

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 SDS Reference Number: 02862 Issue date: 7/9/2024 Revision date: 7/9/2024 Supersedes version of: 7/9/2016 Version: 1.0

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

1.1. Product identifier		
Product form Trade name EC Index-No. EC-No. CAS-No. Product code Type of product Formula Chemical structure	: Substance : CITRIC ACID ANHYDROUS EXTRA PURE : $607-750-00-3$ : $201-069-1$ : $77-92-9$ : $02862$ : Carboxylic acids : C6H8O7 : O OH O HO OH O HO OH OH	
Synonyms	: 2-Hydroxypropane-1,2,3-tricarboxylic aci	
1.2. Relevant identified uses of the substa	ance or mixture and uses advised against	
Relevant identified uses		
Use of the substance/mixture	: Laboratory chemicals, Manufacture of substances	
1.3. Details of the supplier of the safety da	ata sheet	
LOBA CHEMIE PVT.LTD. 107 Wode House Road, Jehangir Villa, Colaba 400005 Mumbai INDIA T +91 22 6663 6663, F +91 22 6663 6699 info@lobachemie.com, www.lobachemie.com		
1.4. Emergency telephone number		
Emergency number	: + 91 22 6663 6663 (9:00am - 6:00 pm)	
SECTION 2: Hazards identification		
2.1. Classification of the substance or mix		
Classification according to Regulation (EC) No. 1272/2008 [CLP]         Serious eye damage/eye irritation, Category 2       H319         Full text of H- and EUH-statements: see section 16		
Adverse physicochemical, human health and environmental effects Causes serious eye irritation.		
2.2. Label elements		
Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms (CLP)		

Signal word (CLP) Hazard statements (CLP) Precautionary statements (CLP) : Warning

GHS07

- : H319 Causes serious eye irritation.
- : P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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## 2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients		
3.1. Substances		
Substance type :	Mono-constituent	
Name	Product identifier	%
CITRIC ACID ANHYDROUS	CAS-No.: 77-92-9 EC-No.: 201-069-1 EC Index-No.: 607-750-00-3	100

<ul> <li>If you feel unwell, seek medical advice.</li> <li>Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.</li> </ul>
: Wash with plenty of water/ Get immediate medical advice/attention. Wash skin with plenty of water.
: Rinse cautiously with water for several minutes. Remove contact lenses, if present and eas to do. Continue rinsing. Get medical advice/attention. If eye irritation persists: Get medical advice/attention.
<ul> <li>Rinse mouth. Do not induce vomiting. Call a poison center or a doctor if you feel unwell.</li> <li>First aid workers will be equipped with suitable personal protective equipment.</li> </ul>
s, both acute and delayed
: Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure. Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
: None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.
<ul><li>Causes serious eye irritation. Eye irritation.</li><li>None under normal conditions.</li></ul>

## 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 Unsuitable extinguishing media	<ul><li>Carbon dioxide. Dry powder. Foam. Water spray.</li><li>Do not use a heavy water stream.</li></ul>	
5.2. Special hazards arising from the substance or mixture		
Fire hazard Explosion hazard Hazardous decomposition products in case of fire	<ul> <li>No fire hazard.</li> <li>No direct explosion hazard.</li> <li>Toxic fumes may be released.</li> </ul>	
5.3. Advice for firefighters		
Firefighting instructions	: Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.	

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Protection during firefighting :	Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
SECTION 6: Accidental release measure	S
6.1. Personal precautions, protective equipm	ent and emergency procedures
General measures :	Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.
For non-emergency personnel	

Protective equipment Emergency procedures	: Wear recommended personal protective equipment. : Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin and eyes.
For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. Use personal protective equipment as required. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Ventilate area. Evacuate unnecessary personnel.

