

# SAFETY DATA SHEET

# **Section 1: Identification**

Product Name:	Citric Acid (all sizes, all containers, all grades)	
Chemical Name/Synonyms:	Citric Acid Anhydrous, Anhydrous Citric Acid, 2-	
	hydroxypropane-1,2,3-tricarboxylic acid	
Company (responsible party):	ESSENTIAL DEPOT, INC.	
	4605 Oak Circle	
	Sebring, FL 33870	
	863.662.0481	
	www.EssentialDepot.com	
Emergency Contact:	CHEMTREC from Inside the USA: 800.424.9300	
	CHEMTREC International: 703.741.5970	
Product Use:	Food Additive Industrial	

# Section 2: Hazard(s) Identification

**GHS Label Elements:** 



Signal Word(s): Warning

**Hazard Statements:** May form combustible dust concentrations in the air.

Causes serious eye irritation.

Hazard Classification: Not classified.

Physical Hazards:	Not classified	
Health hazards:	Serious eye damage/eye irritation	Category 2A
OSHA defined hazards:	Combustible dust	

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### **Precautionary Statements:**

Prevention: •

- Prevent dust accumulation to minimize explosion hazard.
- Keep away from heat/sparks/open flames/hot surfaces.
- No smoking.
- Keep container tightly closed.
- Ground container and receiving equipment.
- Wear protective gloves as well as eye and face protection.
- Wash hands thoroughly after handling.
- Observe good industrial hygiene practices.

Response: •

- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse with water.
- IF IN EYES: Rinse immediately and cautiously with plenty of water. Remove contact lenses if can be easily done. Continue rinsing. If eye irritation persists, seek medical advice/attention.
- IN CASE OF FIRE: Use appropriate media to extinguish.

**Storage:** Store away from incompatible materials.

**Disposal:** 

• Dispose of waste and residue in accordance with all local, regional, national, and international regulations.

Hazard(s) not otherwise classified (HNOC):

None.

**Supplemental Information:** • None known.

# **Section 3: Composition/Information on Ingredients**

<b>Chemical Name</b>	Synonym	CAS Number	% Concentration
Citric Acid	-	77-92-9	100

## **Section 4: First-Aid Measures**

**Skin contact:** Wash off with soap and water. Get medical attention if irritation

develops and persists.

**Eye contact:** Do not rub eyes. Immediately flush eyes with plenty of water for at

least 15 minutes. Remove contact lens, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. If eye irritation persists, get medical advice/attention.

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Inhalation: Remove person to fresh air and maintain person in position

comfortable for breathing. Oxygen or artificial respiration if needed.

Call a physician if symptoms develop or persist.

**Ingestion:** Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Severe eye irritation. Symptoms may include: stinging, tearing,

redness, swelling, and blurred vision.

May cause respiratory irritation.

Dusts may irritate the respiratory tract, skin, and eye.

INDICATORS of the need for IMMEDIATE medical attention and/or special treatment needed Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

**General Information:** Ensure that medical personnel are aware of the material(s) involved

and take precautions to protect themselves.

## **Section 5: Fire-Fighting Measures**

**Suitable extinguishing media:** Water fog. Foam. Dry chemical powder. Carbon

dioxide (CO<sub>2</sub>). Apply extinguishing media carefully to avoid creating airborne dust. Avoid high pressure media which could cause the formation of a potentially explosible dust-air

mixture).

**UNSUITABLE extinguishing media:** Do not use water jet as an extinguisher as this

will spread the fire.

**Specific hazards arising from the chemical:** Explosion hazard. Avoid generating dust, fine

dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard. During fire, gases hazardous to health may be formed. Combustion products may include: carbon

oxides.

**Special protective actions for fire-fighters:** Standard procedure for chemical fires.

**Special protective equipment and** Self-contained breathing apparatus (SCBA) and

**precautions for fire-fighters:** full protective clothing must be worn in case of

fire.

**Fire fighting instructions/equipment:** In case of fire and/or explosion do not breathe

fumes. Move containers from fire area if you

can do so without risk.

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**Specific methods:** Use standard firefighting procedures and

consider the hazards of the other involved

materials.

