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MATERIAL SAFETY DATA SHEET (MSDS) L-ASPARTIC ACID (FOR BIOCHEMISTRY)

1. Identification of the substance/mixture and of the company/undertaking 1.1. Product identifier Trade name : L-ASPARTIC ACID (FOR BIOCHEMISTRY) **Product code** : A0033900100 Identification of the product : L-ASPARTIC ACID99+% CAS No :56-48-8 1.2. Relevant identified uses of the substance or mixture and uses advised against Use : Industrial. For professional use only. 1.3. Details of the supplier of the safety data sheet SUVCHEM **Company identification** Chaitanya Tower, 2nd Floor, Office # 206, Siddharth Nagar, S.V. Road, Goregaon (West), Mumbai - 400062, Maharashtra, India. Contact: +91 22 28725393 / 94 / 95 Email ID: info@suvchem.com/care@suvchem.com 1.4. Emergency telephone number Phone no. : + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [Office hours]

2. Hazards identification -DSD

2.1. Classification of the substance or mixture

Classification EC 67/548 or EC 1999/45					
Classification	: Xi; R36				

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Health hazards : Eye irritation - Category 2A - Warning (CLP : Eye Irrit. 2) H319

2.2. Label elements

Labelling EC 67/548 or EC 1999/45

Symbol(s)





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2. Hazards identification -DSD (continued)				
Symbol(s) R Phrase(s) S Phrase(s)	 : Xi : Irritant : R36 : Irritating to eyes. : S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. 			
Labelling Regulation EC 1272/2	<u>008 (CLP)</u>			
Hazard pictograms				
Signal words	: Warning			
Hazard statements	: H319 : Causes serious eye irritation.			
Precautionary statements				
Prevention	: P280: Wear protective gloves, protective clothing, eye protection, face protection. P264: Wash thoroughly after handling.			
• Response	: P305+P351+P338: IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313: If eye irritation persists: Get medical advice/attention.			
2.3. Other hazards				
Other hazards	: The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.			

Substance / Preparation	: L-ASPARTIC ACID99+% CAS No :56-48-8	
	Substance.	
Contains no other components of	r impurities which will influence the classification of the product.	

4. First aid measures

4.1. Description of first aid measures

Inhalation	: Assure fresh air breathing. Allow the victim to rest.
Skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
Eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists : Get medical advice.
Ingestion	: Obtain emergency medical attention. Rinse mouth. Do NOT induce vomiting.



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4. First aid measures (continued)

<u>4.2. Most important sj</u>	<u>mptoms and enects</u>	<u>s, poin acute and de</u>	layeu

Symptoms relating to use : Causes serious eye irritation.

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

General information : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

5. Fire-fighting measures

5.1. Extinguishing media				
Suitable extinguishing media Unsuitable extinguishing media Surrounding fires	: Foam. Dry powder. Carbon dioxide. Water spray. Sand. : Do not use a heavy water stream. : Use water spray or fog for cooling exposed containers.			
5.2. Special hazards arising from the substance or mixture				
Hazardous combustion products	: Under fire conditions, hazardous fumes will be present.			
5.3. Advice for fire-fighters				
Protection against fire	: Do not enter fire area without proper protective equipment, including respiratory protection.			
Special procedures	: Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.			

6. Accidental release measures				
6.1. Personal precautions, protective equipment and emergency procedures				
For emergency responders	: Equip cleanup crew with proper protection. Ventilate area.			
For non-emergency personnel	: Evacuate unnecessary personnel.			
6.2. Environmental precautions				
Environmental precautions	: Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.			

6.3. Methods and material for containment and cleaning up



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6. Accidental release measures (continued)				
Clean up methods	: On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.			
6.4. Reference to other sections				
See section 8. Exposure controls/personal protection				
7. Handling and storage				
7.1. Precautions for safe handling				
Handling Technical protective measures	: Wash thoroughly after handling. : Provide good ventilation in process area to prevent formation of vapour.			
7.2. Conditions for safe storage, inclu	<u>iding any incompatibilities</u>			
Storage	: Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use.			
Storage - away from	: Strong bases. Strong acids. Sources of ignition. Direct sunlight.			
<u>7.3. Specific end use(s)</u>				
Specific end use(s)	: None.			
8. Exposure controls/personal prote	ction			
8.1. Exposure controls				
Personal protection • Respiratory protection • Hand protection • Eye protection • Others	 : Avoid all unnecessary exposure. : Wear approved mask. : Wear protective gloves. : Chemical goggles or safety glasses. : When using, do not eat, drink or smoke. 			
8.2. Control parameters				
Occupational Exposure Limits	: No data available.			
9. Physical and chemical properties				

