229 Millstone Rd. • Broussard, LA 70518
1-800-737-3546 • Fax: (337) 837-9565

MATERIAL SAFETY DATA SHEET

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

- **Product name: CITRIC ACID SOLUTION (50% BY WT.)**
- **Manufacturer:** Deep South Chemical, Inc.
  229 Millstone Road
  Broussard, LA 70518
  (337) 837-9931
- **For Emergency:** CHEMTREC 1-800-424-9300**;** OUTSIDE THE USA 1-703-527-3887
- **Chemical Family:** SALT SOLUTION IN WATER
- **Formula:** Citric Acid in water
- **Contact Person:** Glenn Ray
- **MSDS Revised:** January 1, 2014
- **NFPA Rating:** Health (2) Fire (1) Reactivity (0)

SECTION 2. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	%	(OSHA) PEL	CAS NO.
Citric Acid (food grade)	50%	NE	77-92-9
Metal Content 5ppm			

SECTION 3. HAZARDS IDENTIFICATION, INCLUDING EMERGENCY OVERVIEW

Inhalation: This product may cause irritation to nose, throat, and respiratory tract
Skin Contact: This product may cause irritation to the skin and may be toxic if absorbed thorough the skin.

SECTION 4. FIRST AID MEASURES

Eyes: Move victim away from exposure and into fresh air. If irritation persists, seek medical attention. For direct exposure, flush with clean water for 15 minutes. Hold eyelids apart to ensure flushing of the entire eye surface.

Inhalation: Move victim away from source of exposure and into fresh air. If irritation persists, seek medical attention. If victim is not breathing, artificial respiration should be administered.

Skin: Remove contaminated clothes. Cleanse affected area thoroughly with soap and water. If irritation persists, seek medical attention. Wash contaminated clothing.

Ingestion: Do not induce vomiting or give anything by mouth. If victim is drowsy or unconscious, place on left side with head down. Seek medical attention.

SECTION 5. FIRE FIGHTING MEASURES

Fire fighting measures:- For small fires, use dry chemical, water spray or alcohol resistant foam. For Large fires, use water spray, fog or alcohol resistant foam.

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SECTION 6. ACCIDENTAL RELEASE MEASURES

Steps to be taken if material is released or spilled: Stay upwind and away from spill. Keep all sources of ignition and hot metal surfaces away from spill. If spill is indoors, ventilate area. Foam may be used to suppress vapors. Keep out of drains, sewers or waterways. Use sand or other inert material to dam and contain. Do not flush with water.

Waste disposal method: Dispose of according to local, state and federal regulations in an approved disposal facility or recycling facility.

Storage: Keep container tightly closed when not in use. Store in cool, dry area. Keep away from sources of ignition. Use and store with adequate ventilation.

Other precautions: Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat, flame, sparks or other sources of ignition.

SECTION 7. HANDLING AND STORAGE

Storage: Store in a well-ventilated area. Keep container tightly closed when not in use. Store in cool, dry area. Keep away from sources of ignition.

Handling avoids contact with skin or eyes. Avoid breathing of vapors. Handle in well-ventilated work space. When handling do not eat, drink or smoke.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: Exhaust.

Protective clothing: Impermeable gloves and impervious clothing as appropriate.

Eye protection: Chemical goggles where splashing may occur.

Special Protection: Safety shower, eye bath and washing facilities should be available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Specific gravity (H_2O = 1): 1.22-1.24@ 75 ^{0} F

Flash Point: >212 ^{0} F

Vapor density (Air = 1): N/D

Solubility: Miscible with water

Vapor pressure: N/D

Evaporation Rate: N/D

Appearance and Odor: Clear fluid ; Odorless

Boiling Point: >252 ^{0} F

Percent Organic Volatile by Volume: 0%

pH: 2.2

Autoignition Temperature: N/A

SECTION 10. STABILITY AND REACTIVITY

Stability and Reactivity: It is stable in normal conditions . It does not polymerize by itself**.**

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicity:

Systemic toxicity appears to occur mostly in cases of heavy ingestion or inhalation. Vapor
Eye- causes irritation and possible corneal burns.
Long term Exposure- Dermatitis or respiratory.
Skin- can cause dry skin and delayed hypersensitivity reactions in some individuals.

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SECTION 12. ECOLOGICAL INFORMATION

Degradation: Bio-degradation is possible but rates are not determined.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal: If spilled dispose according to local laws.

SECTION 14. TRANSPORT INFORMATION

Transport information: 49.CFR 172.101
DOT DESCRIPTION- DOT NON-REGULATED
Shipping labeling N/A

SECTION 15. REGULATORY INFORMATION

Toxic Substances Control Act (TCSA): - The formulation is not carcinogenic
All components of this material are on the USA TSCA inventory.

CERCLA RQ-40 CFR 302.4 (a)
None listed

CERCLA RQ-40 CFR 302.4 (b)
" unlisted hazardous substance"

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

SECTION 16. OTHERINFORMATION

DISCLAIMER- WE ACCEPT NO RESPONSIBILITY FOR RESULTS OBTAINED BY THE APPLICATION OF THIS INFORMATION OR THE SAFETY AND SUITABILITY OF OUR PRODUCTD, EITHER ALONE OR IN COMBINATION WITH OTHER PRODUCTS. USERS ARE ADVISED TO MAKE THEIR OWN TESTS TO DETRMINE THE SAFETY AND SUITABILITY OF EACH PRODUCT FOR THEIR OWN PUPOSES. UNLESS OTHERWISE OBTAINED IN WRITING, WE SELL THE PRODUCTS WITHOUT WARRANTY, AND BUYERS AND USERS ASSUME ALL RESPONSIBILTY AND LIABILITY FOR LOSS OR DAMAGE ARISING FROM HANDLING AND USE OF OUR PRODUCTS, WHETHER USED ALONE OR IN COMBINATION WITH OTHER PRODUCTS.

N/D= No data; N/A = Not applicable; NE = Not established.