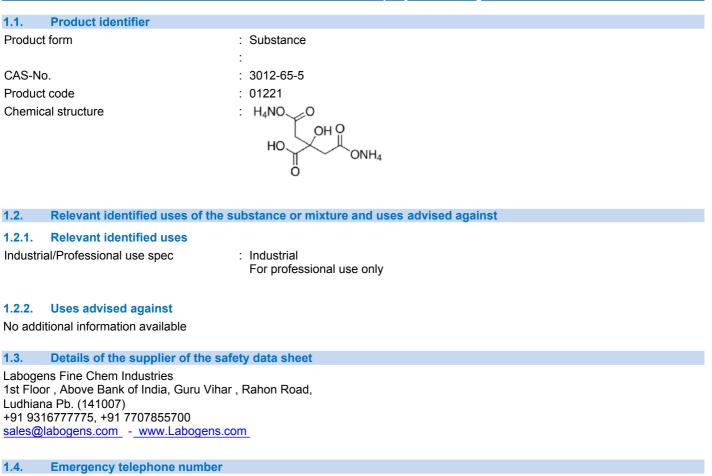
DI-AMMONIUM HYDROGEN CITRATE EXTRA PURE MSDS



CAS-No.: 3012-65-5 MSDS

MATERIAL SAFETY DATA SHEET (MSDS)

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



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 Specific target organ H335 toxicity — Single exposure, Category 3, Respiratory tract irritation

Full text of H statements : see section 16

Safety Data Sheet

Safety Data Sheet	
Classification according to Directive Xi; R36/37	67/548/EEC [DSD] or 1999/45/EC [DPD]
Full text of R-phrases: see section 16	
Adverse physicochemical, human he No additional information available	ealth and environmental effects
2.2. Label elements	
Labelling according to Regulation (E Hazard pictograms (CLP)	C) No. 1272/2008 [CLP] GHS07
Signal word (CLP)	: Warning
Hazard statements (CLP)	 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

SECTION 4: First aid measures

SECTION 3: Composition/information on ingredients					
3.1.	Substances				
Name		: di-AMMONIUM HYDROGEN CITRATE EXTRA PURE			
CAS-N	0.	: 3012-65-5			

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

3.2.	Mixtures						
Not app	plicable						

4.1.	Description of first aid measures	;	
First-aid	measures after inhalation	:	Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
First-aid	measures after skin contact	:	Wash with plenty of water/ Get immediate 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.

Safety Data Sheet

4.2. Most important symptoms and e	ffects, both acute and delayed
Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.
	,
4.3. Indication of any immediate med	ical 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 measures	
6.1. Personal precautions, protective	equipment and emergency procedures
6.1.1. For non-emergency personnel	
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.	
6.3. Methods and material for contain	nment and cleaning up
Methods for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as
	possible. On land, sweep or shovel into suitable containers.
6.4. Reference to other sections	
No additional information available	
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
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.
	uniking of smoking and when leaving work.
7.2. Conditions for safe storage, incl	uding any incompatibilities
Storage conditions	: Keep container tightly closed. Store in a well-ventilated place.
7.3. Specific end use(s)	
No additional information available	
SECTION 8: Exposure controls/personal	protection
8.1. Control parameters	
No additional information available	

Safety Data Sheet

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	: [In case of inadequate ventilation] wear respiratory protection.
SECTION 9: Physical and chemical prop	erties
9.1. Information on basic physical an Physical state	nd chemical properties : Solid
Molecular mass Colour	: 226.19 g/mol : White crystalline.
Odour	: slight ammonia odor.
Odour threshold	: No data available
рН	: 5.2
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
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	: 1.48 g/cm³ : Water: 100 (gm/100 gm water)
Log Pow	: -2.84
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

