CAS-No.: 3458-72-8 MSDS



MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier	
Product form	: Substance
CAS-No.	: 3458-72-8
Product code	: 01150
Chemical structure	HO $OH OH O$
1.2. Relevant identified uses of t	he substance or mixture and uses advised against

1.2.1. Relevant identified uses

Industrial/Professional use spec

: Industrial For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Labogens Fine Chem Industries 1st Floor , Above Bank of India, Guru Vihar , Rahon Road, Ludhiana Pb. (141007) +91 9316777775, +91 7707855700 sales@labogens.com - www.Labogens.com

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]

Serious eye damage/eye H319 irritation, Category 2 Skin corrosion/irritation, H315 Category 2 Specific target organ H335 toxicity — Single exposure, Category 3, Respiratory tract irritation

Full text of H statements : see section 16

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Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Xi; R36 Xi; R37 Xi; R38 Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects No additional information available

2.2. Label elements	
Labelling according to Regulation (EC	No. 1272/2008 [CLP]
Hazard pictograms (CLP)	GHS07
Signal word (CLP)	: Warning
Hazard statements (CLP)	 H315 - Causes skin irritation. H319 - Causes serious eye irritation. H335 - May cause respiratory irritation.
Precautionary statements (CLP)	 P261 - Avoid breathing vapours, dust, fume, gas. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

No additional information available

SECTI	ON 3: Composition/information on	ingredients
2.4	Substances	
3.1.	Substances	
Name		: tri-AMMONIUM CITRATE AR
CAS-N	0.	: 3458-72-8
Full tex	t of R- and H-statements: see sectio	n 16
3.2.	Mixtures	
Not ap	plicable	
SECTI	ON 4: First aid measures	
4.4	Description of first sides exercise	-
4.1.	Description of first aid measures	S
First-ai	d measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

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Salety Data Sheet	
First-aid measures after skin contact	: Wash with plenty of water/ Wash contaminated clothing before reuse. Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting.
4.2. Most important symptoms an	id effects, both acute and delayed
Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.
4.3. Indication of any immediate n	nedical attention and special treatment needed
Treat symptomatically.	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Carbon dioxide. Dry powder. Foam. Water spray.
Unsuitable extinguishing media	: Do not use a heavy water stream.
5.2. Special hazards arising from	the substance or mixture
No additional information available	
5.3. Advice for firefighters	
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory
	protection.
SECTION 6: Accidental release measu	ures
6.1. Personal precautions, protect	tive equipment and emergency procedures
6.1.1. For non-emergency personne	
Emergency procedures	: Evacuate unnecessary personnel.
6.1.2. For emergency responders	
Protective equipment	: Use personal protective equipment as required.
Emergency procedures	: Ventilate area.
6.2. Environmental precautions	
Avoid release to the environment.	
C.2. Matheda and material far con	to instant and all any up
6.3. Methods and material for con Methods for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as
Methods for cleaning up	possible. On land, sweep or shovel into suitable containers.
6.4. Reference to other sections	
6.4. Reference to other sections No additional information available	
SECTION 7: Handling and storage	
Precautions for safe handling	: Avoid contact with skin and eyes. Use only outdoors or in a well-ventilated area. Do not breathe vapours.
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
7.2. Conditions for safe storage, i	ncluding any incompatibilities
Storage conditions	: Keep container tightly closed. Store in a well-ventilated place.
-	
7.3. Specific end use(s)	
No additional information available	
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8.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

