## CAS No: 56-45-1 MSDS



### **MATERIAL SAFETY DATA SHEET (MSDS)**

SECTION 1: Identification of the substan	ce/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Substance
CAS No	: 56-45-1
Product code	: 05687
Chemical structure	
Synonyms	: (S)-2-Amino-3-hydroxypropionic acid
1.2. Relevant identified uses of the s	ubstance or mixture and uses advised against
1.2.1. Relevant identified uses	
Use of the substance/mixture	: Laboratory chemicals, Manufacture of substances
1.2.2. Uses advised against	
No additional information available	
1.3. Details of the supplier of the saf	ety data sheet
Labogens Fine Chem Industries 1st Floor , Above Bank of India, Guru Vihar Ludhiana Pb. (141007) +91 9316777775, +91 7707855700 sales@labogens.com - www.Labogens.com	, Rahon Road,
1.4. Emergency telephone number	
Emergency number	: +91 7707855700 (9:00am - 6:00 pm)
SECTION 2: Hazards identification	

### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP] Not classified

Classification according to Directive 67/548/EEC or 1999/45/EC Not classified

Safety Data Sheet

#### Adverse physicochemical, human health and environmental effects

No additional information available

### 2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] No labelling applicable

2.3.	Other	hazards	

No additional information available

SECTION 3: Composition/information on ingredients			
3.1.	Substance		
Name		: L-SERINE FOR BIOCHEMISTRY	
CAS N	0	: 56-45-1	

Full text of R- and H-phrases: see section 16

# 3.2. Mixture Not applicable

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice.
First-aid measures after skin contact	<ul> <li>Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.</li> </ul>
First-aid measures after eye contact	Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	Rinse mouth out with water. If you feel unwell, seek medical advice.
4.2. Most important symptoms and ef	fects, both acute and delayed

#### No additional information available

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).
Unsuitable extinguishing media	: Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

No additional information available

Safety Data Sheet

5.3.	Advice for firefighters	
Protecti	on during firefighting	: Do not attempt to take action without suitable protective equipment.
SECTIC	ON 6: Accidental release measures	S
6.1.	Personal precautions protective	e equipment and emergency procedures
		equipment and emergency procedures
6.1.1.	For non-emergency personnel	
Emerge	ency procedures	: Evacuate unnecessary personnel.
6.1.2.	For emergency responders	
Protecti	ve equipment	: Use personal protective equipment as required.
Emerge	ency procedures	: Stop release.
6.2.	Environmental precautions	
Avoid re	elease to the environment.	
0.0		
6.3.	Methods and material for contain	
Method	s for cleaning up	: Clear up rapidly by scoop or vacuum.
6.4.	Reference to other sections	
	tional information available	
SECTIC	ON 7: Handling and storage	
7.1.	Precautions for safe handling	
		: Do not get in eyes, on skin, or on clothing.
Precaut	Precautions for safe handling	<ul> <li>Do not get in eyes, on skin, or on clothing.</li> <li>Wash hands and other exposed areas with mild soap and water before eating,</li> </ul>
Precaut	Precautions for safe handling tions for safe handling	
Precaut Hygiene	Precautions for safe handling tions for safe handling e measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
Precaut Hygiene 7.2.	Precautions for safe handling tions for safe handling e measures Conditions for safe storage, incl	<ul> <li>Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.</li> <li>uding any incompatibilities</li> </ul>
Precaut Hygiene 7.2.	Precautions for safe handling tions for safe handling e measures	<ul> <li>Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.</li> <li>uding any incompatibilities</li> <li>Store in original container. Keep container tightly closed. Store in a dry place.</li> </ul>
Precaut Hygiene 7.2.	Precautions for safe handling tions for safe handling e measures Conditions for safe storage, incl	<ul> <li>Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.</li> <li>uding any incompatibilities</li> </ul>
Precaut Hygiene 7.2.	Precautions for safe handling tions for safe handling e measures Conditions for safe storage, incl	<ul> <li>Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.</li> <li>uding any incompatibilities</li> <li>Store in original container. Keep container tightly closed. Store in a dry place.</li> </ul>
Precaut Hygiene 7.2. Storage 7.3.	Precautions for safe handling tions for safe handling e measures Conditions for safe storage, incl e conditions	<ul> <li>Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.</li> <li>uding any incompatibilities</li> <li>Store in original container. Keep container tightly closed. Store in a dry place.</li> </ul>
Precaut Hygiene 7.2. Storage 7.3. No addi	Precautions for safe handling tions for safe handling e measures Conditions for safe storage, incl e conditions Specific end use(s) tional information available	<ul> <li>Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.</li> <li>uding any incompatibilities</li> <li>Store in original container. Keep container tightly closed. Store in a dry place. Protect from moisture.</li> </ul>
Precaut Hygiene 7.2. Storage 7.3. No addi	Precautions for safe handling tions for safe handling e measures Conditions for safe storage, incl e conditions Specific end use(s)	<ul> <li>Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.</li> <li>uding any incompatibilities</li> <li>Store in original container. Keep container tightly closed. Store in a dry place. Protect from moisture.</li> </ul>
Precaut Hygiene 7.2. Storage 7.3. No addi	Precautions for safe handling tions for safe handling e measures Conditions for safe storage, incl e conditions Specific end use(s) tional information available	<ul> <li>Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.</li> <li>uding any incompatibilities</li> <li>Store in original container. Keep container tightly closed. Store in a dry place. Protect from moisture.</li> </ul>
Precaut Hygiene 7.2. Storage 7.3. No addi SECTIC	Precautions for safe handling tions for safe handling e measures Conditions for safe storage, incl e conditions Specific end use(s) tional information available DN 8: Exposure controls/personal	<ul> <li>Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.</li> <li>uding any incompatibilities</li> <li>Store in original container. Keep container tightly closed. Store in a dry place. Protect from moisture.</li> </ul>