**General Fire Hazards:** May for combustible dust concentrations in air.

## **Section 6: Accidental Release Measures**

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

equipment and emergency

**Personal** Keep unnecessary personnel away. Keep people away from and **precautions, protective** upwind of spill/leak. Use only non-sparking tools. Dust deposits should not be allowed to accumulate on surfaces as these may **procedures:** form an explosive mixture if released into the atmosphere in sufficient concentration. Wear appropriate protective equipment and clothing during clean-up. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits (see Section 8 of this SDS). Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see Section 8 of this SDS

Methods and materials for containment and cleaning

up:

Eliminate all ignition sources (no smoking, flares, sparks, or flames in the immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Avoid dispersal of dust in the air (for example: do not "blow" off surfaces with air). Collect surface dust using a vacuum cleaner equipped with HEPA filter. This product is miscible in water. Prevent entry into waterways, sewer, basements, or confined areas. Stop the flow of material, if it is without risk.

**Small Spill:** Sweep up or vacuum up spillage and collect in suitable container for disposal. Wipe up with absorbent material (such as a cloth or fleece). Clean surface thoroughly to remove residual contamination.

**Large Spill:** Wet down with water and dike for later disposal. If sweeping of a contaminated area is necessary then use a dust suppressant agent which does not react with the product. Minimize dust generation and accumulation. Absorb in vermiculite, dry sand, or earth and then place into containers. Shovel the material into waste container. Following product recovery, flush area with water.

> Never return spills to original containers for re-use. For waste disposal see Section 13 of this SDS.

**Environmental precautions:** Avoid discharging into drains, water courses, or onto the ground.

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## **Section 7: Handling and Storage**

## Precautions for safe handling:

Minimize dust generation and accumulation. Avoid significant deposits of material, especially on horizontal surfaces which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Routine housekeeping should be instituted to ensure that dust does not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Explosion-proof general and local exhaust ventilation. If insufficient ventilation then wear suitable respiratory equipment. Avoid breathing dust. Avoid contact with skin and eyes. Avoid prolonged exposure. Wash thoroughly after handling. Wear appropriate personal protective equipment. Handle and open container with care. Observe good industrial hygiene practices.

Conditions for Safe Storage, including incompatibilities:

Keep container tightly closed in a dry, cool, and well-ventilated place. Store away from incompatible materials (see Section 10 of this SDS). Keep away from heat, sparks, and open flame.

Additional safe handling

information:

Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particle Solids

# **Section 8: Exposure Controls/Personal Protection**

Occupational exposure limits:	No exposure limits noted for ingredient(s).	
Biological limit values:	No biological exposure limits noted for the	
	ingredient(s).	

Appropriate engineering controls:	Explosion-proof general and local exhaust
	ventilation. Good general ventilation should be
	used. Ventilation rates should be matched to
	conditions. If applicable, use process
	enclosures, local exhaust ventilation, or other
	engineering controls to maintain airborne levels
	below recommended exposure limits. If
	exposure limits have not been established,
	maintain airborne levels to an acceptable level.
	Provide eye wash station. Ventilation should be
	sufficient to effectively remove and prevent
	accumulation of any dusts or fumes that may be
	generated during handling or thermal
	processing. Eye wash facilities and emergency

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shower must be available when handling this

product

Individual protection measures, such a personal protective equipment:

**Eye/Face protection:** Wear safety glasses with side shields (or

goggles).

**Skin:** hand protection: Wear appropriate chemical resistant gloves.

Nitrile, butyl rubber, or neoprene gloves are recommended. Suitable gloves can be recommended by the glove supplier.

**Skin: other protection:** Wear suitable protective clothing.

**Respiratory protection:** If engineering controls do not maintain airborne

concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not yet been established), then an approved respirator must be worn. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure

limits.

**Thermal hazards:** Wear appropriate thermal protective clothing,

when necessary.

**General hygiene measures:** When using do not eat, drink, or smoke. Always

observe good personal hygiene measures such as washing after handling the material and before eating, drinking, and/or smoking.
Routinely wash work clothing and protective

equipment to remove contaminants.

