

## Safety Data Sheet

### Citric Acid

Safety Data Sheet dated: 10/28/2020 - version 1

## 1. IDENTIFICATION

### Product identifier

Identification of the substance:

Trade name: Citric Acid

Chemical name: Citric Acid

CAS number: 5949-29-1

EC number: 201-069-1

### Other means of identification:

Product Code: 30-036-0050, 30-036-1050

### Recommended use of the chemical and restrictions on use

Recommended use: FOR PROFESSIONAL USE; FOOD ADDITIVE

Restrictions on use: N.A.

### Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Company:

ESSECO S.r.l. Via San Cassiano 99

28069 - Trecate (NO)

Italy

Importer in USA:

Enartis USA Inc.

7795 Bell Road

Windsor

CA 95492

Competent person responsible for the safety data sheet: vino@enartis.it

### Emergency telephone number

Phone: +1 (707) 838 6312

Fax: +1 (707) 838 1765

## 2. HAZARD(S) IDENTIFICATION



### Classification of the chemical

Eye Irrit. 2A Causes serious eye irritation.

### Label elements

#### Pictograms and Signal Words



Warning

### Hazard statements

H319 Causes serious eye irritation.

### Precautionary statements

P264 Wash hands thoroughly after handling.

P280 Wear eye/face protection: wear eye glasses with side protection.

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

P337+P313 If eye irritation persists: Get medical advice/attention.

### Hazards not otherwise classified identified during the classification process:

---

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Substances

Substance Identifications: Citric Acid

CAS number: 5949-29-1

EC number: 201-069-1

#### Mixtures

N.A.

---

### 4. FIRST AID MEASURES

#### Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

Wash thoroughly the body (shower or bath).

In case of persistent skin irritation consult a doctor.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and label hazardous.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

#### Most important symptoms/effects, acute and delayed

Eye irritation

Eye damages

#### Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

---

### 5. FIRE-FIGHTING MEASURES

#### Extinguishing media

Suitable extinguishing media:

Water.; Carbon dioxide (CO<sub>2</sub>).

#### Unsuitable extinguishing media:

None in particular.

#### Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

Hazardous combustion products: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

#### Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

Wear suitable protective clothing (helmet, protective clothings, goggles, fire resistant gloves, boots) and protect respiratory organs (self contained breathing apparatus).

Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

---

### 6. ACCIDENTAL RELEASE MEASURES

## **Personal precautions, protective equipment and emergency procedures**

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

## **Methods and material for containment and cleaning up**

Wash with plenty of water.

Suitable material for taking up: absorbing material, organic, sand

Dispose of the collected material in accordance with the current regulations.

---

## **7. HANDLING AND STORAGE**

### **Precautions for safe handling**

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

### **Conditions for safe storage, including any incompatibilities**

Keep away from open flames, sparks and heat sources.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

Storage temperature: N.A.

---

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **Control parameters**

No data available

Appropriate engineering controls: N.A.

### **Individual protection measures**

Please see both sections 5 and 6 for information about personal protective equipment to be worn in an emergency (e.g.: fire or unintentional release of the substance).

Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

The final choice of protective equipment will depend upon a risk assessment.

Personal protective equipment selections vary based on potential exposure conditions and working conditions.

Eye protection:

Eye glasses with side protection.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Glove suitability and breakthrough time will differ depending on the specific use conditions.

Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions.

Use protective gloves that provides comprehensive protection.; Suitable material:; UNI EN 420/UNI EN 374

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Depending on the potential for exposure, select respiratory protective equipment suitable for the specific conditions of use and in compliance with current legislation.

N.A.

---

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

### **Information on basic physical and chemical properties**

Physical State Solid

Appearance and colour: Solid

Odour: None  
Odour threshold: N.A.  
pH: 1,8 (5%)  
Melting point / freezing point: 153 °C  
Initial boiling point and boiling range: N.A.  
Flash point: N.A.  
Evaporation rate: N.A.  
Upper/lower flammability or explosive limits: N.A.  
Vapour density: N.A.  
Vapour pressure: N.A.  
Relative density: 1.542 g/cm<sup>3</sup>  
Solubility in water: 880 g/L (20°C)  
Solubility in oil: 41,9 %  
Partition coefficient (n-octanol/water): N.A.  
Auto-ignition temperature: N.A.  
Decomposition temperature: 170°  
Viscosity: N.A.  
Explosive properties: N.A.  
Oxidizing properties: N.A.  
Solid/gas flammability: N.A.

