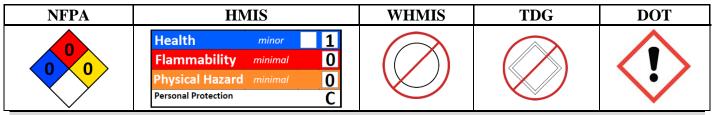


pH Reducer a Citric Acid Solution



Section 1 - IDENTIFICATION

Product Name: pH Reducer Citric Acid Solution
Synonyms: Liquid Citric Acid Solution 50%

Organic Acid: 2-hydroxypropane – 1,2,3-tricarboxylic acid

Recommended Use / Restrictions: For crops, trees, ornamentals, turf, hydroponics & soil pH adjustment

Company: Growth Products, Ltd.

80 Lafayette Avenue White Plains, NY 10603

Company Phone Number: 800-648-7626

Emergency Phone Number: 800-222-1222 (American Association of Poison Control Centers)

Section 2 – HAZARD(S) IDENTIFICATION

Emergency Overview: This product is not considered hazardous and does not require labeling.

POTENTIAL HEALTH EFFECTS: This product may irritate eyes and skin upon contact. Over-exposure by inhalation may

cause respitory tract irritation. Do not ingest. Do not wear contact lenses while

handling. Use personal protective equipment (PPE).

PICTOGRAM:

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SIGNAL WORD: WARNING!

HAZARD STATEMENTS: May cause skin or eye irritation. May be harmful if swallowed or inhaled.

Section 3 – COMPOSITION / INFORMATION ON INGREDIENTS

COMPOSITION INFORMATION:

Subtance/Mixture: Mixture

<u>CHEMICAL NAME</u> <u>CAS REGISTRY NO</u> <u>REACH NO</u> <u>EINECS NO</u>

Citric acid: 77-92-9 - 201-069-1

Yucca schidigera: 223749-05-1 - -



Section 4 – FIRST-AID MEASURES

Routes of Exposure:

INHALATION: Not expected to be harmful under normal conditions of use, however if allowed to become airborne, may

cause irritation of nose, throat and lungs. If symptoms are experienced remove source of contamination

or move victim to fresh air. Obtain medical attention if needed.

INGESTION: Have victim rinse mouth thoroughly with water and drink plenty of water if ingested. DO NOT INDUCE

VOMITING. Seek medical attention.

EYE CONTACT: Irritating to eyes. Immediately flush the contaminated eye(s) with cold, gently flowing water for 5

minutes. Continue flushing for 15 minutes. Rise entire surface of the eye(s) and lids. Seek medical

attention.

SKIN CONTACT: Irritating to skin. Immediately wash skin with cold, gently flowing water for a minimum of 20 minutes

while removing contaminated clothing. Wash clothing prior to reuse. Seek medical attention immediately

if irritation persists.

Section 5 – FIRE-FIGHTING MEASURES

Fire and Explosion Hazards: Non-combustible Flammable Limits: LEL: N/A, UEL: N/A

Extinguishing Media: Use an extinguishing agent suitable for the surrounding fire.

Fire Fighting Procedures: None Flashpoint and Method: N/A

Decomposition Products: Carbon dioxide, carbon monoxide, nitrogen oxides

Section 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Stop leak if without risk. Prevent product from entering drinking water supplies. Collect liquid or solidify with absorbent material and package for disposal according to local, state, and federal regulations.

WASTE DISPOSAL PRECEDURES:

Dispose in accordance with state and local regulation.

Reportable Quantity under Cercla: N/A

Section 7 - HANDLING AND STORAGE

STORAGE TEMPERATURE:

MAX 100° F MIN 32° F INDOOR \checkmark OUTDOOR \bigstar REFRIG. \bigstar

PRECAUTIONS TO BE TAKEN IN HANDLING:

For safe handling - put on appropriate protective clothing (PPE). Do not ingest. Avoid contact with eyes, skin and clothing. Do not reuse containers. Refrain from eating, drinking and smoking in work areas. Do not wear contact lenses.

