

# SAFETY DATA SHEET



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## ORGANIC CITRIC ACID SOLUTION 10%

### SECTION 1: PRODUCT IDENTIFICATION

**Product identifier:** Organic Citric Acid Solution 10% (w/v)  
**Manufacturer:** AGRO RESEARCH INTERNATIONAL LLC  
29203 State Road 46.  
Sorrento, FL. 3277  
**Manufacturer phone:** 1 407 302 6116  
**Recommended uses and restrictions:** Bactericide and fungicide used as part of a protection program for plants and crops.  
**Emergency phone:** **1 407 435 9105**

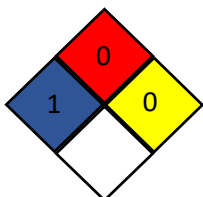
### SECTION 2: HAZARDS IDENTIFICATION

**Classification (GHS):** Serious eye damage/eye irritation. Category: 2A  
**Signal word (OSHA):** Warning  
**Hazards statements:** H319: Causes serious eye irritation  
**Hazard symbols:**



**Precautionary statements:** P264: Wash exposed skin thoroughly after handling  
P280: Wear protective gloves/ protective clothing/ eye 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 persist: Get medical advice/attention.

**Other classifications:**  
**NFPA Rating:**



**HMIS Rating:**

Health	1
Flammability	0
Physical hazard	0

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### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

COMMON NAME	CHEMICAL NAME	Concentration %	CAS #
Organic citric acid anhydrous	Citric acid	10	77-92-9
Water	Water	90	N/A

### SECTION 4: FIRST AID MEASURES

**Ingestion:** NEVER induce vomiting unless directed to do so by medical personnel.

Rinse mouth with water.

Seek medical attention if consumed in large quantities.

Never give anything by mouth to an unconscious person.

**Inhalation:** Allow person to breathe fresh air.

Seek medical attention if discomfort persists.

**Skin contact:** Immediately wash with water and soap.

Remove contaminated clothing and wash before use.

Seek medical attention if irritation develops.

**Eye contact:** if you wear contact lenses remove them immediately.

Rinse with plenty of water for at least 15 minutes, keeping eyelids open.

Seek medical attention if irritation persists.

**Most important symptoms/effects:** Causes serious eye irritation.

**Indication of immediate medical attention and special treatment needed:** Treat symptomatically and supportively.

### SECTION 5: FIRE-FIGHTING MEASURES

**Suitable extinguish media:**

Use media appropriate for surrounding fire dry chemical, carbon dioxide or extinguishing foam. Do not use a heavy water stream.

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### Special protective equipment and precautions for firefighters:

Wear a self-contained breathing apparatus and full protective gear.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Use personal protective equipment recommended. (Section 8). Avoid contact with skin, eyes, and clothing. Keep unnecessary personnel away.

**Environmental precautions:** Do not dump into rivers or lakes, keeping away from drains, surface, and groundwater.

**Methods and materials for containment and cleaning up:** Stop the spill immediately. Pump the product into drums for disposal. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

### SECTION 7: HANDLING AND STORAGE

**Handling:** Avoid direct eye contact. Use only in well-ventilated area. Wash thoroughly exposed parts after handling and complies with the recommendations issued by the area of occupational safety.

**Storage:** Store in a clean, dry place, and in original sealed containers. Keep containers closed when not in use. Do not store with incompatible materials such as strong oxidizing agents and strong bases. It must be protected of direct sunlight.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure limits:

Component	OSHA PEL	ACGIH TLV
Organic citric acid anhydrous	Not established	Not established
Water	Not established	Not established

**PEL:** Permissible Exposure Limit

**TLV:** Threshold Limit Value over 8 hours of work

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### Engineering control:

Provide adequate ventilation. Install emergency showers and eye wash close to storage and handling areas.

### Individual protection measures:

Eye Protection: Use safety glasses with side shields or chemical safety goggles.

Skin Protection: Wear clothing and butyl/nitrile rubber gloves during work. Gloves and protective clothing should be worn when working with a prolonged contact in your pure form.

Respiratory Protection: Ventilation should be adequate if you work for a long time. Follow the OSHA respirator regulations found in 29 CFR 1910.134.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Liquid
<b>Colour:</b>	Colorless
<b>Odor:</b>	Slight
<b>Density (Water = 1)</b>	1.1 at 21°C
<b>Boiling point (°C)</b>	No data available
<b>Vapor pressure (mm Hg)</b>	No data available
<b>Melting point</b>	No data available
<b>Viscosity</b>	No data available
<b>pH</b>	No data available
<b>Flash Point</b>	No data available

### SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** Not reactive.

**Chemical stability:** This product is stable under normal storage conditions. It is not polymerized.

**Possibility of hazardous reactions:** Will not occur

**Conditions to avoid:** High temperatures or excessive heat, open flames and other sources of ignition.

**Incompatible materials:** Reactive with strong oxidizing agents, and strong bases.

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**Hazardous decomposition products:** Excessive heat decomposition can produce carbon monoxide and carbon dioxide.

### SECTION 11: TOXICOLOGICAL INFORMATION

**Potencial health effects:**

Likely routes of exposure: skin and eye contact.

**Acute toxicity:** Not classified

Citric Acid Anhydrous: Ingestion (LD<sub>50</sub> Rat): 3000 mg/kg body weight.

Skin Irritation: Not classified.

Carcinogenicity: Not predictable

Mutagenicity: N/A.

### SECTION 12: ECOLOGICAL INFORMATION

**Ecotoxicity:**

**Organic Citric Acid anhydrous:**

Test	Subject	Value	Time
LC50	Fish 1	440 mg/L	96 hours
LC50	Daphnia magna	1534 mg/L	48 hours

**Persistence and degradability:** Not established.

**Bioaccumulative potential:** Not established.

### SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of waste in accordance with federal, state, and local regulations.

### SECTION 14: TRANSPORT INFORMATION

The Transportation of Dangerous Good Act classification for this product is: Not regulated.

DOT Classification: Not regulated.

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### SECTION 15: REGULATORY INFORMATION

CFR Title 21, Chapter I. Subchapter B. Part 184. Sec. 184.1033. Listing of specific substances affirmed as GRAS.

### SECTION 16: OTHER INFORMATION

Date of Issue: May 30<sup>th</sup>, 2019

Prepared by Agro Research International LLC.

#### References:

The information contained in this safety data sheet material was obtained from sources believed to be accurate and reliable from a technical point of view. Despite that they have been deployed all efforts to ensure full disclosure of product hazards, in some cases, no data are available, which is declared. Whereas the conditions under which the product is used in practice are beyond the control of the supplier, it is assumed that users of this material have been fully trained according to the standards of industrial safety of each user. No express or implied warranties are given, and the provider is not liable for losses, injuries or consequential damages that may result from using or reliance on information contained herein.

#### Abbreviations:

**GHS:** Globally Harmonized System

**OSHA:** Occupational Safety and Health Administration

**NFPA:** National Fire Protection Association

**HMIS:** Hazardous Materials Identification System

**LD<sub>50</sub>:** Median Lethal Dose of a substance or radiation that is fatal to half of a group of test animals.

**LC<sub>50</sub>:** is the acute toxicity test that tests for the concentrate of tissue at which it is lethal to 50% within the test-specified time. The test may start with eggs, embryos, or juveniles and last from 7 to 200 days.

**DOT:** Department of Transportation.

**CFR:** Code of Federal Regulations.

**GRAS:** Generally recognized as Safe