#### Other information

Substance Groups relevant properties N.A.  
Miscibility: N.A.  
Fat Solubility: N.A.  
Conductivity: N.A.

---

## 10. STABILITY AND REACTIVITY

### Reactivity

Data not available.

### Chemical stability

Data not available.

### Possibility of hazardous reactions

None.

Stable under normal conditions.

### Conditions to avoid

Avoid formation of dust; Stable under normal conditions.

### Incompatible materials

Oxidants and strong bases.

### Hazardous decomposition products

None

---

## 11. TOXICOLOGICAL INFORMATION

### Information on toxicological effects

#### Toxicological Information of the Preparation

a) acute toxicity	Not classified Based on available data, the classification criteria are not met LD50 Oral Rat = 11700 mg/kg - (Citric Acid Monohydrate) LD50 Intraperitoneal Rat = 725 mg/kg - (Citric Acid Monohydrate) LD50 Oral Mouse = 5400 mg/kg - (Citric Acid Monohydrate) LD50 Intraperitoneal Mouse = 940 mg/kg - (Citric Acid Monohydrate) LD50 Intravenous Mouse = 42 mg/kg - (Citric Acid Monohydrate) LD50 Skin Rat > 2000 mg/kg - (Citric Acid Monohydrate)
b) skin corrosion/irritation	Not classified Based on available data, the classification criteria are not met Eye Irritant Rabbit Positive - (Citric Acid Monohydrate)

	Skin Irritant Skin Rabbit Negative
c) serious eye damage/irritation	The product is classified: Eye Irrit. 2A(H319)
d) respiratory or skin sensitisation	Not classified
	Based on available data, the classification criteria are not met
e) germ cell mutagenicity	Not classified
	Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified
	Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified
	Based on available data, the classification criteria are not met
h) STOT-single exposure	Not classified
	Based on available data, the classification criteria are not met
i) STOT-repeated exposure	Not classified
	Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified
	Based on available data, the classification criteria are not met

#### Toxicological information on main components of the mixture:

CITRIC ACID MONOHYDRATE	a) acute toxicity	LD50 Oral Rat = 11700 mg/kg	(Citric Acid Monohydrate)
		LD50 Intraperitoneal Rat = 725 mg/kg	(Citric Acid Monohydrate)
		LD50 Oral Mouse = 5400 mg/kg	(Citric Acid Monohydrate)
		LD50 Intraperitoneal Mouse = 940 mg/kg	(Citric Acid Monohydrate)
		LD50 Intravenous Mouse = 42 mg/kg	(Citric Acid Monohydrate)
		LD50 Skin Rat > 2000 mg/kg	(Citric Acid Monohydrate)
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative	OECD404
	c) serious eye damage/irritation	Eye Irritant Rabbit Positive	OECD405

#### Substance(s) listed on the IARC Monographs:

None

#### Substance(s) listed as OSHA Carcinogen(s):

None

#### Substance(s) listed as NIOSH Carcinogen(s):

None

#### Substance(s) listed on the NTP report on Carcinogens:

None

## 12. ECOLOGICAL INFORMATION

### Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

#### List of Eco-Toxicological properties of the product

Not classified for environmental hazards.

Based on available data, the classification criteria are not met

- a) Aquatic acute toxicity : LC50 Fish = 440 mg/L 48h
- a) Aquatic acute toxicity : LC50 Daphnia = 1535 mg/L 24h
- a) Aquatic acute toxicity : LC50 Algae = 425 mg/L 168h
- a) Aquatic acute toxicity : LC50 Bacteria > 10000 mg/L 16h

#### List of Eco-Toxicological properties of the components

Component	Ecotox Data
-----------	-------------

CITRIC ACID MONOHYDRATE      a) Aquatic acute toxicity : LC50 Fish = 440 mg/L 48h - (Citric Acid Monohydrate)

   a) Aquatic acute toxicity : LC50 Daphnia = 1535 mg/L 24h - (Citric Acid Monohydrate)

   a) Aquatic acute toxicity : LC50 Algae = 425 mg/L 168h - (Citric Acid Monohydrate)

   a) Aquatic acute toxicity : LC50 Bacteria > 10000 mg/L 16h - (Citric Acid Monohydrate)

**Persistence and degradability**

N.A.

