

CITRIC ACID 50% SOLUTION

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: CITRIC ACID 50% SOLUTION

General or Generic ID: ORGANIC ACID

Company

Heritage Systems Inc.
2471 Solano Ave Suite 141
Napa, CA. 94558
707-258-0553

Emergency Telephone Number:

1-800-535-5053
24 hours everyday

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s)	CAS Number	% (by weight)
WATER		48.0- 52.0
CITRIC ACID	77-92-9	48.0- 52.0

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin

Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage.

Swallowing

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

Inhalation

Breathing of vapor or mist is possible.

Symptoms of Exposure

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea) irritation (nose, throat, airways).

Target Organ Effects

No data

Developmental Information

No data

Cancer Information

No data

Other Health Effects

No data

Primary Route(s) of Entry

Inhalation, Skin contact.

4. FIRST AID MEASURES

Eyes

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Swallowing

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Note to Physicians

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (for example, asthma-like conditions).

5. FIRE FIGHTING MEASURES

Flash Point

Not applicable

Explosive Limit

Not applicable

Autoignition Temperature

No data

Hazardous Products of Combustion

May form: carbon dioxide and carbon monoxide, various hydrocarbons.

Fire and Explosion Hazards

No special fire hazards are known to be associated with this product.

Extinguishing Media

water fog, carbon dioxide, dry chemical.

Fire Fighting Instructions

Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.

NFPA Rating

Not determined

6. ACCIDENTAL RELEASE MEASURES

Small Spill

Absorb liquid on vermiculite, floor absorbent or other absorbent material.

Large Spill

Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers.

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

Skin Protection

Wear resistant gloves such as: neoprene, nitrile rubber, polyvinyl chloride, Wear normal work clothing covering arms and legs..

Respiratory Protections

If overexposure has been determined or documented, a NIOSH/MSHA approved dust/mist and fume respirator is advised in the absence of proper environmental control (see your safety equipment supplier). Engineering or administrative controls should be implemented to reduce exposure.

Engineering Controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below level of overexposure (from known, suspected or apparent adverse effects).

Exposure Guidelines

Component

WATER

No exposure limits established

CITRIC ACID (77-92-9)

No exposure limits established

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point

(for product) 212.0 - 219.0 F (100.0 - 103.8 C) @ 760 mmHg

Vapor Pressure

(for product) 21.900 mmHg @ 77.00 F

Specific Vapor Density

Not applicable

Specific Gravity

1.240 @ 60.00 F

Liquid Density

10.340 lbs/gal @ 60.00 F

1.240 kg/l @ 15.60 C

Percent Volatiles

50.0 %

Evaporation Rate
SLOWER THAN ETHYL ETHER

Appearance
No data

State
LIQUID

Physical Form
HOMOGENEOUS SOLUTION

Color
CLEAR, APHA COLOR 100

Odor
No data

pH
No data

10. STABILITY AND REACTIVITY

Hazardous Polymerization
Product will not undergo hazardous polymerization.

Hazardous Decomposition
May form: carbon dioxide and carbon monoxide, various hydrocarbons.

Chemical Stability
Stable.

Incompatibility
Avoid contact with: strong alkalies.

11. TOXICOLOGICAL INFORMATION

No data

12. ECOLOGICAL INFORMATION

No data

13. DISPOSAL CONSIDERATION

Waste Management Information

Destroy by incineration in accordance with applicable regulations.

14. TRANSPORT INFORMATION

DOT Information - 49 CFR 172.101

DOT Description:
NON-REGULATED

Container/Mode:
55 GAL DRUM/TRUCK PACKAGE

NOS Component:
CITRIC ACID

RQ (Reportable Quantity) - 49 CFR 172.101
Not applicable

15. REGULATORY INFORMATION

US Federal Regulations

TSCA (Toxic Substances Control Act) Status
TSCA (UNITED STATES) The intentional ingredients of this product are listed.

CERCLA RQ - 40 CFR 302.4(a)
None listed

CERCLA RQ - 40 CFR 302.4(b)
Materials without a "listed" RQ may be reportable as an "unlisted hazardous substance". See 40 CFR 302.5 (b).

SARA 302 Components - 40 CFR 355 Appendix A
None

Section 311/312 Hazard Class - 40 CFR 370.2
Immediate(X) Delayed() Fire() Reactive() Sudden
Release of Pressure()

SARA 313 Components - 40 CFR 372.65
None

International Regulations

Inventory Status
Not determined

State and Local Regulations

California Proposition 65
The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of

to 1986: This product contains the following substance(s) known
the state of California to cause reproductive harm.
ARSENIC

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

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