## 6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up	
For containment Methods for cleaning up	<ul> <li>Using a clean shovel, put the material in a dry container and cover without compressing it.</li> <li>Mechanically recover the product. On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.</li> </ul>
Other information	: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storag	e	
7.1. Precautions for safe handling		
Additional hazards when processed Precautions for safe handling Hygiene measures	<ul> <li>Not expected to present a significant hazard under anticipated conditions of normal use.</li> <li>Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe vapours. Wear personal protective equipment.</li> <li>Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.</li> </ul>	
7.2. Conditions for safe storage, including any incompatibilities		
Technical measures Storage conditions Packaging materials	<ul> <li>Keep in a cool, well-ventilated place away from heat.</li> <li>Store in a well-ventilated place. Keep container tightly closed.</li> <li>Store always product in container of same material as original container.</li> </ul>	
7.3. Specific end use(s)		

No additional information available

## SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

No additional information available

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### 8.2. Exposure controls

#### Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

### **Personal protection equipment**

#### Personal protective equipment:

Wear recommended personal protective equipment. Personal protective equipment symbol(s):



### Eye and face protection

Eye protection: Chemical goggles or safety glasses

#### **Skin protection**

Skin and body protection: Wear a mask

Hand protection: Protective gloves

#### **Respiratory protection**

**Respiratory protection:** Wear appropriate mask

#### **Environmental exposure controls**

Environmental exposure controls: Avoid release to the environment.

## **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: White.
Appearance	: Crystalline powder.
Molecular mass	: 192.13 g/mol
Odour	: Odourless.
Odour threshold	: Not available
Melting point	: 153 – 159 °C
Freezing point	: Not applicable
Boiling point	: Decomposes
Flammability	: Not available
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: 100 °C
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
рН	: Not available
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: 6.5 cP (50% aq. sol.)
Solubility	: Water: 59.2 % at 20 °C - Soluble in water
	Ethanol: Soluble
	Ether: Soluble
	Acetone: Soluble
Partition coefficient n-octanol/water (Log Kow)	: Not available

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Vapour pressure	: < 0.1 hPa at 25 °C
Vapour pressure at 50°C	: Not available
Density	: 1.665 g/cm³ at 20 °C
Relative density	: Not available
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available

#### 9.2. Other information

No additional information available

## **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

**10.2. Chemical stability** 

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Direct sunlight. Air contact. Moisture.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## **SECTION 11: Toxicological information**

Acute toxicity (oral)	: Not classified	
Acute toxicity (dermal)	: Not classified	
Acute toxicity (inhalation)	: Not classified	
Skin corrosion/irritation	: Not classified	
Serious eye damage/irritation	: Causes serious eye irritation.	
Respiratory or skin sensitisation	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not classified	
STOT-single exposure	: Not classified	
STOT-repeated exposure	: Not classified	
Aspiration hazard	: Not classified	
CITRIC ACID ANHYDROUS EXTRA PURE (77-92-9)		
Viscosity, kinematic	Not applicable	

No additional information available

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SECTION 12: Ecological information		
12.1. Toxicity		
Ecology - general Hazardous to the aquatic environment, short–term	<ul> <li>The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.</li> <li>Not classified</li> </ul>	
(acute) Hazardous to the aquatic environment, long–term (chronic)	: Not classified	
12.2. Persistence and degradability		
CITRIC ACID ANHYDROUS EXTRA PURE (77-92-9)		
Persistence and degradability	Rapidly degradable	
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. Endocrine disrupting properties		
No additional information available		
12.7. Other adverse effects		
No additional information available		

SECTION 13: Disposal consideration	s
13.1. Waste treatment methods	
Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	<ul> <li>Comply with applicable regulations for solid waste disposal. Disposal must be done according to official regulations.</li> </ul>

Additional information

according to official regulations. : Do not re-use empty containers.

