

# Material Safety Data Sheet

Revision: 07/25/2005



Hazard information is provided for compliance with both the UK Chemicals (Hazard Information and Packaging) (CHIP) Regulations and the US Hazard Communication Standard (HCS)

## IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

PRODUCT NAME:  
L-Ascorbic Acid, Ultrapure

PRODUCT CODE:  
11545

EEC NUMBER:  
200-066-2

### SUPPLIER:

**USB Corporation, 26111 Miles Road, Cleveland, Ohio 44128 Phone: (216) 765-5000**  
Please visit our website at [www.usbweb.com](http://www.usbweb.com) for contact information on USB product distributors within your area.

### Emergency Contact:

**Chemtrec (800) 424-9300**  
**Outside USA & Canada 703 527 3887**

## COMPOSITION/

### HAZARDOUS COMPONENTS

### HAZARD

### CAS NO.

### %WT

### TLV

### CHIP R & S Phrases

L-Ascorbic Acid

50-81-7

~ 100%

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R:36/37/38 Irritating to eyes, respiratory system and skin.  
S:22 Do not breathe dust.  
S:24/25 Avoid contact with skin and eyes.  
S:36/37 Wear suitable protective clothing and gloves.

## HAZARDS IDENTIFICATION

### CHIP

Irritant

### HCS

Irritant

## FIRST-AID MEASURES

**EYES:** Flush with water for 15 minutes. Seek medical advice if irritation persists.

**SKIN:** Flush with water, then wash thoroughly with soap and water. Remove contaminated clothing and wash before reuse. Seek medical attention if irritation persists.

**INHALATION:** Remove the victim from exposure and move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Keep victim quiet and warm. Seek immediate medical attention.

**INGESTION:** Drink water and seek immediate medical attention. Avoid alcoholic beverages. Never give anything by mouth to an unconscious person.

## FIRE-FIGHTING INFORMATION

Use media suitable to extinguish the supporting or surrounding fire. Wear NIOSH (or equivalent) approved self contained breathing apparatus. For small fires only: use carbon dioxide, dry powder or foam. Evacuate personnel to an area of upwind direction and remove unneeded materials; keep fire-exposed containers cool with water spray and provide firefighters with self-contained breathing equipment. Dust explosion hazard. Ground all equipment in contact with free-flowing powder to prevent electrostatic charges. Maximum explosion pressure: 88 psig. Minimum explosion concentration: 66 g/m<sup>3</sup>.  
Flash Point = No data available.

## ACCIDENTAL RELEASE MEASURES

Wear appropriate personal protective equipment and clothing including lab coat, safety glasses, gloves and NIOSH-approved respirator. Remove all sources of ignition. Collect with nonsparking tools in a manner that does not create dust and place in a suitable waste container. Avoid contact of material with skin or eyes. Use adequate ventilation.

## HANDLING AND STORAGE

Wear appropriate personal protective equipment and clothing including lab coat, safety glasses, gloves and NIOSH-approved respirator. Avoid contact of material with skin or eyes. Use adequate ventilation. Keep away from all sources of ignition. Light and air sensitive. Store ambient away from incompatible materials.

## PERSONAL PROTECTION

Wear appropriate personal protective equipment and clothing including lab coat, safety glasses, gloves and NIOSH-approved respirator. A qualified industrial hygienist should evaluate the need for respiratory protection. Use respiratory protection approved by NIOSH (or equivalent) and appropriate to the hazard. Avoid contact of material with skin or eyes. Mechanical ventilation or local exhaust as needed to control exposure to dust, vapors or mists. Access to a safety shower and eye-wash.

## PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White to yellowish, crystalline powder  
Vapor Pressure (mm Hg): No data available  
Solubility (Water): Soluble  
Percent Volatile: No data available  
Chemical Formula: C<sub>8</sub>H<sub>8</sub>O<sub>6</sub>

Boiling Point: No data available  
Vapor Density: No data available  
Specific Gravity: 1.65 g/cm<sup>3</sup>  
Evaporation Rate: No data available  
Melting Point: 190-192°C

**STABILITY AND REACTIVITY**

Product is stable. Avoid humidity, light and warming. Hazardous decomposition products include oxides of carbon. Incompatible with alkali, iron, copper, water, oxidizing agents, bases, metals, metal salts, sodium salicylate, sodium nitrate and sodium nitrite. Hazardous polymerization will not occur.

**TOXICOLOGICAL INFORMATION**

**EFFECTS OF OVEREXPOSURE:**

**EYES:** Contact may cause irritation.

**SKIN:** Contact may cause skin irritation particularly in conjunction with humidity (perspiration).

**INHALATION:** Material may be irritating to mucous membranes and upper respiratory tract.

**INGESTION:** Chronic ingestion or excessive dosage may cause urine acidification and gastrointestinal effects including nausea, vomiting, diarrhea, constipation, cramps and loss of appetite.

**ADDITIONAL INFORMATION:**

May be harmful by inhalation, ingestion and skin absorption. May cause kidney stones and bladder stones. May increase blood calcium levels.

Tumorigenic, reproductive effects, mutation and toxicity data listed in RTECS under C17650000.

Only select RTECS information is provided here. Please see actual RTECS entry for complete information.

Oral Rat LD50 = 11900 mg/kg (1976). Toxic effects may include lacrimation, somnolence, hypermotility and diarrhea.

Reproductive: Effects on embryo or fetus included fetal death (1990).

Specific developmental abnormalities - musculoskeletal and central nervous systems (1961).

Fertility - post-implantation mortality (e.g. dead and/or resorbed implants per total number of implants. (1962).

Tumorigenic data: carcinogenic by RTECS criteria.

Carcinogenic data: NCI Carcinogenesis Studies (feed); no evidence: mouse, rat.

Definition(s): RTECS = Registry of Toxic Effects of Chemical Substances.

NCI = National Cancer Institute.

**ECOLOGICAL INFORMATION**

Well inherently biodegradable: 97%, 5 d; 100%, 15 d (Zahn-Wellens test, OECD No. 302 B).

Barely toxic for fish (rainbow trout): LC50 (96 h) 1020 mg/l (OECD No. 203).

**DISPOSAL CONSIDERATIONS**

Dispose of material in accordance with applicable local, state, and federal regulations.

**TRANSPORTATION INFORMATION**

US DOT / IATA: No applicable information.

**REGULATORY INFORMATION**

RCRA - No applicable information.

SARA 302 - This material does not have an RQ or TPQ.

SARA 313 - This material is not reportable under 313.

SARA 311/312 - Acute, Fire.

EPA TSCA Section 8(b) - Chemical Inventory.

Exposure Limits - Not established.

California Proposition 65 - No applicable information.

This data sheet is based upon information believed to be reliable. The Company makes no statement or warranty as to the accuracy or completeness of the information contained herein which is offered for your consideration, investigation and verification. Any use of the information contained in this data sheet must be determined by the user to be in accordance with appropriate applicable regulations.