

ASCORBIC ACID
EXTENDED SAFETY DATA SHEET


ACCORDING TO EC-REGULATIONS 1907/2006 (REACH); 1272/2008 & 453/2010 (CLP)

Version: 1
Date: 09-12-2010

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1 Product identifier**
- Chemical Name L-Ascorbic Acid
Trade name Vitamin C, Ascorvit, Vicomin C, Acorbate, Ascorbutina, Catavin C, Cevex, Secorbate; 3-Keto-L-gulofuranolactone; 3-Oxo-L-gulofuranolactone
CAS No. 50-81-7
EINECS No. 200-066-2
REACH Registration No.
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**
- Identified use(s) IN THE FOOD INDUSTRY, IT CAN BE USED AS NUTRITIONAL SUPPLEMENTS IN THE FOOD PROCESSING AND IS ALSO GOOD ANTIOXIDANTS IN THE FOOD PRESERVATION.
- Uses advised against No uses advised against
- 1.3 Details of the supplier of the Safety Data Sheet**
- Company Identification Shandong Luwei Pharmaceutical Co.,Ltd.
Shuangfeng Industrial Park, Zichuan District,
Zibo City, Shandong, China
Umlaufen DaeMyung chemical
187, Cheongwonsandan 3-gil, Mado-myeon, Hwaseong-si, Gyeonggi-do, Korea
T. +82-2-462-3857
- 1.4 Emergency telephone number T. +82-2-462-3857
Opening hours

SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture**
- 2.1.1 Regulation (EC) No. 1272/2008 (CLP)** Warning. H319: Causes serious eye and skin irritation
2.1.2 Directive 67/548/EEC & Directive 1999/45/EC Xi; Irritant. R36
- 2.2 Label elements**
- 2.2.1 According to Regulation (EC) No. 1272/2008 & 453/2010 (CLP)**
- Hazard Pictogram 
- Signal word(s) Warning
Hazard statement(s) H319: Causes serious eye and skin irritation
H302 Harmful if swallowed
H335 May cause respiratory irritation
Precautionary statement(s) P264. Wash hands thoroughly after handling.
P280 Wear eye and skin protection.
P305 + P351 + P338. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye and skin irritation persists: Get medical advice/attention.
- 2.3 Other hazards** Not known
2.4 Additional Information Not known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

Composition	%W/W	EC No.	CAS No
Ascorbic Acid	100%	200-066-2	50-81-7

SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear

Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. If irritation persists, call a physician.

Eye Contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Ingestion

Do NOT induce vomiting. Drink 2 or 4 glasses of water. Never give anything by mouth to an unconscious person. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

Serious eye damage/eye irritation: Eye Irrit. 2

4.3 Indication of immediate medical attention and special treatment needed

Consult a physician.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

5.1.1 Suitable Extinguishing Media

In case of fire use water spray, dry chemical, carbon dioxide, or chemical foam

5.1.2. Unsuitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

Oxides of carbon

5.3 Advice for fire-fighters

In the event of fire, wear self-contained breathing apparatus and wear suitable protective clothing.

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations

5.4 Additional information

Explosion hazard from the generation of dust.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

6.2 Environmental precautions

Do not flush substance into surface water or sewage system.

6.3 Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal.

6.4 Reference to other sections

Section 8

6.5 Additional Information

Not known

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Use only in well-ventilated areas. Do not breathe vapours/dust

7.2 Conditions for safe storage, including any incompatibilities

Keep locked up or in an area accessible only to qualified staff

Storage

Store in tightly closed original container in a dry, cool and well ventilated place. Keep in original container.

Incompatible materials

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

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION




8.1 Control parameters

8.1.1 Occupational Exposure Limits

No values assigned

8.1.2 Biological limit values

No values assigned

<p>8.2 Exposure controls</p> <p>8.2.1 Appropriate engineering controls</p> <p>8.2.2 Personal protection equipment</p> <p>Eye/face protection</p>  <p>Skin protection (Hand protection/ Other)</p>  <p>Respiratory protection</p>  <p>Thermal hazards</p>	<p>Minimise the risk of dust inhalation. Provide adequate ventilation.</p> <p>Safety glasses with side-shields</p> <p>Avoid contact with skin, eyes and clothing. Wash hands before breaks and at the end of workday. Protective gloves must satisfy the specifications of EU Directive 89/686/EEC and EN 374</p> <p>Provide adequate ventilation. Wear respirator where dust level exceeds 10 mg/m3.</p> <p>Not applicable</p>
<p>8.2.3 Environmental Exposure Controls</p> <p>8.2.4 Hygiene measures</p>	<p>Do not allow to enter drains, sewers or watercourses</p> <p>Do not smoke in the work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated.</p> <p>When using do not eat, drink or smoke.</p>