# **Section 9: Physical and Chemical Properties**

Appearance:

Physical state: SolidForm: GranulesColor: White

**Odor:** Not available

**Odor threshold:** Not available

**pH:** 2.2

**Melting point/freezing point:** 307.4 °F (152 °C)

**Initial boiling point and boiling range:** Not available

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Flash point: Not available

**Evaporation rate:** Not available

Flammability (solid, gas): combustible dust

**Upper/lower flammability or explosive limits:** 

Flammability limit – lower (%): Not available Flammability limit – upper (%): Not available Explosive limit – lower (%): Not available Explosive limit – lower (%): Not available

Vapor pressure: Not available

Vapor density: Not available

Relative density: No available

Solubility(ies):

In water: Soluble

Partition coefficient (n-octanol/water): Not available

**Auto ignition temperature:** 1851.8 °F (1011 °C)

**Decomposition temperature:** Not available

**Viscosity:** Not available

Other information:

Explosive properties: Not explosive Oxidizing properties: Not oxidizing Molecular formula: C6-H8-O7 Molecular weight: 192.12 g/mol

## **Section 10: Stability and Reactivity**

**Reactivity:** Product is stable and non-reactive under normal conditions of use,

storage, and transport.

**Chemical stability:** Stable under normal conditions.

**Conditions to avoid:** • Keep away from heat, hot surfaces, sparks, open flames, and

other ignition sources.

• Contact with incompatible materials.

Minimize dust generation and accumulation.

Avoid dispersal of dust in the air (such as by cleaning dust

surfaces with air).

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Incompatible materials:

Hazardous decomposition products:

Build up of dangerous toxic fumes is possible in cases of fire or high temperature.

Carbon dioxide

Cabon monoxide

# **Section 11: Toxicological Information**

INFORMATION ON LIKELY ROUTES OF EXPOSURE		
Eye Contact:	Causes serious eye irritation. Dust in the eyes will cause	
	irritation.	
Inhalation:	Dust may irritate respiratory system. Inhalation of dusts may	
	cause respiratory irritation.	
Skin Contact:	Dust or powder may irritate the skin. Dust may irritate the skin.	
Ingestion:	May cause discomfort if swallowed.	

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL		
	CHARACTERISTICS	
Eye Contact:	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Dusts may irritate the eyes.	
Inhalation:	May cause respiratory irritation. Dusts may irritate the respiratory tract.	
Skin Contact:	Dusts may irritate the skin.	
Ingestion:	Not Available	

INFORMATION ON TOXICOLOGICAL EFFECTS		
Acute Toxicity:	Not expected to be acutely toxic.	
<b>Eyes:</b> Serious eye damage or irritation.		
Inhalation: Not a respiratory sensitizer.		
<b>Skin Contact:</b> Dusts may irritate the skin but is not a skin sensitizer.		
Ingestion:	Not Available	

## **GERM CELL MUTAGENICITY**

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

### **CARCINOGENICITY**

Not classified as to carcinogenicity to humans.

**IARC Monographs, Overall Evaluation of Carcinogenicity:** Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052): Not regulated.

NTP Report on Carcinogens: Not listed.

### REPRODUCTIVE TOXICITY

This product is not expected to cause reproductive or developmental effects.

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## **SPECIFIC TARGET ORGAN TOXICITY (single exposure)**

Not classified.

## **SPECIFIC TARGET ORGAN TOXICITY (repeated exposure)**

Not classified.

#### **ASPIRATION HAZARD**

Not an aspiration hazard.

### **OTHER INFORMATION:**

Prolonged inhalation may be harmful.

## **Section 12: Ecological Information (non-mandatory)**

#### **ECOTOXICITY**

This product is not classified as environmentally hazardous. However, that does not exclude the possibility that large or frequent spills can have harmful or damaging effects on the environment.

### PERSISTENCE AND DEGRADABILITY

No data is available on the degradability of this product.

#### **BIOACCUMULATIVE POTENTIAL**

The product is miscible in water and readily biodegradable in both water and soil. Accumulation is not expected.

#### **MOBILITY IN SOIL**

This product is soluble in water and, therefore, expected to be moderately mobile in soil.

#### **OTHER ADVERSE EFFECTS**

No other adverse environmental effects (such as: ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) expected from this product.

## **Section 13: Disposal Considerations**

**Disposal instructions:** Collect and reclaim or dispose in sealed containers at licensed waste

disposal site. Dispose of contents/container in accordance with

local/regional/national/international regulations.

**Local disposal regulations:** Dispose in accordance with applicable regulations.

**YOUR** hazardous waste

code:

YOUR waste code should be assigned by discussion between

yourself, the user (if not yourself), and the waste disposal company.