8.2. Exposure controls		
Hand protection	: protective gloves	
Eye protection	: Chemical goggles or safety glasses	
Skin and body protection	: Wear suitable protective clothing	
Respiratory protection	: Wear respiratory protection	
SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and chemical properties		

: Solid

Physical state

Safety Data Sheet

Salely Data Sheet	
Colour	: White crystalline.
Odour	: odourless.
Odour threshold	: No data available
рН	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 222 °C
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density Solubility	:1.537 g/cm³ :Water: Soluble in water
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available
9.2. Other information	
No additional information available	
SECTION 10: Stability and reactivity	
10.1. Reactivity	
No additional information available	
10.2. Chemical stability	
Stable under normal conditions.	
10.3. Possibility of hazardous reactio	ns
No additional information available	
10.4. Conditions to avoid	
Direct sunlight. Air contact. Moisture.	
10.5. Incompatible materials	
No additional information available	

Safety Data Sheet

### **10.6.** Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information			
11.1. Information on toxicological e	effects		
Acute toxicity	: Not classified		
Skin corrosion/irritation	: Not classified		
Serious eye damage/irritation	: Not classified		
Respiratory or skin sensitisation	: Not classified		
Germ cell mutagenicity	: Not classified		
Carcinogenicity	: Not classified		
<b>·</b> ·			
Reproductive toxicity	: Not classified		
Specific target organ toxicity (single	: Not classified		
exposure)			
Specific target organ toxicity (repeated	: Not classified		
exposure)			
Aspiration bazard	: Not classified		
Aspiration hazard	. INUL CIASSINEU		

SECTION 12: Ecological information
12.1. Toxicity
No additional information available
12.2. Persistence and degradability
No additional information available
12.3. Bioaccumulative potential
No additional information available
12.4. Mobility in soil
No additional information available
12.5. Results of PBT and vPvB assessment
No additional information available
12.6. Other adverse effects

No additional information available

Safety Data Sheet

Safety Data Sheet			
SECTION 13: Disposal considerations	5		
13.1. Waste treatment methods			
No additional information available			
SECTION 14: Transport information			
In accordance with ADR / RID / IMDG /	ATA / ADN		
14.1. UN number	. Not applicable		
UN-No. (ADR)	: Not applicable		
UN-No. (IMDG)	: Not applicable		
UN-No.(IATA)	: Not applicable		
UN-No.(ADN)	: Not applicable		
UN-No. (RID)	: Not applicable		
14.2. UN proper shipping name			
Proper Shipping Name (ADR)	: Not applicable		
Proper Shipping Name (IMDG)	: Not applicable		
Proper Shipping Name (IATA)	: Not applicable		
Proper Shipping Name (ADN)	: Not applicable		
Proper Shipping Name (RID)	: Not applicable		
14.3. Transport hazard class(es)			
ADR			
Transport hazard class(es) (ADR)	: Not applicable		
IMDG			
Transport hazard class(es) (IMDG)	: Not applicable		
ΙΑΤΑ			
Transport hazard class(es) (IATA)	: Not applicable		
ADN			
Transport hazard class(es) (ADN)	: Not applicable		
RID			
עוא Transport hazard class(es) (RID)	: Not applicable		
14.4. Packing group			
Packing group (ADR)	: Not applicable		
Packing group (IMDG)	: Not applicable		
Packing group (IATA)	: Not applicable		
Packing group (ADN)	: Not applicable		
Packing group (RID)	: Not applicable		
14.5. Environmental hazards			
Dangerous for the environment	: No		
Marine pollutant	: No		

Safety Data Sheet

14.6. Special precautions for user

- Overland transport

No data available

- Transport by sea No data available

Air transport
 No data available

- Inland waterway transport No data available

- Rail transport No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

**SECTION 15: Regulatory information** 

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

L-SERINE FOR BIOCHEMISTRY is not on the REACH Candidate List

L-SERINE FOR BIOCHEMISTRY is not on the REACH Annex XIV List

#### 15.1.2. National regulations

#### Germany

AwSV/VwVwS Annex reference	:	Water hazard class (WGK) 1, slightly hazardous to water (Classification according to VwVwS, Annex 2; WGK No 6704)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	:	Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

**15.2.** Chemical safety assessment No additional information available

SECTION 16: Other information

Safety Data Sheet

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product