PRECAUTIONS TO BE TAKEN IN STORAGE:

Not harmed by freezing. Thaw frozen fertilizer slowly and stir before using. Store in a cool, dry well ventilated area. Rotate stock in storage to use oldest first. Store in original containers only. Keep out of reach of children.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

SKIN PROTECTION: Gloves & protective apron.

EYE PROTECTION: Use goggles.

PROTECTIVE CLOTHING: Protective apron. Where there is a large scale use of this material with significant potential

for worker contact, long-sleeved clothing or coveralls, chemical resistant gloves, and/or

safety glasses with side shields may be necessary.

OTHER PROTECTION: N/A

Respiratory Protection or Required Ventilation:

Not normally needed. Where air contaminants can exceed acceptable criteria use NIOSH/MSHA approved respiratory protection equipment.



Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State:LiquidEvaporation Rate:Same as WaterColor:ClearBoiling Point:About 212° F / 100° COdor:NoneFreezing Point:< 32° F / 0° C</th>

Weight Per Gallon / Liter: 9.5# @ 70° F / 1.14 Kg @ 21° C

Storage Life at 70F: 2 years **pH – 21C:** 1.5

Solubility: Completely Miscible

Viscosity: 1-15 cps @ 21 Degrees C Flash Point/Method: Non-combustible

Vapor Pressure: N/A

Storage Temperature: Above 32° F / 0° C

Section 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable. Avoid contact with strong bases & oxidizing agents.

CONDITIONS TO AVOID: Reaction with caustic materials can cause exothermic reaction.

INCOMPATIBLE MATERIALS: Caustics, oxidizers, & bases

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon

HAZARDOUS POLMERIZATION: Material is not know to polymerize. Will not occur.

Section 11 - TOXICOLOGICAL INFORMATION

EFFECT OF OVEREXPOSURE ACUTE

(SHORT TERM EXPOSURE): Liquid contact may cause eye irritation and skin irritation.

CHORONIC (LONG TERM EXPOSURE): None Known

EXPOSURE ROUTES: Not expected to be harmful under normal conditions of use,

however if allowed to become airborne, may cause irritation of

nose, throat and lungs.

May cause irritation on prolonged or repeated contact

Hazard:

ACUTE TOXICITY (LETHAL DOSES):

DERMAL LD 50: 0.5 ml dose level for rabbits.

ORAL LD 50: 5400 mg/kg dosage level for mouse, 6730 mg/kg dosage for rat.

ACUTE TOXICITY (IRRITATION, SENSITIZATION):

EFFECTS TO EYES: Irritating to eyes.

EFFECTS TO INGESTION: May be harmful if swallowed.

EFFECTS TO SKIN: Moderate irritation, reversible within 7 days

CARCINOGENICITY DATE: Not listed by NTP, IARC or regulated carcinogen by OSHA.

Section 12 – ECOLOGICAL INFORMATION

TOXICITY: This material is not classified as hazardous. It is not considered to

be persistent, bioaccumulating nor toxic. Use according to good

working practices.

ECOTOXICITY: N/E

MOBILITY IN SOIL: This product is biodegradable is soil by microbial activity.

OTHER ADVERSE EFFECTS: N/E. None known.

Section 13 – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:

Waste should be avoided or minimized wherever possible. Empty containers may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.



Section 14 – TRANSPORT INFORMATION

DOT UN STATUS: This material is not regulated hazardous material for transportation.

Section 15 – REGULATORY INFORMATION

WHMIS Classification: N/A

Section 16 - OTHER INFORMATION

Revised Date: 3 May 2016

OTHER PRECAUTIONS: Read enitre label before using.

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ABBREVIATIONS / ACRONYMS: N/E – Not Established N/A – Not Applicable

NFPA – National Fire Protection Association

HMIS - Hazardous Materials Identification System

WHMIS - Workplace Hazardous Materials Information System

TDG – Transport of Dangerous Goods DOT – Department of Transportation

NIOSH - National Institute of Occupational Safety & Health

RELs – Recommended Exposure Limits NTP- National Toxicology Program

IARC- International Agency for Research on Cancer OSHA- Occupational Safety and Health Administration

GHS- Globally Harmonized System

HMIS Letter: C Required Equipment:





