



# Safety Data Sheet

Issue Date: 11-Dec-2012

Revision Date: 04-Feb-2014

Version 2

## 1. IDENTIFICATION

### Product Identifier

**Product Name** Citric Acid

### Other means of identification

**SDS #** SVM-046  
**Product Code** 23902 & 23926  
Formula code F1158

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

**Recommended Use** Cleaning product.

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

ServiceMaster™ Clean  
3839 Forest Hill Irene Rd.  
Memphis, TN, USA. 38125

### Emergency Telephone Number

**Company Phone Number** 1-800-756-5656 (ServiceMaster™ Clean)  
**Emergency Telephone (24 hr)** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

**Appearance** White dry granules

**Physical State** Solid

**Odor** Slightly acidic

### Classification

### Hazards Not Otherwise Classified (HNOC)

May be harmful if swallowed

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Citric Acid	77-92-9	60-100

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

## 4. FIRST-AID MEASURES

### First Aid Measures

<b>General Advice</b>	Provide this SDS to medical personnel for treatment.
<b>Eye Contact</b>	Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention immediately.
<b>Skin Contact</b>	Brush away excess of dry material. Immediately flush with cool water for 15 minutes. Obtain medical attention if irritation persists.
<b>Inhalation</b>	If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
<b>Ingestion</b>	Do not induce vomiting. Rinse mouth with water then drink one or two glasses of water. Obtain medical attention. Never give anything by mouth if victim is unconscious, or is convulsing.

### Most important symptoms and effects

<b>Symptoms</b>	Eye: Causes severe irritation. Skin: Causes irritation. Inhalation: May cause respiratory tract irritation. Ingestion: Causes irritation to mouth, throat and stomach. May cause stomach distress, nausea or vomiting.
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### Indication of any immediate medical attention and special treatment needed

<b>Notes to Physician</b>	Treat symptomatically.
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## 5. FIRE-FIGHTING MEASURES

### Suitable Extinguishing Media

Dry chemical, water spray, foam, water, or carbon dioxide.

**Unsuitable Extinguishing Media** Not determined.

### Specific Hazards Arising from the Chemical

Product is not flammable or combustible.

**Hazardous Combustion Products** Carbon oxides.

### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions** Use personal protective equipment as required.

### Methods and material for containment and cleaning up

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Clean-Up** Before attempting clean up, refer to hazard data given above. Use broom or dry vacuum to collect material for proper disposal without raising dust. Rinse area with water. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on Safe Handling** Keep out of the reach of children.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Store in a closed container away from incompatible materials. Store in a cool, dry, well-ventilated place.

**Incompatible Materials** Caustics, Metals, Chlorinated products.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Citric Acid 77-92-9	-	15 mg / m3 (Total)	-

### Appropriate engineering controls

**Engineering Controls** General ventilation normally adequate.

### Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Safety glasses.

**Skin and Body Protection** Rubber gloves. Confirm with a reputable supplier first.

**Respiratory Protection** Not normally required if good ventilation is maintained.

**General Hygiene Considerations** Wash contaminated clothing before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical State</b>	Solid	<b>Odor</b>	Slightly acidic
<b>Appearance</b>	White dry granules	<b>Odor Threshold</b>	Not determined
<b>Color</b>	White		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	<4.0	
<b>Melting Point/Freezing Point</b>	Not determined	
<b>Boiling Point/Boiling Range</b>	Not determined	
<b>Flash Point</b>	None	
<b>Evaporation Rate</b>	Not determined	
<b>Flammability (Solid, Gas)</b>	Not determined	
<b>Upper Flammability Limits</b>	Not applicable	
<b>Lower Flammability Limit</b>	Not applicable	
<b>Vapor Pressure</b>	Not determined	
<b>Vapor Density</b>	Not determined	
<b>Specific Gravity</b>	Not determined	
<b>Water Solubility</b>	Not determined	
<b>Solubility in other solvents</b>	Not determined	
<b>Partition Coefficient</b>	Not determined	
<b>Auto-ignition Temperature</b>	Not determined	
<b>Decomposition Temperature</b>	Not determined	
<b>Kinematic Viscosity</b>	Not determined	
<b>Dynamic Viscosity</b>	Not determined	
<b>Explosive Properties</b>	Not determined	
<b>Oxidizing Properties</b>	Not determined	

## 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions. Do not mix with anything but water. Reacts with metals. Hazardous vapors may be produced when mixed with chlorinated products.

### Chemical Stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Conditions to Avoid

Keep out of reach of children.

### Incompatible Materials

Caustics, Metals, Chlorinated products.

### Hazardous Decomposition Products

May include and are not limited to oxides of carbon when heated to decomposition.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

<b>Eye Contact</b>	May cause temporary irritation on eye contact.
<b>Skin Contact</b>	May cause temporary irritation on skin contact.
<b>Inhalation</b>	Dusts of this product may cause irritation of the nose, throat, and respiratory tract.
<b>Ingestion</b>	May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

### Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Citric Acid 77-92-9	= 3000 mg/kg ( Rat )	-	-

### Information on physical, chemical and toxicological effects

**Symptoms** Please see section 4 of this SDS for symptoms.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Carcinogenicity</b>	This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
<b>Chronic toxicity</b>	Prolonged or repeated exposure can cause drying, de-fatting and dermatitis.

### Numerical measures of toxicity

Product Information

**Oral LD50** 3000 mg/kg (rat)

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

### Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Citric Acid 77-92-9		1516: 96 h Lepomis macrochirus mg/L LC50 static		120: 72 h Daphnia magna mg/L EC50

### Persistence/Degradability

Not determined.

### Bioaccumulation

Not determined.

**Mobility**

Chemical Name	Partition Coefficient
Citric Acid 77-92-9	-1.72

**Other Adverse Effects**

Not determined

**13. DISPOSAL CONSIDERATIONS****Waste Treatment Methods**

<b>Disposal of Wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated Packaging</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.

**14. TRANSPORT INFORMATION**

<b>DOT</b>	Not regulated
<b>IATA</b>	Not regulated
<b>IMDG</b>	Not regulated
<b>TDG</b>	Not regulated

**15. REGULATORY INFORMATION****International Inventories**

<b>TSCA</b>	All ingredients are listed or exempt from listing on Chemical Substance Inventory
<b>DSL</b>	Listed
<b>NDSL</b>	Listed

**Legend:**

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*  
*DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*  
*EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*  
*ENCS - Japan Existing and New Chemical Substances*  
*IECSC - China Inventory of Existing Chemical Substances*  
*KECL - Korean Existing and Evaluated Chemical Substances*  
*PICCS - Philippines Inventory of Chemicals and Chemical Substances*

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

Not determined

**16. OTHER INFORMATION**

<b><u>NFPA</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Instability</b>	<b>Special Hazards</b>
	1	1	0	Not determined
<b><u>HMIS</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Physical Hazards</b>	<b>Personal Protection</b>
	Not determined	Not determined	Not determined	Not determined

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**Revision Note:** New format

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**