

# **Safety Data Sheet**

# Citric Acid, Monohydrate, Crystal, ACS

#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Citric Acid, Monohydrate, Crystal, ACS

Synonyms/Generic Names: 2-Hydroxy-1,2,3-Propantricarboxylic acid

Product Number: CP-A1314D, CP-M1314D, 1505

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer: ChemPure Brand Chemicals

39103 Warren Road Westland, MI 48185

For More Information Call: 734-729-1805 (Monday-Friday 8:00-4:30)

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

#### 2. HAZARDS IDENTIFICATION

OSHA Hazards: Irritant

Target Organs: None

Signal Words: Warning

**Pictograms:** 



#### **GHS Classification:**

Eye irritation   Category 2A
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#### **GHS Label Elements, including precautionary statements:**

# **Hazard Statements:**

H319	Causes serious eye irritation.	

# **Precautionary Statements:**

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**

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

Revised on 08/15/2013 Page 1 of 5

### **NFPA Ratings**

Health	2
Flammability	1
Reactivity	0
Specific hazard	Not Available

### **HMIS Ratings**

Health	2
Fire	1
Reactivity	0
Personal	E

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS#	EINECS# / ELINCS#	Formula	Molecular Weight
Citric Acid	>99	59-29-1	201-069-1	C <sub>6</sub> H <sub>8</sub> O <sub>7</sub> •H <sub>2</sub> O	210.14 g/mol

# 4. FIRST-AID MEASURES

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

# 5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable)  Use water spray, alcohol-resistant foam, dry chemical, or carbon	
extinguishing media	dioxide.
Special protective equipment	Wear self-contained, approved breathing apparatus and full protective
and precautions for firefighters	clothing, including eye protection and boots.
Specific hazards arising from Emits toxic fumes (carbon oxides) under fire conditions. (See also	
the chemical	Stability and Reactivity section).

# 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions	Prevent spillage from entering drains. Any release to the environment
	may be subject to federal/national or local reporting requirements.
Methods and materials for	Pick up ad arrange disposal without creating dust. Sweep up and shovel.
containment and cleaning up	Clean surfaces thoroughly with water to remove residual contamination.
	Dispose of all waste and cleanup materials in accordance with
	regulations.

### 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. Avoid formation of dusts.

Revised on 08/15/2013 Page 2 of 5

### Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls: Contains no substances with occupational exposure limit values.

### **Personal Protection**

Eyes	Wear chemical safety glasses with side shields or goggles.	
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an	
	approved respirator.	
Skin	Wear nitrile or rubber gloves, apron or lab coat.	
Other	Not Available	

#### **Other Recommendations**

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	White crystalline solid.
Odor	Not Available
Odor threshold	Not Available
pH	1.8 at 50 g/l at 20°C (68°F)
Melting point/freezing point	Not Available
Initial boiling point and boiling range	Not Available
Flash point	173.9°C (345.0°F) – Closed cup.
Evaporation rate	Not Available
Flammability (solid, gas)	Not Available
Upper/lower flammability or explosive limit	Not Available
Vapor pressure	Not Available
Vapor density	7.26 (air=1)
Density	1.54
Solubility (ies)	Soluble in water
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	175°C (Breaks down to Citric acid, anhydrous above 78°C)

# 10. STABILITY AND REACTIVITY

Chemical Stability	Stable	
Possibility of Hazardous Reactions	Will not occur.	
Conditions to Avoid	Excess heat, moisture	
Incompatible Materials	Strong oxidizing agents, bases, reducing agents, nitrates.	
Hazardous Decomposition Products	carbon oxides.	

Revised on 08/15/2013 Page 3 of 5

# 11. TOXICOLOGICAL INFORMATION

### **Acute Toxicity**

Skin	Not Available
Eyes	Eyes – rabbit – Irritating to eyes.
Respiratory	Not Available
Ingestion	LD50 Oral – rat – 6,730 mg/kg
Other	LD50 Intraperitoneal – rat – 375 mg/kg

# Carcinogenicity

IARC	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.
ACGIH	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.
NTP	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.
OSHA	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

Skin	Irritation, itching, swelling, redness, pain.	
Eyes	Irritation, itching, redness, pain.	
Respiratory	Irritation, coughing, wheezing.	
Ingestion	Gastrointestinal discomfort and possible pain.	

Chronic Toxicity	Respiratory sensitization: Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.
Teratogenicity	Not Available
Mutagenicity	Not Available
Embryotoxicity	Not Available
Specific Target Organ Toxicity	Not Available
Reproductive Toxicity	Not Available
Respiratory/Skin Sensitization	Not Available

# 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

Aquatic Vertebrate	Not Available
Aquatic Invertebrate	Not Available
Terrestrial	Not Available

Persistence and Degradability	Not Available
Bioaccumulative Potential	Not Available
Mobility in Soil	Not Available
PBT and vPvB Assessment	Not Available
Other Adverse Effects	Not Available

# 13. DISPOSAL CONSIDERATIONS

Waste Residues	Users should review their operations in terms of the applicable federal/national or	
	local regulations and consult with appropriate regulatory agencies if necessary before	
	disposing of waste product container or residue.	

Revised on 08/15/2013 Page 4 of 5

Product	Users should review their operations in terms of the applicable federal/national or	
Containers	local regulations and consult with appropriate regulatory agencies if necessary	
	before disposing of waste product container.	

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.

# 14. TRANSPORTATION INFORMATION

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

# 15. REGULATORY INFORMATION

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	Citric Acid Monohydrate
SARA 312	Citric Acid Monohydrate
SARA 313	Not Listed
WHMIS Canada	Class E: Corrosive material.

### **16. OTHER INFORMATION**

Revision	Date
Revision 1	07-09-2012
Revision 2	08/15/2013

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Revised on 08/15/2013 Page 5 of 5