CONTACT : LEONID CHEMICALS
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L-CYSTEINE

SECTION 1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name:
L-Cysteine

Catalog Numbers: C/9150

Synonyms:
Cystein; Cysteine; Thioserine.

Company Information:
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SECTION 2- COMPOSITION, INFORMATION ON INGREDIENTS

CAS #	:	52-90-4
Chemical Name	:	L-Cysteine
%	:	100 %
EINECS#	:	200-158-2
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 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:
Un Listed

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.

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.

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.

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SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:
Good general ventilation should be sufficient to control airborne levels.

Personal Protective Equipment

Eyes:
Not available.
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. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

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	:	C3H7NO2S
Molecular Weight	:	121.1145

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability:
Stable under normal temperatures and pressures.
Conditions to Avoid:
Incompatible materials, light, moisture, exposure to air.
Incompatibilities with Other Materials:
Strong oxidizing agents.
Hazardous Decomposition Products:
Carbon monoxide, oxides of nitrogen, oxides of sulfur, irritating and toxic fumes and gases, carbon dioxide.

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, NIOSH, NTP, or OSHA.
See actual entry in RTECS for complete information.
Other:
Un Listed

SECTION 12 - ECOLOGICAL INFORMATION

Un Listed

SECTION 13 - DISPOSAL CONSIDERATIONS

Products which are considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location. Contact a specialist disposal company or the local waste regulator for advice. Empty containers must be decontaminated before returning for recycling.

SECTION 14 - TRANSPORT INFORMATION

IATA
Not regulated as a hazardous material.

IMO
Not regulated as a hazardous material.

ID/ADR
Not regulated as a hazardous material.

SECTION 15 - REGULATORY INFORMATION

European/International Regulations
European Labeling in Accordance with EC Directives

Hazard Symbols:
XN

Risk Phrases:
R 22 Harmful if swallowed.

Safety Phrases:
Un Listed

WGK (Water Danger/Protection)
CAS# 52-90-4: 0

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United Kingdom Occupational Exposure Limits

United Kingdom Maximum Exposure Limits
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.

Exposure Limits
CAS# 52-90-4: OEL-RUSSIA:STEL 2 mg/m3

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

SECTION 16 - ADDITIONAL INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.

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