## **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / ADN / RID

### 14.1. UN number or ID number

#### Not regulated for transport

14.2. UN proper shipping name	
Proper Shipping Name (ADR)	: Not regulated
Proper Shipping Name (IMDG)	: Not regulated
Proper Shipping Name (IATA)	: Not regulated
Proper Shipping Name (ADN)	: Not regulated
Proper Shipping Name (RID)	: Not regulated

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14.3. Transport hazard class(es)	
ADR Transport hazard class(es) (ADR)	: Not regulated
IMDG Transport hazard class(es) (IMDG)	: Not regulated
IATA Transport hazard class(es) (IATA)	: Not regulated
ADN Transport hazard class(es) (ADN)	: Not regulated
RID Transport hazard class(es) (RID)	: Not regulated
14.4. Packing group	
Packing group (ADR) Packing group (IMDG) Packing group (IATA) Packing group (ADN) Packing group (RID)	<ul> <li>Not regulated</li> <li>Not regulated</li> <li>Not regulated</li> <li>Not regulated</li> <li>Not regulated</li> </ul>
14.5. Environmental hazards	
Other information	: No supplementary information available
14.6. Special precautions for user	
Overland transport Not regulated	
Transport by sea Not regulated	
Air transport Not regulated	
Inland waterway transport Not regulated	
Rail transport Not regulated	
14.7. Maritime transport in bulk accordin	ng to IMO instruments
Not applicable	
SECTION 15: Regulatory information	n

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

#### **EU-Regulations**

#### **REACH Annex XVII (Restriction List)**

Not listed on REACH Annex XVII

### REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

### **REACH Candidate List (SVHC)**

Not listed on the REACH Candidate List

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### **PIC Regulation (Prior Informed Consent)**

Not listed on the PIC list (Regulation EU 649/2012)

#### POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

### Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

#### Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

#### **Explosives Precursors Regulation (2019/1148)**

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

#### **Drug Precursors Regulation (273/2004)**

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### **National regulations**

Germany		
Water hazard class (WGK)	:	WGK 3, Highly hazardous to water (Classification according to AwSV).
Hazardous Incident Ordinance (12. BImSchV)	:	Is not subject to the Hazardous Incident Ordinance (12. BImSchV)
Netherlands		
SZW-lijst van kankerverwekkende stoffen	:	The substance is not listed
SZW-lijst van mutagene stoffen	:	The substance is not listed
SZW-lijst van reprotoxische stoffen – Borstvoeding	:	The substance is not listed
SZW-lijst van reprotoxische stoffen –	:	The substance is not listed
Vruchtbaarheid		
SZW-lijst van reprotoxische stoffen – Ontwikkeling	:	The substance is not listed
Denmark		
Class for fire hazard	:	Class III-1
Store unit	:	50 liter
Classification remarks	:	Flammable according to the Danish Ministry of Justice; Emergency management guidelines for the storage of flammable liquids must be followed

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

### **SECTION 16: Other information**

Abbreviations and acronyms:			
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways		
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road		
ATE	Acute Toxicity Estimate		
BCF	Bioconcentration factor		
BLV	Biological limit value		
BOD	Biochemical oxygen demand (BOD)		
COD	Chemical oxygen demand (COD)		
DMEL	Derived Minimal Effect level		
DNEL	Derived-No Effect Level		
EC-No.	European Community number		

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Abbreviations and acronyms:				
EC50	Median effective concentration			
EN	European Standard			
IARC	International Agency for Research on Cancer			
ΙΑΤΑ	International Air Transport Association			
IMDG	International Maritime Dangerous Goods			
LC50	Median lethal concentration			
LD50	Median lethal dose			
LOAEL	Lowest Observed Adverse Effect Level			
NOAEC	No-Observed Adverse Effect Concentration			
NOAEL	No-Observed Adverse Effect Level			
NOEC	No-Observed Effect Concentration			
OECD	Organisation for Economic Co-operation and Development			
OEL	Occupational Exposure Limit			
РВТ	Persistent Bioaccumulative Toxic			
PNEC	Predicted No-Effect Concentration			
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail			
SDS	Safety Data Sheet			
STP	Sewage treatment plant			
ThOD	Theoretical oxygen demand (ThOD)			
TLM	Median Tolerance Limit			
VOC	Volatile Organic Compounds			
CAS-No.	Chemical Abstract Service number			
N.O.S.	Not Otherwise Specified			
vPvB	Very Persistent and Very Bioaccumulative			
ED	Endocrine disruptor			

Full text of H- and EUF	Full text of H- and EUH-statements:		
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2		
H319	Causes serious eye irritation.		

Safety Data Sheet (SDS), EU

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.