

# Safety Data Sheet

## Citric Acid 50%

Issuing Date 17 June 2015

Revision Date 1 July 2017

Revision Number 1

### 1. PRODUCT AND COMPANY IDENTIFICATION

#### GHS product identifier

**Product Name:** Citric Acid 50%

**Synonyms/Generic Names:** 3-carboxy-3-hydroxy pentanedioic acid, 2-hydroxypropane- 1,2,3-tricarboxylic acid, 3-hydroxypentanedioic acid-3-carboxylic acid, hydrogen citrate

**Product Use:** Industrial, Manufacturing or Laboratory use

Supplier's details

Supplier Address

Surpass Chemical Company, Inc.

1254 Broadway

Albany, NY 12204

518-434-8101

**In Case of Emergency Call:** CHEMTREC – 800-424-9300 (24 Hours/Day, 7 Days/Week)

### 2. HAZARDS IDENTIFICATION

**OSHA Hazards:** Irritant

**Target Organs:** None Known

**Signal Words:** Danger

**Pictograms:**



**GHS Classification:**

Eye Irritant	Category 2A
Skin Irritant	Category 2
Acute toxicity, Oral	Category 5

**GHS Label Elements, including precautionary statements:**

#### Hazard Statements:

H303	May be harmful if swallowed
H315	Causes skin irritation.
H318	Causes serious eye damage.

**Precautionary Statements:**

P280	Wear protective gloves/eye protection /face protection
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

**Potential Health Effects**

<b>Eyes</b>	Causes eye irritation.
<b>Inhalation</b>	May be harmful if inhaled. Causes respiratory tract irritation.
<b>Skin</b>	May be harmful if absorbed through skin. Causes skin irritation.
<b>Ingestion</b>	May be harmful if swallowed.

**NFPA Ratings**

<b>Health</b>	2
<b>Flammability</b>	0
<b>Reactivity</b>	0
<b>Specific hazard</b>	Not Available

**HMIS Ratings**

<b>Health</b>	2
<b>Fire</b>	0
<b>Reactivity</b>	0
<b>Personal</b>	D

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Citric Acid	50	77-92-2	201-069-1	C <sub>6</sub> H <sub>8</sub> O <sub>7</sub>	210.14 g/mol
Water	50	7732-18-5	231-791-2	H <sub>2</sub> O	18.00 g/mol

**4. FIRST-AID MEASURES**

<b>Eyes</b>	In case of eye contact, rinse with plenty of water and seek medical attention immediately.
<b>Inhalation</b>	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.
<b>Skin</b>	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention.
<b>Ingestion</b>	<b>Do Not Induce Vomiting!</b> Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.

**5. FIREFIGHTING MEASURES**

<b>Suitable (and unsuitable) extinguishing media</b>	Product is not flammable. Use appropriate media for adjacent fire. Use water spray, dry chemical, or carbon dioxide to extinguish supporting fire.
<b>Special protective equipment and precautions for firefighters</b>	Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
<b>Specific hazards arising from the chemical</b>	Emits toxic fumes (carbon oxides) under fire conditions. (See also Stability and Reactivity section).

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions, protective equipment and emergency procedures</b>	See section 8 for recommendations on the use of personal protective equipment.
<b>Environmental precautions</b>	Do not let product enter drains. Any release to the environment may be subject to federal/national or local reporting requirements.
<b>Methods and materials for containment and cleaning up</b>	Neutralize spill with sodium bicarbonate or lime. Absorb neutralized spill with vermiculite or other inert absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations. Containers, even when empty, will retain residue and vapors.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use.

### Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Protect against moisture and light. Maintain adequate ventilation. Keep away from incompatible materials (see section 10 for incompatibilities).

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Occupational Exposure Controls:

Component	Exposure Limits	Basis	Entity
Citric Acid	5 mg/m <sup>3</sup>	PEL	OSHA

TWA: Time Weighted Average over 8 hours of work.

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.

IDLH: Immediately Dangerous to Life or Health

WEEL: Workplace Environmental Exposure Levels

### Personal Protection

<b>Eyes</b>	Wear chemical safety glasses with a face shield for splash protection.
<b>Inhalation</b>	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
<b>Skin</b>	Wear neoprene or rubber gloves, apron and other protective clothing appropriate to the risk of exposure.
<b>Other</b>	Not Available

### Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling. Have supplies and equipment for neutralization and running water available.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Clear, colorless solution. Liquid
Odor	Odorless
Odor threshold	Not Available
pH	Approx. 2.5 or lower
Melting point/freezing point	Not Available
Initial boiling point and boiling range	Not Available
Flash point	Not Flammable
Evaporation rate	Not Available
Flammability (solid, gas)	Not Flammable
Upper/lower flammability or explosive limit	Not Explosive
Vapor pressure	Not Available
Vapor density	Not Available
Relative density	1.24
Solubility (ies)	Soluble in water
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable
<b>Possibility of Hazardous Reactions</b>	Will not occur.
<b>Conditions to Avoid</b>	Not Available
<b>Incompatible Materials</b>	Oxidizers, alkalis
<b>Hazardous Decomposition Products</b>	Carbon oxides

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

<b>Skin</b>	Skin – rabbit – Mild skin irritation 24 hours
<b>Eyes</b>	Eyes – rabbit – Severe eye irritation 24 hours
<b>Respiratory</b>	Not Available
<b>Ingestion</b>	LD50 Oral – rat – 3,000 mg/kg

### Carcinogenicity

<b>IARC</b>	No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
<b>ACGIH</b>	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
<b>NTP</b>	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
<b>OSHA</b>	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### Signs & Symptoms of Exposure

<b>Skin</b>	Irritation, itching, swelling, redness and pain.
<b>Eyes</b>	Irritation.
<b>Respiratory</b>	Irritation to the mucous membranes and upper respiratory tract.
<b>Ingestion</b>	Gastrointestinal discomfort and possible pain upon ingestion.

<b>Chronic Toxicity</b>	Not Available
<b>Teratogenicity</b>	Not Available
<b>Mutagenicity</b>	Not Available
<b>Embryotoxicity</b>	Not Available
<b>Specific Target Organ Toxicity</b>	Not Available

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## 12. ECOLOGICAL INFORMATION

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### Ecotoxicity

<b>Aquatic Vertebrate</b>	LC50 – Leuciscus idus melanotus – 440 mg/l – 48 h
<b>Aquatic Invertebrate</b>	Not Available
<b>Terrestrial</b>	Not Available

<b>Persistence and Degradability</b>	Not Available
<b>Bioaccumulative Potential</b>	Does not accumulate
<b>Mobility in Soil</b>	Not Available
<b>PBT and vPvB Assessment</b>	Not Available
<b>Other Adverse Effects</b>	Not Available

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## 13. DISPOSAL CONSIDERATIONS

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<b>Waste Residues</b>	Dispose of through a licensed contractor. Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies before discharging or disposing of waste material.
<b>Product Containers</b>	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies before discharging or disposing of waste material.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

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## 14. TRANSPORTATION INFORMATION

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US DOT	Not Dangerous Goods
TDG	Not Dangerous Goods
IMDG	Not Dangerous Goods
Marine Pollutant	No
IATA/ICAO	Not Dangerous Goods

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## 15. REGULATORY INFORMATION

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TSCA Inventory Status	All ingredients are listed on the TSCA inventory.
DSCL (EEC)	All ingredients are listed on the DSCL inventory.
California Proposition 65	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Not Listed
SARA 312	Not Listed
SARA 313	Not Listed
WHMIS Canada	Class E: Corrosive Material

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**16. OTHER INFORMATION**

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Revision	Date
Revision 1	7/1/17