



Material Safety Data Sheet
According to EU Regulation 1907/2006 in the current version

Date 15-03-16
Version 1.0

CITRIC ACID

1. Identification of the substance/preparation and the company

Trade name: Citric acid
Utilization: Cosmetic additive
Supplier company: **Elemental SRL**, Piata Cazarmii no.15, 410188-Oradea, jud.Bihor, Romania
identification: Tel/Fax: +40259-436.755, office@elemental.eu
Emergency: RO: numar national pentru cazuri de urgenta: 021 3183606 Institutul de Sanatate Publica Bucuresti. International emergency number: +49 180 2273-112

2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Eye irritation (Category 2), H319

For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Xi Irritant R36

For the full text of the R-phrases mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word: Warning

Hazard statement(s): H319 Causes serious eye irritation.

Precautionary statement(s): P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard Statements: none

2.3 Other hazards - none

3. Composition / Information on ingredients

Substances

Citric acid monohydrate Formula: C6-H8-O7- (H2O) Molecular weight: 210,2 g/mol

CAS-number: 5945-29-1 EC-no.: 201-069-1

Hazardous ingredients according to Regulation (EC) No 1272/2008

Concentration <= 100% Classification: Eye Irrit. 2; H319

Hazardous ingredients according to Directive 1999/45/EC

Concentration <= 100% Classification: Xi, R36

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

4. First Aid

4.1 Description of first aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in section 11.

4.3 Indication of any immediate medical attention and special treatment needed: no data available



Material Safety Data Sheet
According to EU Regulation 1907/2006 in the current version

Date 15-03-16
Version 1.0

CITRIC ACID

5. Fire-fighting Measures

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture: Carbon oxides

5.3 Advice for firefighters: Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information: no data available

6. Accidental release measures:

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust. For personal protection see section 8.

6.2 Environmental precautions: Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections: for disposal see section 13.

7. Handling and Storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end use(s): Apart from the uses mentioned in section 1 no other specific uses are stipulated

8. Exposure Controls and Personal Protection

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection: Safety glasses with side-shields conforming to EN166.

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands.

Body Protection: impervious clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: for nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges.



9. Physical and Chemical Properties

Appearance: crystalline, powder
Colour: white
Odour: odourless
pH: 1,5-2 at 50g/l at 20°C



Material Safety Data Sheet
According to EU Regulation 1907/2006 in the current version

Date 15-03-16
Version 1.0

CITRIC ACID

Molecular weight: 210.2
Melting point: 153°C
Boiling point & range: not available
Flash point: 170 °C closed cup
Specific gravity: 1.542
Solubility: in water
Explosive properties: not explosive
Decomposition temperature: not available

10. Stability and Reactivity

- 10.1 Reactivity: no data available
- 10.2 Chemical stability: Stable under recommended storage conditions.
- 10.3 Possibility of hazardous reactions: no data available
- 10.4 Conditions to avoid: no data available
- 10.5 Incompatible materials: Oxidizing agents, Bases, Reducing agents.
- 10.6 Hazardous decomposition products: not available
- 10.7 Corrosivity: slightly corrosive in presence of steel, aluminium.

11. Toxicological Information

- 11.1 Information on toxicological effects
 - Acute toxicity: LD50 acute oral toxicity: 3000 mg/kg (rat)
 - Skin corrosion/irritation: hazardous in case of skin contact, corrosive, irritant
 - Serious eye damage/eye irritation. Irritating to eyes. Hazardous in case of eye contact. Eye contact can result in corneal damage. Inflammation of the eye is characterised by redness, watering, itching.
 - Respiratory or skin sensitisation: Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals. Lung irritant. Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract characterised by burning, sneezing and coughing.
 - Ingestion: may cause burns to mouth, throat and stomach.
 - Germ cell mutagenicity: no data available
 - Carcinogenicity. IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
 - Reproductive toxicity: no data available
 - Specific target organ toxicity - single exposure: no data available. Specific target organ toxicity - repeated exposure: no data available.
 - Aspiration hazard: no data available

12. Ecological Information

- 12.1 Toxicity
 - Toxicity to fish: LC50 *Leuciscus idus* (Golden orfe): 440 -760 mg/l; 96 h
- 12.2 Persistence and degradability
 - Biodegradability 98 %; 2 days. OECD Test Guideline 302B (anhydrous substance) Readily eliminated from water.
 - Biochemical Oxygen Demand (BOD) 481 mg/g (5 days)- lit. Chemical Oxygen Demand (COD) 685 mg/g - lit.
- 12.3 Bioaccumulative potential
 - Partition coefficient: n-octanol/water log Pow: -1.72(20 °C) OECD Test Guideline 117 (anhydrous substance).
 - Bioaccumulation is not expected.
- 12.4 Mobility in soil: No information available.
- 12.5 Results of PBT and vPvB assessment: PBT/vPvB assessment not available as chemical safety assessment not



Material Safety Data Sheet
According to EU Regulation 1907/2006 in the current version

Date 15-03-16
Version 1.0

CITRIC ACID

required/not conducted.

12.6 Other adverse effects: Additional ecological information: Harmful effect due to pH shift.

13. Disposal Considerations

13.1. Waste from residues / unused products

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste.

13.2. Packaging treatment

Handle uncleaned containers like the product itself.

14. Transport Information

General recommendations: Not classified as dangerous in the meaning of transport regulations

UN no: not classified

Road (ADR/RID): not classified

Air (IATA/ICAO): not classified

Sea (IMDG): not classified

Special precautions for user: See section 6-8

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC: n/a

15. Additional Regulatory Information

EU regulations

Major Accident Hazard Legislation SEVESO III: Not applicable

Occupational restrictions: Take note of Dir 94/33/EC on the protection of young people at work.

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer: not regulated

Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC: not regulated

Substances of very high concern (SVHC): this product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit.

Chemical Safety Assessment: For this product a chemical safety assessment was not carried out

16. Other Information

Disclaimer:

This material safety data sheet does not constitute a guarantee of the properties of the product and is not a contractual legal report. The information is given in good faith on the basis of our best knowledge of the product at the indicated time. However, we cannot accept responsibility or liability for any consequences arising from its use, no warranty for correctness and completeness is given. We caution the users against the incurred possible risks when the product is used at other ends than the use for which it was initially planned. It is the user's responsibility during handling, storage and product use to consult the main regulatory texts in force regarding workers and environment protection.

Full text of H-Statements referred to under sections 2 and 3.

Eye Irrit. Eye irritation. H319 Causes serious eye irritation.

Full text of R-phrases referred to under sections 2 and 3

Xi Irritant R36 Irritating to eyes.

Abbreviations and acronyms:



Material Safety Data Sheet
According to EU Regulation 1907/2006 in the current version

Date 15-03-16
Version 1.0

CITRIC ACID

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organization

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent