

Trade name: Citric acid**Product no.:** OLE000077-92-9**Current version :** 7.0.0, issued: 21.12.2022**Replaced version:** 6.0.0, issued: 11.01.2018**Region:** GB**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Trade name****Citric acid**

Substance name Citric acid

Identification numbers

CAS no. 77-92-9

EC no. 201-069-1

Index no. 607-750-00-3

1.2 Relevant identified uses of the substance or mixture and uses advised against**Relevant identified uses of the substance or mixture**

No data available.

Uses advised against

No data available.

1.3 Details of the supplier of the safety data sheet**Address**

Chr. Olesen GmbH

Daimlerstr. 14-16

21357 Bardowick

Telephone no. +49(0) 4131 - 400 46 45

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Information provided by / telephone

Tel.: +49 4131 400 46 45; Fax: +49 4131 400 46 49

Advice on Safety Data Sheet

sdb_info@umco.de

1.4 Emergency telephone number

For medical advice (in German and English):

+49 (0)551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification in accordance with Regulation (EC) No 1272/2008 (CLP)**

Eye Irrit. 2; H319

STOT SE 3; H335

Classification information

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3 and 4 of Annex I to CLP.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)****Product identifier**

607-750-00-3 (Citric acid)

Hazard pictograms

GHS07

Signal word

Warning

Hazard statement(s)

H319

Causes serious eye irritation.

H335

May cause respiratory irritation.

Precautionary statement(s)

P261

Avoid breathing dust.

P280

Wear protective gloves/protective clothing/eye protection/face protection.

Trade name: Citric acid**Product no.:** OLE000077-92-9**Current version :** 7.0.0, issued: 21.12.2022**Replaced version:** 6.0.0, issued: 11.01.2018**Region:** GB

P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312

Call a POISON CENTER/doctor if you feel unwell.

P501

Dispose of contents/container to a facility in accordance with local and national regulations.

2.3 Other hazards

No data available.

SECTION 3: Composition/information on ingredients**3.1 Substances****Chemical characterization**

Substance name Citric acid

Identification numbers

CAS no. 77-92-9

EC no. 201-069-1

Index no. 607-750-00-3

3.2 Mixtures

Not applicable. The product is not a mixture.

SECTION 4: First aid measures**4.1 Description of first aid measures****General information**

In case of persisting adverse effects, consult a physician.

After inhalation

In the event of symptoms take medical treatment. Ensure supply of fresh air.

After skin contact

In case of contact with skin wash off immediately with soap and water.

After eye contact

Rinse the affected eye immediately with plenty of water at the same time keep the unaffected eye well protected.

After ingestion

Let plenty of water be drunk in small gulps.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing media**

Water spray jet; Carbon dioxide; Extinguishing powder

Unsuitable extinguishing media

No data available.

5.2 Special hazards arising from the substance or mixtureCombustion products of this material have to be classed invariably as respiratory poison. In the event of fire, the following can be released: Carbon dioxide (CO₂); Carbon monoxide (CO)**5.3 Advice for firefighters**

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations. Fire-fighting operations, rescue and clearing work under effect of combustion and smoulder gases just may be done with breathing apparatus. Wear protective clothing.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures****For non-emergency personnel**

Remove persons to safety.

For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not allow to enter drains or waterways.

Trade name: Citric acid**Product no.:** OLE000077-92-9**Current version :** 7.0.0, issued: 21.12.2022**Replaced version:** 6.0.0, issued: 11.01.2018**Region:** GB**6.3 Methods and material for containment and cleaning up**

Send in suitable containers for recovery or disposal. Flush away residues with water. Collect mechanically.

6.4 Reference to other sections

No data available.

SECTION 7: Handling and storage**7.1 Precautions for safe handling****Advice on safe handling**

Provide good ventilation at the work area (local exhaust ventilation, if necessary). Avoid dust formation.

General protective and hygiene measures

Clean skin thoroughly after work; apply skin cream. Do not eat, drink or smoke during work time. Do not inhale dust. Provide eye wash fountain in work area.

Advice on protection against fire and explosion

Take precautionary measures against static charges.

7.2 Conditions for safe storage, including any incompatibilities**Technical measures and storage conditions**

Keep barrel tightly closed. Storage: cool and dry; Protect from heat and direct sunlight.

Requirements for storage rooms and vessels

Keep only in the original container.

Incompatible products

Do not store with alkalis. Do not store together with oxidizing agents. Do not store together with reducing agents.

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters**

No parameters available for monitoring.

8.2 Exposure controls**Appropriate engineering controls**

No data available.

Personal protective equipment**Respiratory protection**

In case of insufficient ventilation or long-term effect use breathing apparatus.

Eye / face protection

Tightly fitting safety glasses (EN 166).

Hand protection

In case of intensive contact, wear protective gloves (EN 374). Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties).

Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves.

Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material	butyl				
Material thickness		0.6	-	0.8	mm
Breakthrough time	>			480	min
Appropriate Material	viton				

Other

Acid-resistant protective clothing

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties****State of aggregation**

solid

Form

solid

EU safety data sheet

Trade name: Citric acid

Product no.: OLE000077-92-9

Current version : 7.0.0, issued: 21.12.2022

Replaced version: 6.0.0, issued: 11.01.2018

Region: GB

Colour			
white			
Odour			
odourless			
pH value			
Value	1.6		
Reference temperature	20	°C	
Concentration	100	g/l	
Boiling point / boiling range			
No data available			
Melting point/freezing point			
Value	153	°C	
Decomposition temperature			
No data available			
Flash point			
No data available			
Ignition temperature			
No data available			
Flammability			
No data available			
Lower explosion limit			
No data available			
Upper explosion limit			
No data available			
Vapour pressure			
Value	<	0.1	hPa
Reference temperature		20	°C
Relative vapour density			
No data available			
Relative density			
No data available			
Density			
Value	1.542	g/cm ³	
Reference temperature	20	°C	
Bulk density			
Value	appr. 500	- 900	kg/m ³
Solubility in water			
Value	1330	g/l	
Reference temperature	20	°C	
Solubility			
No data available			
Partition coefficient n-octanol/water (log value)			
No data available			
Kinematic viscosity			
No data available			
Particle characteristics			
No data available			

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical stability

No data available.

Trade name: Citric acid**Product no.:** OLE000077-92-9**Current version :** 7.0.0, issued: 21.12.2022**Replaced version:** 6.0.0, issued: 11.01.2018**Region:** GB**10.3 Possibility of hazardous reactions**

No data available.

10.4 Conditions to avoid

Reactions with reducing agents. risk of dust explosions; Reactions with oxidising agents.

10.5 Incompatible materials

No data available.

10.6 Hazardous decomposition products

Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

Acute oral toxicity			
LD50		3000	mg/kg
Species	rat		
LD50		5040	mg/kg
Species	mouse		
Acute dermal toxicity			
Comments	No data available.		
Acute inhalational toxicity			
Comments	No data available.		
Skin corrosion/irritation			
Evaluation	slightly irritant		
Serious eye damage/irritation			
Species	rabbit eye		
Method	Draize method		
Evaluation	irritant		
Respiratory or skin sensitisation			
No data available			
Germ cell mutagenicity			
No data available			
Reproduction toxicity			
No data available			
Carcinogenicity			
No data available			
STOT - single exposure			
No data available			
STOT - repeated exposure			
No data available			
Aspiration hazard			
No data available			
Delayed and immediate effects as well as chronic effects from short and long-term exposure			
Irritates the mucous membrane.			

11.2 Information on other hazards**Endocrine disrupting properties**

No data available.

Other information

No data available.

SECTION 12: Ecological information**12.1 Toxicity**

Toxicity to fish (acute)			
LC50	440	- 760	g/m³
Duration of exposure		96	h
Species	Leuciscus idus		
Toxicity to fish (chronic)			

Trade name: Citric acid**Product no.:** OLE000077-92-9**Current version :** 7.0.0, issued: 21.12.2022**Replaced version:** 6.0.0, issued: 11.01.2018**Region:** GB

No data available			
Toxicity to Daphnia (acute)			
EC50	appr.	120	g/m³
Species	Daphnia magna		
Toxicity to Daphnia (chronic)			
No data available			
Toxicity to algae (acute)			
IC5		640	mg/l
Duration of exposure		7	d
Species	Scenedesmus quadricauda		
Toxicity to algae (chronic)			
No data available			
Bacteria toxicity			
EC5	>	10	g/l
Duration of exposure		16	h
Species	Pseudomonas putida		
EC5		80	mg/l
Duration of exposure		8	d
Species	Microcystis aeruginosa		

12.2 Persistence and degradability

Biodegradability			
Evaluation	readily degradable		
Type	BOD5		
Value		0.526	g/g
Type	ThOD		
Value		0.75	g/g
Type	COD		
Value		0.728	g/g
Physico-chemical eliminability			
Evaluation	Readily eliminable from water		

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

Other adverse effects	
Due to the log P(o/w) of < 1 a bioaccumulation is not to be expected.	

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product**

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information**14.1 Transport ADR/RID/ADN**

The product is not subject to ADR/RID/ADN regulations.

14.2 Transport IMDG

The product is not subject to IMDG regulations.

14.3 Transport ICAO-TI / IATA

Trade name: Citric acid**Product no.:** OLE000077-92-9**Current version :** 7.0.0, issued: 21.12.2022**Replaced version:** 6.0.0, issued: 11.01.2018**Region:** GB

The product is not subject to ICAO-TI / IATA regulations.

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

No data available.

14.7 Maritime transport in bulk according to IMO instruments

Not relevant

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulations****Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)**

In accordance with the REACH regulation (EC) 1907/2006, the product does not contain any substances that are considered as subject to listing in annex XIV, inventory of substances requiring authorisation.

REACH candidate list of substances of very high concern (SVHC) for authorisation

In accordance with article 57 and article 59 of the Reach regulation (EC) 1907/2006, this substance is not considered as subject to listing in annex XIV, inventory of substances requiring authorisation ("Authorization list").

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES

The substance is considered being subject to REACH regulation (EC) 1907/2006 annex XVII.

No	Substance name	CAS no.	EC no.	No
1	Citric acid	77-92-9	201-069-1	75

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This substance is not subject to Part 1 or 2 of Annex I

15.2 Chemical safety assessment

No data available.

SECTION 16: Other information**Further information**

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The information is based on our current knowledge however it does not represent a guarantee of product properties nor does it create any legal obligation.

Sources of key data used to compile the data sheet:

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Alterations/supplements:

Alterations to the previous edition are marked in the left-hand margin.

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Prod-ID 37980