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties	
Appearance	Solid, crystalline
Colour	White
Odour	Odourless
pH (Value)	Not available
Melting Point	>190 °C at 1,013 hPa
Boiling point/boiling range (°C):	>190 °C at 1,013 hPa
Flash Point (°C)	Not available
Flammability	Non flammable
Relative Density	1.65
Solubility (Water)	333 g/1000ml at 20 °C
Solubility (Other)	Soluble in alcohol
Vapor Pressure	Not available.
Vapor Density	Not available
Evaporation Rate	Not available
Viscosity	Not available
Decomposition Temperature (°C)	Not available
Explosive properties	Not explosive
Oxidising properties	Not oxidising
Upper /low Flammability or explosive limit	Not available
Auto ignition temperature	Not available
Partition coefficient: n-octanol/water:	Not available
9.2 Other information	
Molecular Formula	C ₆ H ₈ O ₆
Molecular Weight:	176.13

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Strong oxidizers and alkali hydroxides, alkalis
10.2 Chemical stability	Stable under normal conditions, may decompose on exposure to moist air or water
10.3 Conditions to avoid	Exposure to heat and moisture.
10.4 Incompatible materials	Strong oxidizers and alkali hydroxides, alkalis, iron, copper, sodium salicylate, sodium nitrite, theobromine and methenamine.
10.5 Hazardous Decomposition Product(s)	Oxides of carbon. Carbon dioxide

10.6 Possibility of hazardous reactions Will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

11.1.1 Substances

Acute toxicity

Oral, mouse: LD50 3367 mg/kg;
Oral, rat: LD50 11900 mg/kg
Inhalation No data

Skin corrosion/irritation

Mild skin irritant

Eye Contact

Irritating

Respiratory or skin sensitization –skin

Not a sensitizer

Mutagenicity

Not a mutagen

Carcinogenicity

Not a carcinogen

Reproductive toxicity

Not a reproductive toxin

STOT - single exposure

Not known

STOT - repeated exposure

Not known

Aspiration hazard

Not known

11.2 Other information

Not known

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

No data available

12.2 Persistence and degradability

Biodegradable

12.3 Bioaccumulative potential

No expected to bioaccumulate

12.4 Mobility in soil

Not applicable

12.5 Other adverse effects

Not known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

13.2 Additional Information

Not known

SECTION 14: TRANSPORT INFORMATION

14.1 UN NO.

GP

14.2 UN proper shipping name

Not regulated

14.3 Transport hazard class

Not regulated

14.4 Packing group, if applicable

Not applicable

14.5 Environment hazards

Land transport (ADR/RID)

Not subject to transport regulations.

Sea transport (IMDG)

Not subject to transport regulations.

Air transport (ICAO/IATA)

Not subject to transport regulations.

14.6 Special precautions for use

Not applicable

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not known

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture substance

15.1.1 EU regulations

User to follow EU and US directives and regulations

Authorisations and/or restrictions on use

Not applicable

15.1.2 National regulations

User to follow national regulations

SECTION 16: OTHER INFORMATION

MSDS Creation Date: 2/26/1999

Revision #9 Date: 09/21/2015

References:

Chemical Safety Report for Ascorbic acid and Ascorbates

Regulation (EC) No. 1272/2008 & 453/2010 (CLP)

Directive 67/548/EEC & Directive 1999/45/EC

Risk Phrases and Safety Phrases

R36: Irritating to eyes

S26: Avoid contact with eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

Hazard statement(s) and Precautionary statement(s)

H319: Causes serious eye irritation

P264: Wash hands thoroughly after handling.

P280: Wear eye protection.

P305 + P351 + P338. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

Training advice: Ensure staff and workers receive adequate training with regular updates in the handling of chemicals

Additional Information. Not known

Information contained in this publication or as otherwise supplied to users is believed to be accurate and is given in good faith, but it is for the users to satisfy themselves of the suitability of the product for their own particular purpose. Shandong Luwei Pharmaceutical Co., Ltd. gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. Shandong Luwei Pharmaceutical Co., Ltd. accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.