Inc. shall not be held liable for any damage resulting from handling or from contact with the product. The information contained in this Safety Data Sheet (SDS) is current as of the Effective Date shown in this document and may be subject to amendment by STEMCELL Technologies Inc.
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