**Bioaccumulative potential**

N.A.

**Mobility in soil**

N.A.

None

**Other adverse effects**

N.A.

---

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

Recover if possible. In so doing, comply with the local and national regulations currently in force.

---

**14. TRANSPORT INFORMATION**

Not classified as dangerous in the meaning of transport regulations.

**UN number**

ADR-UN number: N.A.  
DOT-UN Number: N.A.  
IATA-Un number: N.A.  
IMDG-Un number: N.A.

**UN proper shipping name**

ADR-Shipping Name: N.A.  
DOT Proper Shipping Name: N.A.  
IATA-Technical name: N.A.  
IMDG-Technical name: N.A.

**Transport hazard class(es)**

ADR-Class: N.A.  
DOT Hazard Class: N.A.  
IATA-Class: N.A.  
IMDG-Class: N.A.

**Packing group**

ADR-Packing Group: N.A.  
ADR exempt: N.A.  
IATA-Packing group: N.A.  
IMDG-Packing group: N.A.

**Environmental hazards**

Marine pollutant: No  
Environmental Pollutant: N.A.

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

N.A.

**Special precautions**

Department of Transportation (DOT):

N.A.

Road and Rail ( ADR-RID ) :

N.A.

Air ( IATA ) :  
N.A.  
Sea ( IMDG ) :  
N.A.

---

## 15. REGULATORY INFORMATION

Listed on Canadian DSL, Australian AICS, Phillipines PICCS, Chinese IECSC, Japanese MITI, Korean KECL, and EU EINECS.  
Chemical safety assessment not required.

### USA - Federal regulations

#### TSCA - Toxic Substances Control Act

##### TSCA inventory:

No substances listed

##### TSCA listed substances:

No substances listed

#### SARA - Superfund Amendments and Reauthorization Act

##### Section 302 - Extremely Hazardous Substances:

No substances listed

##### Section 304 - Hazardous substances:

No substances listed

##### Section 313 - Toxic chemical list:

No substances listed

#### CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

##### Substance(s) listed under CERCLA:

No substances listed

#### CAA - Clean Air Act

##### CAA listed substances:

No substances listed

#### CWA - Clean Water Act

##### CWA listed substances:

No substances listed

### USA - State specific regulations

#### California Proposition 65

##### Substance(s) listed under California Proposition 65:

No substances listed

#### Massachusetts Right to know

##### Substance(s) listed under Massachusetts Right to know:

No substances listed

#### Pennsylvania Right to know

##### Substance(s) listed under Pennsylvania Right to know:

CITRIC ACID MONOHYDRATE

#### New Jersey Right to know

##### Substance(s) listed under New Jersey Right to know:

CITRIC ACID MONOHYDRATE

## 16. OTHER INFORMATION

Code	Description
H319	Causes serious eye irritation.

Safety Data Sheet dated: 10/28/2020 - version 1

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. The information relates only to the specific material and may not be valid for such material used in combination with any other material or in any process.

This document was prepared by a competent person who has received appropriate training.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

### Legend to abbreviations and acronyms used in the safety data sheet:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

CLP: Classification, Labeling, Packaging.

EINECS: European Inventory of Existing Commercial Chemical Substances.

INCI: International Nomenclature of Cosmetic Ingredients.

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

GefStoffVO: Ordinance on Hazardous Substances, Germany.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

DNEL: Derived No Effect Level.

PNEC: Predicted No Effect Concentration.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

WGK: German Water Hazard Class.

KSt: Explosion coefficient.

Not Available

The information in this SDS is provided all the relevant data fully and truly. However, the information is provided without any warranty on their absolute extensiveness and accuracy. This SDS was prepared to provide safety preventive measures for the users who have got professional training. The personal user who obtained this SDS should make independent judgment for the applicability of this SDS under special conditions. In these special cases, we do not assume responsibility for the damage.