

MATERIAL SAFETY DATA SHEET (MSDS)**TRI-AMMONIUM CITRATE LR****1. Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Trade name : TRI-AMMONIUM CITRATE LR

Product code : A0023705000

Identification of the product : TRI-AMMONIUM CITRATE EXTRA PURE
CAS No :3458-72-8

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

Company identification : SUVCHEM
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 : Specific Target Organ Toxicity - Single exposure - Respiratory tract irritation -
Category 3 - Warning (CLP : STOT SE 3) H335
Skin irritation - Category 2 - Warning (CLP : Skin Corr. 2) H315
Eye irritation - Category 2A - Warning (CLP : Eye Irrit. 2) H319

2.2. Label elements**Labelling EC 67/548 or EC 1999/45**

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TRI-AMMONIUM CITRATE LR
2. Hazards identification -DSD (continued)

Symbol(s)



Symbol(s)

: Xi : Irritant

R Phrase(s)

 : R36 : Irritating to eyes.
 R37 : Irritating to respiratory system.
 R38 : Irritating to skin.

S Phrase(s)

 : S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 S36 : Wear suitable protective clothing.

Labelling Regulation EC 1272/2008 (CLP)

Hazard pictograms



Signal words

: Warning

Hazard statements

 : H319 : Causes serious eye irritation.
 H315 : Causes skin irritation.
 H335 : May cause respiratory irritation.

Precautionary statements

• Prevention

 : P280: Wear protective gloves, protective clothing, eye protection, face protection.
 P271: Use only outdoors or in a well-ventilated area.
 P261: Avoid breathing dust, fume, gas, mist, vapours, spray.
 P264: Wash thoroughly after handling.

• Response

 : P302+P352: IF ON SKIN : Wash with plenty of soap and water.
 P332+P313: If skin irritation occurs : Get medical advice.
 P305+P351+P338: IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P304+P340: IF INHALED : Remove to fresh air and keep at rest in a position comfortable for breathing.
 P363: Wash contaminated clothing before reuse.

• Storage

 : P403+P233: Store in well-ventilated place. Keep container tightly closed.
 P405: Store locked up.

• Disposal considerations

: P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

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.

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TRI-AMMONIUM CITRATE LR

3. Composition/information on ingredients

Substance / Preparation : TRI-AMMONIUM CITRATE EXTRA PURE
 CAS No :3458-72-8
 Substance.

Contains no other components or impurities which will influence the classification of the product.

4. First aid measures

4.1. Description of first aid measures

Inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.

Skin contact : Specific treatment (see on this label). Get medical advice. Wash contaminated clothing before reuse. Wash with plenty of soap and water. If skin irritation occurs :

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.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms relating to use : Causes serious eye irritation.
 Causes skin irritation. May cause respiratory 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 : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

Surrounding fires : 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.

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5. Fire-fighting measures (continued)

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

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 : Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Wash thoroughly after handling. Wash thoroughly after handling.

Technical protective measures : Provide good ventilation in process area to prevent formation of vapour.

Special precautions : Avoid breathing dust, fume, gas, mist, vapours, spray.

7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep only in the original container in a cool, well ventilated place. Keep container tightly closed.

Storage - away from : Strong bases. Strong acids. Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

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7. Handling and storage (continued)

Specific end use(s) : None.

8. Exposure controls/personal protection
8.1. Exposure controls

Personal protection : Avoid all unnecessary exposure.

- Respiratory protection : Wear approved mask.
- Hand protection : Wear protective gloves.
- Skin protection : Wear suitable protective clothing.
- Eye protection : Chemical goggles or safety glasses.
- Others : 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

Physical state at 20 °C : Solid.

Colour : White crystalline

Odour : N/A

Odour threshold : No data available.

pH value : Not applicable.

Melting point [°C] : 185 °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] : 100 °C

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

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9. Physical and chemical properties (continued)

Density [g/cm ³]	: 1
Relative density, gas (air=1)	: N/A
Relative density, liquid (water=1)	: N/A
Solubility in water [% weight]	: Soluble in water
Solubility in water	: N/A
Log Pow octanol / water at 20°C	: No data available.
Solubility	: N/A
Viscosity at 40°C [mm ² /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
10.1. Reactivity

Reactivity	: Not established.
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10.2. Chemical stability

Chemical stability	: Stable under recommended storage conditions.
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10.3. Possibility of hazardous reactions

Hazardous reactions	: Not established.
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10.4. Conditions to avoid

Conditions to avoid	: Direct sunlight. Extremely high or low temperatures.
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10.5. Incompatible materials

Materials to avoid	: Strong acids. Strong bases.
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10.6. Hazardous decomposition products

Hazardous decomposition products	: Fumes. Carbon monoxide. Carbon dioxide.
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TRI-AMMONIUM CITRATE LR
11. Toxicological information
11.1. Information on toxicological effects
Acute toxicity

- 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.
 Causes skin irritation.
 May cause respiratory 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

Toxicity information : Not established.

12.2. Persistence - degradability

Persistence - degradability : Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential : Not established.

12.4. Mobility in soil

Mobility in soil : Not established.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment : 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

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12. Ecological information (continued)

Environmental precautions : Avoid release to the environment.

13. Disposal considerations
13.1. Waste treatment methods

General : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

14. Transport information
14.1. Land transport (ADR-RID)

General information : Not regulated.

14.2. Sea transport (IMDG) [English only]

General information : Not regulated.

14.3. Air transport (ICAO-IATA) [English only]

General information : Not regulated.

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 the substance or mixture : Ensure all national/local regulations are observed.

REACH Restrictions - Annex XVII : The components of this product are not subject to restrictions.

REACH Authorisation - Annex XIV : 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

Revision : Revision - See : *

Abbreviations and acronyms : PBT: persistent, bioaccumulative and toxic.
vPvB: very persistent and very bioaccumulative

MATERIAL SAFETY DATA SHEET (MSDS)**TRI-AMMONIUM CITRATE LR****16. Other information (continued)**

Sources of key data used	: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
Further information	: None.

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

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