Waste from residue or

unused products:

Dispose in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its

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container must be disposed of in a safe manner (see Disposal

instructions in this SDS immediately above).

**Contaminated packaging:** Since emptied containers may retain product residue, follow label

warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

# **Section 14: Transport Information**

Not regulated as a dangerous good or as a hazardous material.

	DOT	IMDG	IATA
UN Number	N/A	N/A	N/A
<b>UN Proper Shipping Name</b>	N/A	N/A	N/A
Transport Hazard Class(es)	N/A	N/A	N/A
Packing Group	N/A	N/A	N/A
Environmental Hazards	N/A	N/A	N/A

# **Section 15: Regulatory Information**

### **U. S. REGULATIONS**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

All ingredients are on the U.S. EPA TSC Inventory List.

**Federal Regulations:** TSCA Section 12(b) Export Notification (40 CFR 707,

SubPart D): Not regulated.

**CERCLA Hazardous Substance List (40** Not listed.

CFR 302.4):

**SARA 304 Emergency release** 

notification:

Not regulated.

**OSHA Specifically Regulated** 

Substances (29 CFR 1910.100-1053)

Not regulated.

Clean Air Act Section (CAA) Section

112 Hazardous Air Pollutants (HAPs)

List:

Not regulated.

Clean Air Act Section (CAA) Section

112(r) Accidental Release Prevention

(40 CFR 68.130):

Not regulated.

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Food and Drug Administration (FDA): Total food additive

Direct food additive GRAS food additive

**Superfund Amendments and Reauthorization Act of 986 (SARA)** 

SARA 302 Extremely Not listed.

hazardous substance:

SARA 311/312 Hazardous Yes

**Chemical:** Classification hazard categories:

Combustible dust

Serious eye damage or eye irritation

SARA 313 (TRI reporting) Not regulated

U.S. STATE REGULATIONS		
U.S. Massachusetts RTK –	Not regulated.	
Substance List:		
U.S. New Jersy Worker and	Not listed.	
Community Right-to-Know		
Act		
U.S. Pennsylvania Worker	Not listed.	
and Community Right-to-	ınity Right-to-	
Know Law	Know Law	
U.S. Rhode Island RTK	Not regulated.	
California Prop 65:	California Safe Drinking Water and Toxic Enforcement Act of 2016	
	(Proposition 65): This material is not known to contain any chemicals	
	currently listed as carcinogens or reproductive toxins. For more	
	information go to www.P65Warnings.ca.gov.	

REPORTED IN THE FOLLOWING INVENTORIES:		
Country(s) or Region	Inventory Name	In Inventory (Yes/No*)
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (DSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Korean Existing Chemicals Inventory (KECI)	Yes
New Zealand	New Zealand Inventory of Chemicals (NZIoC)	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
U.S. and Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

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\* "Yes" indicates that the product complies with the inventory requirements administered by the governing country(s).

"No" indicates that one or more components of his product are not listed or exempt from listing on the inventory administered by the governing country(s).

## **Section 16: Other Information**

Hazardous Material Information System (HMIS®) ratings (U.S.A.): Health: 2
Flammability: 2
Physical Hazard: 0

**NFPA Ratings:** 



Health: 2
Flammability: 2
Physical Hazard: 0

KEY TO ABB	KEY TO ABBREVIATIONS		
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act		
DOT	Department of Transportation		
GHS	Globally Harmonized System of Classification and Labelling of Chemicals		
HMIS	Hazardous Materials Identification System		
IARC	International Agency for Research on Cancer		
IATA	International Air Transport Association		
IMDG	International Maritime Dangerous Goods		
N/A	Not Available		
NFPA	National Fire Protection Association		
NTP	National Toxicology Program		
OSHA	Occupational Safety and Health Administration		
SARA	Superfund Amendments and Reauthorization Act		
SDS	Safety Data Sheet		
TSCA	Toxic Substances Control Act		
UN	United Nations		

REFERENCES	
ESIS	European chemical Substances Information System
ECHA	A registered substances database of the European Chemicals Agency
CLP	Regulation on Classification, Labeling and Packaging of Substances and Mixtures

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**Date Created:** 04.22.2009

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the end use performance. The product is sold on the basis that buyers test the product for their specific purposes and uses. This information regards only the material designated herein and may not be valid for the designated material when used in combination with any other material(s) or in any process(es).

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