Exposure controls

Eye protectionSkin and body protectionRespiratory protectionSECTION 9: Physical and chemical proper9.1.Information on basic physical andPhysical stateMolecular massColourOdourOdour thresholdpHRelative evaporation rate (butylacetate=1)Melting pointFreezing pointBoiling pointFlash pointAuto-ignition temperatureDecomposition temperatureFlammability (solid, gas)	
Skin and body protectionRespiratory protectionSECTION 9: Physical and chemical proper9.1.Information on basic physical andPhysical stateMolecular massColourOdourOdourOdour thresholdpHRelative evaporation rate (butylacetate=1)Melting pointFreezing pointBoiling pointFlash pointAuto-ignition temperatureDecomposition temperatureFlammability (solid, gas)	 Wear suitable protective clothing [In case of inadequate ventilation] wear respiratory protection. rties d chemical properties Solid 243.22 g/mol White crystalline. No data available
Respiratory protectionSECTION 9: Physical and chemical proper9.1. Information on basic physical and Physical stateMolecular mass ColourOdourOdourOdour thresholdpHRelative evaporation rate (butylacetate=1)Melting pointFreezing pointBoiling pointFlash pointAuto-ignition temperatureDecomposition temperatureFlammability (solid, gas)	 [In case of inadequate ventilation] wear respiratory protection. rties d chemical properties Solid 243.22 g/mol White crystalline. No data available
SECTION 9: Physical and chemical proper 9.1. Information on basic physical and Physical state	rties d chemical properties : Solid : 243.22 g/mol : White crystalline. : No data available : No data available : No data available : No data available
9.1.Information on basic physical and Physical statePhysical stateImage: StateMolecular massImage: StateColourImage: StateOdourImage: StateOdourImage: StateOdour thresholdImage: StatepHImage: StateRelative evaporation rate (butylacetate=1)Melting pointFreezing pointBoiling pointFlash pointAuto-ignition temperatureDecomposition temperatureFlammability (solid, gas)	 d chemical properties Solid 243.22 g/mol White crystalline. No data available
Physical stateImage: StateMolecular massImage: StateColourImage: StateOdourImage: StateOdour thresholdImage: StatepHImage: StateRelative evaporation rate (butylacetate=1)Image: StateMelting pointImage: StateFreezing pointImage: StateBoiling pointImage: StateFlash pointImage: StateAuto-ignition temperatureImage: StateDecomposition temperatureImage: StateFlammability (solid, gas)Image: State	 Solid 243.22 g/mol White crystalline. No data available No data available No data available No data available
Molecular mass Colour:Odour:Odour threshold:pH:Relative evaporation rate (butylacetate=1):Melting point:Freezing point:Boiling point:Flash point:Auto-ignition temperature:Decomposition temperature:Flammability (solid, gas):	 243.22 g/mol White crystalline. No data available No data available No data available No data available
Colour:Odour:Odour threshold:pH:Relative evaporation rate (butylacetate=1):Melting point:Freezing point:Boiling point:Flash point:Auto-ignition temperature:Decomposition temperature:Flammability (solid, gas):	 White crystalline. No data available No data available No data available No data available
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pH:Relative evaporation rate (butylacetate=1):Melting point:Freezing point:Boiling point:Flash point:Auto-ignition temperature:Decomposition temperature:Flammability (solid, gas):	: No data available : No data available
Relative evaporation rate (butylacetate=1) Melting point Freezing point Boiling point Flash point Auto-ignition temperature Decomposition temperature Flammability (solid, gas)	: No data available
Melting point Freezing point Boiling point Flash point Auto-ignition temperature Decomposition temperature Flammability (solid, gas)	
Freezing pointBoiling pointFlash pointAuto-ignition temperatureDecomposition temperatureFlammability (solid, gas)	: 185 °C
Boiling pointFlash pointAuto-ignition temperatureDecomposition temperatureFlammability (solid, gas)	
Flash point : Auto-ignition temperature : Decomposition temperature : Flammability (solid, gas) :	: No data available
Auto-ignition temperature Decomposition temperature Flammability (solid, gas)	: 100 °C
Decomposition temperature Flammability (solid, gas)	: No data available
Flammability (solid, gas)	: No data available
	: No data available
Vapour pressure	: No data available
	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
5	: 1 g/cm³ : Water: Soluble in water
Log Pow	: No data available
Viscosity, kinematic	
Viscosity, dynamic	: No data available
Solubility : Log Pow :	: Water: Soluble in water

Explosive properties	: No data available	
Oxidising properties	: No data available	
Explosive limits	: No data available	
0.2. Other information		
No additional information available		
SECTION 10: Stability and reactiv	ty	
10.1. Reactivity		
No additional information available		
10.2. Chemical stability		
Stable under normal conditions.		
10.3. Possibility of hazardous	eactions	
No additional information available		
10.4. Conditions to avoid		
Direct sunlight. Air contact. Moisture		
10.5. Incompatible materials		
No additional information available		
	anducts	
No additional information available 10.6. Hazardous decompositio No additional information available	ı products	
10.6. Hazardous decompositio	ı products	
10.6. Hazardous decompositio		
10.6. Hazardous decompositio No additional information available	ation	
10.6.Hazardous decompositioNo additional information availableSECTION 11: Toxicological inform	ation	
10.6.Hazardous decompositioNo additional information availableSECTION 11: Toxicological inform11.1.Information on toxicologi	ation cal effects	
10.6.Hazardous decompositioNo additional information availableSECTION 11: Toxicological inform11.1.Information on toxicologi	ation cal effects	
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10.6. Hazardous decompositio No additional information available SECTION 11: Toxicological inform 11.1. Information on toxicologi Acute toxicity Skin corrosion/irritation	ation cal effects : Not classified : Causes skin irritation.	
10.6. Hazardous decompositio No additional information available SECTION 11: Toxicological inform 11.1. Information on toxicologi Acute toxicity Skin corrosion/irritation Serious eye damage/irritation	ation cal effects : Not classified : Causes skin irritation. : Causes serious eye irritation.	
10.6. Hazardous decompositio No additional information available SECTION 11: Toxicological inform 11.1. Information on toxicologi Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation	ation cal effects : Not classified : Causes skin irritation. : Causes serious eye irritation. : Not classified	
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10.6. Hazardous decompositio No additional information available SECTION 11: Toxicological inform 11.1. Information on toxicologi Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity	ation cal effects : Not classified : Causes skin irritation. : Causes serious eye irritation. : Not classified : Not classified : Not classified : Not classified	
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10.6. Hazardous decompositio No additional information available SECTION 11: Toxicological inform 11.1. Information on toxicologi Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity	ation cal effects : Not classified : Causes skin irritation. : Causes serious eye irritation. : Not classified : Not classified : Not classified : Not classified	