9.1. Information on basic physical and chemical properties



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9. Physical and chemical properties (continued)

Physical state at 20 °C	: Solid.
Colour	: White crystalline
Odour	: N/A
Odour threshold	: No data available.
pH value	: Not applicable.
Melting point [°C]	: > 300 °C
Decomposition point [°C]	: N/A
Critical temperature [°C]	: N/A
Auto-ignition temperature [°C]	: N/A
Flammability (solid, gas)	: N/A
Flash point [°C]	: N/A
Boiling point [°C]	: N/A
Initial boiling point [°C]	: N/A
Final boiling point [°C]	: N/A
Evaporation rate	: N/A
Vapour pressure [20°C]	: N/A
Vapour pressure mm/Hg	: N/A
Vapour density	: N/A
Density [g/cm3]	: 1,661
Relative density, gas (air=1)	: N/A
Relative density, liquid (water=1)	: N/A
Solubility in water [% weight]	: Slightly soluble in
Solubility in water	: N/A
Log Pow octanol / water at 20°C	: No data available.
Solubility	: 2.8
Viscosity at 40°C [mm2/s]	: N/A
9.2. Other information	
Explosive properties	: N/A
Explosion limits - upper [%]	: N/A
Explosion limits - lower [%]	: N/A
Oxidising properties	: No data available.

10. Stability and reactivity

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Reactivity

: Not established.



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10. Stability and reactivity (continued)

10.2. Chemical stability			
Chemical stability	: Stable under recommended storage conditions.		
10.3. Possibility of hazardous reactions			
Hazardous reactions	: Not established.		
10.4. Conditions to avoid			
Conditions to avoid	: Direct sunlight. Extremely high or low temperatures.		
10.5. Incompatible materials			
Materials to avoid	: Strong acids. Strong bases.		
10.6. Hazardous decomposition products			
Hazardous decomposition products	: Fumes. Carbon monoxide. Carbon dioxide.		

11. Toxicological information

11.1. Information on toxicological effects

• Inhalation	: Based on available data, the classification criteria are not met.
• Dermal	: Based on available data, the classification criteria are not met.
Ingestion	: Based on available data, the classification criteria are not met.
Corrosion	: Based on available data, the classification criteria are not met.
Irritation	: Causes serious eye irritation.
Sensitization	: Based on available data, the classification criteria are not met.
Mutagenicity	: Based on available data, the classification criteria are not met.
Carcinogenicity	: Based on available data, the classification criteria are not met.
Toxic for reproduction	: Based on available data, the classification criteria are not met.
STOT-single exposure	: Based on available data, the classification criteria are not met.
STOT-repeated exposure	: Based on available data, the classification criteria are not met.
Aspiration hazard	: Based on available data, the classification criteria are not met.

12. Ecological information

12.1. Toxicity



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12. Ecological information (continued)		
Toxicity information	: Not established.	
<u>12.2. Persistence - degradability</u>		
Persistence - degradability	: Biodegradable.	
12.3. Bioaccumulative potential		
Bioaccumulative potential	: Not established.	
<u>12.4. Mobility in soil</u>		
Mobility in soil	: Not established.	
12.5. Results of PBT and vPvB assessment		
Results of PBT and vPvB assessmen	t : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.	
12.6. Other adverse effects		
Environmental precautions	: Avoid release to the environment.	
13. Disposal considerations		
13. Disposal considerations <u>13.1. Waste treatment methods</u>		
	: Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.	
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<u>13.1. Waste treatment methods</u> General		
13.1. Waste treatment methods General 14. Transport information		
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15. Regulatory information

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

Safety, health and environmental regulations/legislation specific for th substance or mixture	: Ensure all national/local regulations are observed.
REACH Restrictions - Annex XVII REACH Authorisation - Annex XIV	: The components of this product are not subject to restrictions. : The components of this product are not subject to authorization.
15.2. Chemical Safety Assessment	
Chemical Safety Assessment	: It has not been carried out.
16. Other information	
16. Other information Revision	: Revision - See : *
	: Revision - See : * : PBT: persistent, bioaccumulative and toxic. vPvB: very persistent and very bioaccumulative
Revision	: PBT: persistent, bioaccumulative and toxic.

In accordance with REACH Regulation (CE) Nº 1907/2006 and with CLP Regulation (CE) Nº 1272/2008

DISCLAIMER:

- SUVCHEM Products are to be used as Lab Chemicals for R&D only. Not for drug, medicinal, household or other uses.
- SUVCHEM shall not be responsible for any damage resulting from handling or from contact with the above product.
- SUVCHEM provides the information contained herein in good faith but makes no representation as to its
 comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of
 the material by a properly trained person using this product.

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