

## Material Safety Data Sheet.

### 1. IDENTIFICATION

**Product Identifier:** L-Cysteine HCL monohydrate  
**Other Means of Identification:**  
**Synonymes:** H-Cys-OH.HCl.H2O  
L-Cysteine hydrochloride hydrate  
**Chemical Formula:** C3H7NO2S.HCl.H2O  
**Chemical Family:** Amino Acid  
**CAS Number:** 7048-04-6

**Recommended Use:** Nutritional supplement  
**Restrictions on Use:** Not known.  
**Initial Supplier Identifier:** Gurvey & Berry Co. Inc.  
310 Judson Street, Unit #15  
Toronto, ON, Canada, M8Z 5T6  
Tel: (416) 259-5700 Fax: (416) 259-5417  
E-mail: [msds@gurveyberry.com](mailto:msds@gurveyberry.com)

**Emergency Telephone number:** Canutec +1 (613)-966-6666

### 2. HAZARD IDENTIFICATION

GHS Classification in accordance with Hazardous Products Regulations (HPR) OR/2015-17)

Classification acc. To GHS			
Section	Hazard class	Hazard class and category	Hazard statement
3.2	Skin corrosion/irritation	2	H315
3.3	Serious eye damage/eye irritation	2A	H319
3.8	Specific target organ toxicity – single exposure (respiratory tract irritation)	3	H335

Signal word: **Warning!**

Pictograms: GHS 07



### Hazard statements

- H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.

### Precautionary statements – prevention.

- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P264 Wash hands thoroughly after handling.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wear protective gloves/clothing and eye/face protection.

### Precautionary statements - response

- P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P312 Call a poison center/doctor if you feel unwell.  
P332+P313 If skin irritation occurs: Get medical advice/attention.  
P337+P313 If eye irritation persists: Get medical advice/attention.  
P362 Take off contaminated clothing and wash before use.

### Precautionary statements - storage

- P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.

### Precautionary statements - disposal

- P501 Dispose of contents/container to industrial combustion plant.

### Hazards not otherwise classified (HNOC) or not covered by GHS.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration	Common name / Synonyms	Other identifiers
L-Cysteine HCL monohydrate	7048-04-6	ca 100%	See section 1	

### Notes:

## 4. FIRST-AID MEASURES

### First aid measures by route of exposure:

- General:** Move out of dangerous area.  
Remove any contaminated clothing.  
Consult a physician and show this safety data sheet.

- After Ingestion:** Do not induce vomiting without medical advice.  
Rinse mouth with water.  
Never administer anything by mouth to an unconscious person. Obtain medical aid immediately.
- After Inhalation:** Move person to fresh air.  
If not breathing, give artificial respiration.  
If breathing is difficult, give oxygen.  
Obtain medical aid.
- After Skin Contact:** Remove contaminated clothing and shoes.  
Brush off loose particles from skin.  
Flush skin with soap and water at least 15 min.  
Seek medical attention if irritation develops.
- After Eye Contact:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Seek medical attention should irritation develop or persist.

### **Most Important Symptoms and Effects, Acute and Delayed:**

- Symptoms/effects after inhalation of dust:** Dry/sore throat. Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes.
- Symptoms/effects after skin contact :** Tingling/irritation of the skin.
- Symptoms/effects after eye contact :** Dust can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of the eyes.
- Symptoms/effects after ingestion :** Irritation of the gastric/intestinal mucosa.

## **5. FIRE-FIGHTING MEASURES**

- Suitable Extinguishing Media:** Water spray, dry chemical, or alcohol resistant foam, or carbon dioxide.
- Unsuitable Extinguishing Media:** N/A
- Special Hazards Arising from the Product:**  
Decomposition Products - Nitrogen oxides, carbon monoxide, and carbon dioxide. Chlorine compounds.
- Special Protective Equipment and Precautions for Fire-Fighters:**  
As in any fire, wear a self contained breathing apparatus in pressure demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

## **6. ACCIDENTAL RELEASE MEASURES**

- Individual Protection Measures (e.g. personal protective equipment):**  
Use personal protective equipment: Protective clothing (cover neck and head), gloves, face shield, boots, N95 respirator or better. Evacuate

personnel to safe areas. Ensure adequate ventilation. Avoid breathing dust.

For full list of PPE see section 8.

#### Methods and materials for containment and cleaning up

**Small spill:** Wear personal protective equipment (see section 8). Sweep up, then place into a suitable container for disposal. Avoid generating dust (e.g. by wetting). Provide ventilation. Avoid contact with skin.

**Large spill:** Evacuate the area. Communicate the hazard to other workers. Do not touch damaged containers or spilled material unless wearing a respirator, chemical safety goggles, rubber boots and heavy rubber gloves. Stop leak if you can do it without risk. Use a shovel to put the solid in a convenient waste disposal container. Avoid generation of dust. Dispose the waste container of in according to local and regional authority regulations.

**Environmental precautions:** N/A

**Reference to other sections:** See section 1 for emergency contact.  
See section 8 for information on appropriate personal protective equipment.  
See section 13 for disposal.