SECTION 12: Ecological information		
12.1. Toxicity		
No additional information available		
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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 asse	essment
No additional information available	
12.6. Other adverse effects	
No additional information available	
SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
No additional information available	
SECTION 14: Transport information	
In accordance with ADR / RID / IMDG / I	ATA / ADN
14.1. UN number	
UN-No. (ADR)	: Not applicable
UN-No. (ADR) UN-No. (IMDG)	: Not applicable
UN-No. (ADR) UN-No. (IMDG) UN-No. (IATA)	: Not applicable : Not applicable
UN-No. (ADR) UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN)	 Not applicable Not applicable Not applicable
UN-No. (ADR) UN-No. (IMDG) UN-No. (IATA)	: Not applicable : Not applicable
UN-No. (ADR) UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (RID)	 Not applicable Not applicable Not applicable
UN-No. (ADR) UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (RID) 14.2. UN proper shipping name	 Not applicable Not applicable Not applicable Not applicable
UN-No. (ADR) UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (RID)	 Not applicable Not applicable Not applicable
UN-No. (ADR) UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (RID) 14.2. UN proper shipping name Proper Shipping Name (ADR)	 Not applicable Not applicable Not applicable Not applicable Not applicable
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UN-No. (ADR) UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (ADN) UN-No. (RID) 14.2. UN proper shipping name Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID) 14.3. Transport hazard class(es)	 Not applicable
UN-No. (ADR) UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (ADN) UN-No. (RID) 14.2. UN proper shipping name Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID) 14.3. Transport hazard class(es) ADR	 Not applicable
UN-No. (ADR) UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (ADN) UN-No. (RID) 14.2. UN proper shipping name Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID) 14.3. Transport hazard class(es)	 Not applicable
UN-No. (ADR) UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (ADN) UN-No. (RID) 14.2. UN proper shipping name Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID) 14.3. Transport hazard class(es) ADR Transport hazard class(es) (ADR)	 Not applicable
UN-No. (ADR) UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (ADN) UN-No. (RID) 14.2. UN proper shipping name Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID) 14.3. Transport hazard class(es) ADR Transport hazard class(es) (ADR) IMDG	 Not applicable
UN-No. (ADR) UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (ADN) UN-No. (RID) 14.2. UN proper shipping name Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID) 14.3. Transport hazard class(es) ADR Transport hazard class(es) (ADR)	 Not applicable
UN-No. (ADR) UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (ADN) UN-No. (RID) 14.2. UN proper shipping name Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID) 14.3. Transport hazard class(es) ADR Transport hazard class(es) (ADR) IMDG Transport hazard class(es) (IMDG)	 Not applicable
UN-No. (ADR) UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (ADN) UN-No. (RID) 14.2. UN proper shipping name Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID) 14.3. Transport hazard class(es) ADR Transport hazard class(es) (ADR) IMDG Transport hazard class(es) (IMDG) IATA	 Not applicable
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ADN	
Transport hazard class(es) (ADN)	: Not applicable
RID	
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
Other information	: No supplementary information available

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

tri-AMMONIUM CITRATE AR is not on the REACH Candidate List tri-AMMONIUM CITRATE AR is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

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12th Ordinance Implementing the Federal : Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance) Immission Control Act - 12.BImSchV

Netherlands

SZW-lijst van kankerverwekkende stoffen SZW-lijst van mutagene stoffen	The substance is not listedThe substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	: The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	: The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	: The substance is not listed
Denmark Recommendations Danish Regulation	: Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of R-, H- and EUH-statements:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
R36	Irritating to eyes
R37	Irritating to respiratory system
R38	Irritating to skin
Xi	Irritant

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