Safety Data Sheet	
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.	
40.2 Descibility of borondous vession	
10.3. Possibility of hazardous reaction No additional information available	DNS
No additional mormation available	
10.4. Conditions to avoid	
Direct sunlight. Air contact. Moisture.	
3 • • • • • • • •	
10.5. Incompatible materials	
No additional information available	
10.6. Hazardous decomposition proc	lucts
No additional information available	
SECTION 11: Toxicological information	
	fects
	fects : Not classified
11.1. Information on toxicological eff	
11.1. Information on toxicological eff	
11.1. Information on toxicological eff Acute toxicity	: Not classified
11.1. Information on toxicological eff	 Not classified Not classified
11.1. Information on toxicological eff Acute toxicity Skin corrosion/irritation	 Not classified PH: 5.2
11.1. Information on toxicological eff Acute toxicity	 Not classified Not classified pH: 5.2 Causes serious eye irritation.
11.1. Information on toxicological eff Acute toxicity Skin corrosion/irritation Serious eye damage/irritation	 Not classified Not classified pH: 5.2 Causes serious eye irritation. pH: 5.2
11.1. Information on toxicological eff Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation	 Not classified Not classified pH: 5.2 Causes serious eye irritation.
11.1. Information on toxicological eff Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity	 Not classified Not classified pH: 5.2 Causes serious eye irritation. pH: 5.2 Not classified
11.1. Information on toxicological eff Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation	 Not classified Not classified pH: 5.2 Causes serious eye irritation. pH: 5.2 Not classified Not classified
11.1. Information on toxicological eff Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity	 Not classified Not classified pH: 5.2 Causes serious eye irritation. pH: 5.2 Not classified Not classified Not classified
11.1. Information on toxicological eff Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity	 Not classified Not classified pH: 5.2 Causes serious eye irritation. pH: 5.2 Not classified Not classified Not classified Not classified
11.1. Information on toxicological eff Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity	 Not classified Not classified pH: 5.2 Causes serious eye irritation. pH: 5.2 Not classified Not classified Not classified
11.1. Information on toxicological eff Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity	 Not classified Not classified pH: 5.2 Causes serious eye irritation. pH: 5.2 Not classified Not classified Not classified Not classified
11.1. Information on toxicological eff Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity	 Not classified Not classified pH: 5.2 Causes serious eye irritation. pH: 5.2 Not classified Not classified Not classified Not classified
11.1. Information on toxicological eff Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity STOT-single exposure	 Not classified Not classified pH: 5.2 Causes serious eye irritation. pH: 5.2 Not classified Not classified Not classified Not classified May cause respiratory irritation.
11.1. Information on toxicological eff Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity STOT-single exposure	 Not classified Not classified pH: 5.2 Causes serious eye irritation. pH: 5.2 Not classified Not classified Not classified Not classified May cause respiratory irritation.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

Safety Data Sheet

12.2. Persistence and degradabilit	y		
No additional information available			
12.3. Bioaccumulative potential			
di-AMMONIUM HYDROGEN CITRAT			
Log Pow	-2.84		
12.4. Mobility in soil			
No additional information available			
12.5. Results of PBT and vPvB as	sessment		
No additional information available			
12.6. Other adverse effects No additional information available			
	•		
SECTION 13: Disposal consideration	S		
13.1. Waste treatment methods			
No additional information available			
SECTION 14: Transport information			
In accordance with ADR / RID / IMDG /			
14.1. UN number UN-No. (ADR)	· Not applicable		
UN-No. (IMDG)	: Not applicable : Not applicable		
UN-No. (IATA)	: Not applicable		
UN-No. (ADN)	: Not applicable		
UN-No. (RID)	: Not applicable		
14.2. UN proper shipping name	. Net exclastic		
Proper Shipping Name (ADR)	: Not applicable		
Proper Shipping Name (IMDG) Proper Shipping Name (IATA)	: Not applicable : Not applicable		
Proper Shipping Name (ADN)	: Not applicable		
Proper Shipping Name (RID)	: Not applicable		
14.3. Transport hazard class(es)			
	. Not or all a bla		
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		
www.l.abogens.com		25/04/2016	6/8

Safety Data Sheet

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

di-AMMONIUM HYDROGEN CITRATE EXTRA PURE is not on the REACH Candidate List di-AMMONIUM HYDROGEN CITRATE EXTRA PURE is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

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

Safety Data Sheet

Netherlands		
SZW-lijst van kankerverwekkende stoffen	:	The substance is not listed
SZW-lijst van mutagene stoffen	:	The 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			
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation			
H319	Causes serious eye irritation.			
H335	May cause respiratory irritation.			
R36/37	Irritating to eyes and respiratory system			
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