### 7. HANDLING AND STORAGE

**Precautions for Safe Handling:** Wash hands thoroughly after handling. Wash hands before eating. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. See also section 2.2

**Conditions for Safe Storage:** Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Hygroscopic. Moisture sensitive. Air and light sensitive.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control Parameters

Chemical Name	ACGIH® TLV®		OSHA PEL	
	TWA	STEL	TWA	STEL
L-Cysteine HCL Monohydrate	N/A	N/A	N/A	N/A

**Appropriate Engineering Controls:** Good general ventilation. Mechanical exhaust recommended. Safety shower and eye wash fountain are required.

**Personal precautions, protective equipment, and emergency procedures:**

<b>Respiratory System:</b>	Use personal protective equipment. Avoid dust formation. Ensure adequate ventilation. Avoid breathing dust. Use an N 95 respirator or better.
<b>Eye/face protection</b>	Face shield and safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
<b>Skin and body protection</b>	Impervious protective clothing and boots should be worn to prevent skin contact. In case of dust formation: head, full face and neck protection.  Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
<b>Control of environmental exposure</b>	Do not let product enter drains.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form:	Crystalline Powder
Color:	White or almost white
Molecular Weight:	175.64g/mol
Odour:	characteristic odour
Odour Threshold:	N/A
pH:	0.8-1.2 at 100g/L 20C
Melting Point/freezing point:	175C
Initial boiling point/boiling range:	N/A
Flash Point:	N/A
Evaporation Rate:	N/A
Flammability (solid; gas):	N/A
Upper flammability or explosive limits	N/A
Lower flammability or explosive limits	N/A
Vapor Pressure (mmHg):	N/A
Vapor Density (air=1):	N/A
Relative Density:	N/A
Solubility in Water:	Freely soluble
Solubility in Other Agents:	Soluble in Ethanol, Methanol, Acetone
Partition coefficient (n-octanol/water)	N/A
Autoignition	N/A
Decomposition	175C
Viscosity	N/A
Explosive properties	N/A
Oxidizing properties	N/A
Other information:	N/A

## 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	Oxidizes slowly on exposure to air.
<b>Chemical stability:</b>	Stable under normal temperatures and pressures, and recommended storage conditions. Discolors on exposure to light. Discolors on exposure to air. Hygroscopic. Unstable on exposure to air.
<b>Possibility of hazardous reactions:</b>	Violent reactions possible with oxidizing agents.
<b>Conditions to avoid:</b>	Heat, open flame, and incompatible materials.
<b>Incompatible materials:</b>	Strong oxidizing agents, metals
<b>Hazardous decomposition products:</b>	Nitrogen oxides, carbon monoxide, carbon dioxide, Sulfur oxides, Chlorine compounds.
<b>Other decomposition products:</b>	N/A
<b>In the event of fire:</b>	see section 5.

## 11. TOXICOLOGICAL INFORMATION

### Likely Routes of Exposure

Inhalation:	Yes
Skin contact:	Yes
Eye contact:	Yes
Ingestion:	Yes

**Acute Toxicity Oral LD<sub>50</sub>:** N/A

**Skin corrosion/irritation:** Causes severe skin burns and eye damage.  
pH: 0.8 (10 % solution)

**Serious Eye Damage/irritation:** Eye damage/irritation  
pH: 0.8 (10 % solution)

### Respiratory and/or Skin

**Sensitization:** N/A

**Aspiration Toxicity:** N/A

### STOT (Specific Target Organ Toxicity)

**Single Exposure:** May cause respiratory irritation.

### STOT (Specific Target Organ Toxicity)

**Repeated Exposure:** N/A

### Carcinogenicity:

**IARC** Not listed

**ACGIH®** Not listed

**OSHA** Not listed

**Reproductive Toxicity:** N/A

**Germ Cell Mutagenicity:** N/A

**Interactive Effects** N/A

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:**

No data available

**Persistence and degradability:**

No data available

**Bioaccumulative potential:**

No data available

**Mobility in soil:**

No data available

**Other adverse effects:**

**Results of PBT and vPvB assessment.** This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**13. DISPOSAL CONSIDERATIONS**

**Wastes of Residues:**

Dispose according to local, provincial, and federal regulations. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.

**Contaminated Packaging:**

Dispose of as unused product.

**14. TRANSPORT INFORMATION**

**Not hazardous for transport.**

**15. REGULATORY INFORMATION**

CANADA DSL/NDSL: CAS # 52-89-1 (anhydrous) is listed on the DSL.

**16. OTHER INFORMATION**

This information is based upon knowledge currently available.

More detailed information on the physical and chemical properties can be requested from the supplier. To the best of our knowledge, the information contained herein is accurate and complete. However, this should not be construed to imply any warranty or guarantee. Gurvey & Berry Co. Inc. shall not be held liable for any damage resulting from handling or from contact with the above chemical.

Created On: December 5, 2005

Last Revised: 22 March 2021

Printed On: 22 March 2021

This document will only be updated as needed.

N/A = not available.

N/D = not determined.