

## CITRIC ACID MONOHYDRATE

### SECTION 1: PRODUCT IDENTIFICATION

**Product Name:** CITRIC ACID MONOHYDRATE

**Product Code:** TMB 093

**CAS#:** 5949-29-1

**Synonym:** Not available.

**Chemical Name:** Not available.

**Chemical Formula:** C<sub>6</sub>H<sub>8</sub>O<sub>7</sub>.H<sub>2</sub>O

**Formula Weight:** 210.14

### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

**Composition:**

**Name:** Citric Acid Monohydrate

**Toxicological Data on Ingredients:** Eye Irrit. 2; H319

### SECTION 3: HAZARDS IDENTIFICATION

**Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008**

Eye irritation (Category 2), H319

**Potential Acute Health Effects:** Not available.

**Potential Chronic Health Effects:** Not available.

**Carcinogenic Effects:** Not available.

**Mutagenic Effects:** Not available.

**Teratogenic Effects:** Not available.

**Developmental Toxicity:** Not Available

### SECTION 4: FIRST AID MEASURES

**Eye Contact:** Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

**Skin Contact:** Wash off immediately with soap and plenty of water. Cover the irritated skin with emollient. Immediate medical attention is required.

**Serious Skin Contact:** Not available.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Serious Inhalation:** Not Available.

**Ingestion:** Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

**Serious Ingestion:** Not available.

### SECTION 5: FIRE FIGHTING MEASURES

**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special hazards arising from the substance or mixture**



Carbon oxides

**Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal precautions and emergency procedures**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

**Environmental precautions**

Do not let product enter drains.

**Methods and materials for containment and cleaning up**

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

**SECTION 7: HANDLING AND STORAGE**

**Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

**Storage conditions:**

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

**Storage class:**

Not available

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.

**Respiratory protection**

Respiratory protection is not required. If protection from nuisance levels of dusts are desired, use type N95 or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical state and appearance</b>	:	Crystalline
<b>Odor</b>	:	Odorless
<b>Color</b>	:	White
<b>Molecular Weight</b>	:	Not available
<b>pH</b>	:	Not available
<b>Boiling Point</b>	:	Not available
<b>Melting Point</b>	:	Not available
<b>Critical Temperature</b>	:	Not available
<b>Specific Gravity</b>	:	Not available
<b>Vapor Pressure</b>	:	Not available
<b>Vapor Density</b>	:	Not available
<b>Volatility</b>	:	Not available
<b>Odor Threshold</b>	:	Not available



Water/Oil Dist. Coeff.	:	Not available
Ionicity (in Water)	:	Not available
Dispersion Properties	:	Not available
Solubility	:	Not available

### SECTION 10: STABILITY AND REACTIVITY DATA

**Stability:** The product is chemically stable under standard ambient conditions (room temperature).

**Instability Temperature:** Not available

**Conditions of Instability:** Not available

**Incompatibility with various substances:** Oxidizing agents, Bases, Reducing agents, Nitrates, Strong oxidizing agents

**Special Remarks on Corrosivity:** Non corrosive.

**Special Remarks on Reactivity:** Not available

**Possibility of hazardous reactions:** Hazardous decomposition products formed under fire conditions. - Carbon oxides

**Hazardous decomposition products:** In case of fire.

### SECTION 11: TOXICOLOGICAL INFORMATION.

**Acute Toxicity:** Not available

**Inhalation:** No data available

**Dermal:** No data available

**Routes of Entry:** Inhalation, Ingestion

**Toxicity to Animals:**

LD50 Oral - Mouse - male and female - 5.400 mg/kg

LD50 Dermal - Rat - male and female - > 2.000 mg/kg

**Chronic Effects on Humans:** Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

**Other Toxic Effects on Humans:** Vomiting, Diarrhoea, Damage to tooth enamel., Dermatitis

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Special Remarks on Toxicity to Animals:** Not available

**Special Remarks on other Toxic Effects on Humans:** Not available

**Potential Health Effects:** Not available

### SECTION 12: ECOLOGICAL INFORMATION

**Ecotoxicity:**

Toxicity to fish static test LC50 - Leuciscus idus melanotus - 440 mg/l - 48 h

Toxicity to daphnia static test LC50 - Daphnia magna (Water flea) - 1.535 mg/l - 24 h and other aquatic invertebrates

**BOD and COD:**

Biochemical Oxygen Demand (BOD) 481 mg/g

Chemical Oxygen Demand (COD) 685 mg/g

Theoretical oxygen demand 686 mg/g

**Products of Biodegradation:** Not available

**Toxicity of the Products of Biodegradation:** Not available.

**Special Remarks on the Products of Biodegradation:** Not Available

### SECTION 13: DISPOSAL CONSIDERATIONS



**Waste Disposal:**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

**SECTION 14: TRANSPORT INFORMATION**

**UN number:**

**ADR/RID:**

**IMDG:**

**IATA:**

**UN proper shipping name**

**ADR/RID:** Not dangerous goods

**IMDG:** Not dangerous goods

**IATA:** Not dangerous goods

**Transport hazard class(es):**

**ADR/RID:**

**IMDG:**

**IATA:**

**Packaging group:**

**ADR/RID:**

**IMDG:**

**IATA:**

**Environmental hazards:**

**ADR/RID:** no

**IMDG Marine pollutant:** no

**IATA:** no

**SECTION 15: REGULATORY INFORMATION**

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

REACH - Restrictions on the manufacture : Not applicable  
placing on the market and use of certain  
dangerous substances, preparations and articles  
(Annex XVII)

**SECTION 16: OTHER INFORMATION**

**References: Full text of H AND R-Statements:**

H319 Causes serious eye irritation.

**Other Special Considerations:** Not available

The information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. The information is offered solely for user's obligation to investigate and determine the suitability of the information for their particular purpose.

