



MATERIAL SAFETY DATA SHEET

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L-SERINE, 99%

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: L-SERINE, 99%

Catalog Numbers:

S080

Synonyms:

(S)-2-Amino-3-hydroxypropionic acid.

Company Identification:

LEONID CHEMICALS

62/A-2 2nd Stage, Industrial Suburb

Yeshwanthpur, Bangalore -22, INDIA

Ph- +91-80-23378354

SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	: 56-45-1
Chemical Name	: L-SERINE
%	: 99%
EINECS#	: 200-274-3
Haz Symbols	: None Listed
Risk Phrases	: None Listed

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Moisture sensitive. Light sensitive.

Potential Health Effects

Eye:

May cause eye irritation.

Skin:

May cause skin irritation. May be harmful if absorbed through the skin.

Ingestion:

May cause irritation of the digestive tract. May be harmful if swallowed.

Inhalation:

May cause respiratory tract irritation. May be harmful if inhaled.

Chronic:

Not available.

SECTION 4 - FIRST AID MEASURES



Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.

Skin:

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:

Get medical aid. Wash mouth out with water.

Inhalation:

Remove from exposure and move to fresh air immediately.

Notes to Physician:

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.

Extinguishing Media:

Use water spray, dry chemical, carbon dioxide, or chemical foam.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

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

Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container.

SECTION 7 - HANDLING and STORAGE

Handling:

Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes.

Storage:

Store in a cool, dry place. Do not store in direct sunlight. Store in a tightly closed container.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Personal Protective Equipment

Eyes:

Wear chemical goggles.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear a chemical apron.

Respirators:

A NIOSH/MSHA approved air purifying dust or mist respirator or European Standard EN 149.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Crystalline powder
Color: white
Odor: Not available.
pH: Not available.
Vapor Pressure: Negligible.
Viscosity: Not available.
Boiling Point: Not available.
Freezing/Melting Point: 222 deg C
Autoignition Temperature: Not available.
Flash Point: Not available.
Explosion Limits, lower: Not available.
Explosion Limits, upper: Not available.
Decomposition Temperature: >180 deg C
Solubility in water: SOLUBLE IN WATER: 250 G/L (20° C)
Specific Gravity/Density: 1.6000g/cm³
Molecular Formula: C₃H₇NO₃
Molecular Weight: 105.09

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, light, exposure to moist air or water.

Incompatibilities with Other Materials:

Strong oxidizing agents.

Hazardous Decomposition Products:

Nitrogen oxides, carbon monoxide, carbon dioxide.

Hazardous Polymerization: Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 56-45-1: VT8100000

LD50/LC50:

Not available.

Carcinogenicity:

L-SERINE -

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Other:

See actual entry in RTECS for complete information.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:

The product can be degraded microbiologically.

SECTION 13 - DISPOSAL CONSIDERATIONS

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

SECTION 14 - TRANSPORT INFORMATION

IATA

No information available.

IMO

No information available.

RID/ADR

No information available.

SECTION 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available.

Risk Phrases:

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# 56-45-1: 0

United Kingdom Occupational Exposure Limits

United Kingdom Maximum Exposure Limits

Canada

CAS# 56-45-1 is listed on Canada's DSL List.

CAS# 56-45-1 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

US FEDERAL

TSCA

CAS# 56-45-1 is listed on the TSCA inventory.

SECTION 16 - ADDITIONAL INFORMATION

MSDS Creation Date: 7/16/1996 Revision #0 Date: Original.

The information above is believed to be accurate and represents the best

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