



## L-Cysteine 52-90-4 MSDS

<b>Name:</b>	L-Cysteine 99+% (TLC) Material Safety Data Sheet
<b>Synonym:</b>	Cystein; Cysteine; Thioserine
<b>CAS:</b>	52-90-4

### Section 1 - Chemical Product

MSDS Name: L-Cysteine 99+% (TLC) Material Safety Data Sheet

Synonym: Cystein; Cysteine; Thioserine

### Section 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	content	EINECS#
52-90-4	L-Cysteine	>99	-

Hazard Symbols: XN

Risk Phrases: 22

### Section 3 - HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Harmful if swallowed. Hygroscopic (absorbs moisture from the air). Air sensitive. Light sensitive.

Potential Health Effects

Eye:

May cause eye irritation.

Skin:

May cause skin irritation.

Ingestion:

Ingestion of large amounts may cause gastrointestinal irritation.

May be harmful if swallowed.

Inhalation:

May cause respiratory tract irritation.

Chronic:

No information found.

### Section 4 - FIRST AID MEASURES

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper



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and lower eyelids. If irritation develops, get medical aid.

Skin:

Get medical aid if irritation develops or persists. Wash clothing before reuse. Flush skin with plenty of soap and water.

Ingestion:

Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid if irritation or symptoms occur.

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.

Notes to Physician:

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## Section 5 - FIRE FIGHTING MEASURES

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

Extinguishing Media:

In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam. Use agent most appropriate to extinguish fire. Do NOT get water inside containers.

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## Section 6 - ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

Place under an inert atmosphere. Do not get water inside containers.

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## Section 7 - HANDLING and STORAGE

Handling:

Wash hands before eating. Avoid contact with eyes. Avoid ingestion and inhalation. Store protected from light. Handle under an inert atmosphere. Store protected from air. Do not allow contact with water. Keep from contact with moist air and steam.

Storage:

Store in a cool, dry place. Do not store in direct sunlight. Keep container closed when not in use. Do not expose to air. Store protected from moisture. Store protected from light. Store under an inert atmosphere.

## Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Good general ventilation should be sufficient to control airborne levels.

Exposure Limits CAS# 52-90-4: Russia: 2 mg/m<sup>3</sup> TWA Personal Protective Equipment Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Protective garments not normally required.

Clothing:

Wear appropriate protective clothing to minimize contact with skin.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

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## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid

Color: white

Odor: None reported.

pH: Not available.

Vapor Pressure: Not available.

Viscosity: Not available.

Boiling Point: Not available.

Freezing/Melting Point: 178 deg C (decomposes)

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits, lower: Not available.

Explosion Limits, upper: Not available.

Decomposition Temperature: 178 deg C

Solubility in water: Soluble in water.

Specific Gravity/Density: Not available.

Molecular Formula: C<sub>3</sub>H<sub>7</sub>NO<sub>2</sub>S

Molecular Weight: 121.1145

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## Section 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.



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Conditions to Avoid:

Incompatible materials, light, moisture, exposure to air.

Incompatibilities with Other Materials:

Strong oxidizing agents.

Hazardous Decomposition Products:

Nitrogen oxides, carbon monoxide, oxides of nitrogen, oxides of sulfur, irritating and toxic fumes and gases, carbon dioxide, nitrogen.

Hazardous Polymerization: Has not been reported.

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## Section 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 52-90-4: HA1600000 LD50/LC50:

CAS# 52-90-4: Oral, mouse: LD50 = 660 mg/kg; Oral, rat: LD50 = 1890 mg/kg.

Carcinogenicity:

L-Cysteine - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

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## Section 12 - ECOLOGICAL INFORMATION

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## Section 13 - DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

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## Section 14 - TRANSPORT INFORMATION

IATA

Not regulated as a hazardous material.

IMO

Not regulated as a hazardous material.

RID/ADR

Not regulated as a hazardous material.

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## Section 15 - REGULATORY INFORMATION

European/International Regulations



Qingdao Wanyuan Mountain Biotech Co.,Ltd

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European Labeling in Accordance with EC Directives

Hazard Symbols: XN

Risk Phrases:

R 22 Harmful if swallowed.

Safety Phrases:

WGK (Water Danger/Protection)

CAS# 52-90-4: 0

Canada

CAS# 52-90-4 is listed on Canada's DSL List.

CAS# 52-90-4 is not listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 52-90-4 is listed on the TSCA inventory.

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## **SECTION 16 - ADDITIONAL INFORMATION**

N/A