SAFETY DATA SHEET
SUPERIOR CITRIC ACID
DATE REVISED: January 1, 2017

Product Name: Superior Citric Acid
Manufacturer: Superior Flux & Mfg. Co. 6615 Parkland Blvd. Cleveland, OH 44139
Emergency Phone Number: 1-800-424-9300 (CHEMTREC)
Other Information Calls: (440) 349-3000

To the Purchaser: This MSDS contains important environmental, health, and toxicology information for your employees who have ordered this product. Please be sure this information is given to them. If you resell this product, a copy of the MSDS should be given to the buyer.

H.M.I.S. INFORMATION: HEALTH = 1 FLAMMABILITY = 0 REACTIVITY = 0

SECTION I - IDENTIFICATION
Common Name: Superior Citric Acid
Chemical Family: Organic Acid
CAS Number: 77-92-2
Chemical Name: 2-Hydroxy-1,2,3-propanetricarboxylic acid
Formula: C6H8O7

SECTION II – HAZARDS IDENTIFICATION
Classification of Substance or Mixture:
Classification (CLP): No Data Available
Label Elements (CLP): No Data Available

Eye Irritation, Category 2A
Precautionary Statements: P280, P305+P351+P338, P310
Risk Phrases: R41
Safety Phrases: S36, S39
See section XVI for full text description of S and R phrases
Other Hazards: None if used properly

SECTION III- COMPOSITION INFORMATION

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS Number</th>
<th>%</th>
<th>OSHA PEL</th>
<th>H Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citric Acid</td>
<td>77-92-9</td>
<td>15-24</td>
<td>NA</td>
<td>H319</td>
</tr>
</tbody>
</table>

Unlisted percentages are non-hazardous stabilizers, activators, and water. None of the materials in this product are listed in NTP, IARC, or OSHA as carcinogens.

SECTION IV- HEALTH HAZARDS
SDS. Superior Citric Acid. Page 1 of 4
Primary Routes of Entry: Skin and eyes.

Signs and Symptoms of Exposure:

1) Acute Effects: Irritation of skin or eyes upon contact. Eye contact can result in corneal damage or blindness. Skin contact can produce inflammation and blistering. Severe over exposure can produce lung damage, choking, unconsciousness, or death.

2) Chronic Effects: NA

Medical Conditions Generally Aggravated by Overexposure: 

Chemical Listed as a Carcinogen or Potential Carcinogen: 

OSHA Permissible Exposure Limit (PEL): 15 mg/m³
ACGIH Threshold Limit Value (TLV): 15 mg/m³

EMERGENCY AND FIRST AID PROCEDURES

Inhalation: Remove to fresh air
Skin: Wash thoroughly with soap and water.
Ingestion: If patient is fully conscious, give large amounts of water. Obtain medical attention immediately.

SECTION V - FIRE AND EXPLOSION HAZARD DATA

Flash Point: NA
Flammable Limits: NA
Extinguishing Media: Dry chemical powder for small fire. For large fire use water spray, fog, or foam. Do not use water jet.
Auto Ignition Temperature: 1010°C (1850°F)
Special Fire Fighting Procedures: Slightly explosive in presence of open flames or sparks. Non-explosive in presence of shocks.
Unusual Fire and Explosion Hazards: None

SECTION VI - ACCIDENTAL RELEASE MEASURES

Steps to be taken in case material is spilled: Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on contaminated surface and dispose of according to state, federal, and local regulations.

SECTION VII - HANDLING AND STORAGE

Precautions to be Taken in Handling and Storage: Store in plastic containers in cool area. Wash thoroughly after use.
Work/Hygienic Practices: Avoid contact with skin, eyes and clothing.
Other Precautions: Keep container away from excessive heat.

SECTION VIII - CONTROL MEASURES

Respiratory Protection (TYPE): NIOSH approved respirator.
Ventilation: Yes
Mechanical (General): Yes
Local Exhaust: Yes
Eye Protection: Safety Glasses
Protective Gloves: Recommended, NIOSH approved
Other Protective Clothing or Equipment: Protective coat or apron

SECTION IX - PHYSICAL AND CHEMICAL CHARACTERISTICS

Boiling Point: Decomposes
Specific Gravity (Water = 1): 1.665 (water=1)
Vapor Pressure (mm Hg): NA
Percent Volatile by Volume: NA
Vapor Density (Air = 1): NA
Evaporation Rate (Butyl Acetate = 1): NA
Melting Point: 153°C/307.4°C
Solubility in Water: Soluble
Appearance and Odor: Solid powder, odorless

SECTION X - STABILITY AND REACTIVITY

Stability: Product is stable
(Conditions to Avoid): NA
Incompatibility: Reactive with oxidizing agents, reducing agents, metals, alkalis.
Hazardous Decomposition Products: NA
Hazardous Polymerization: Will not occur
(Conditions to Avoid): NA

SECTION XI - TOXICOLOGICAL INFORMATION

Acute Toxicity Data
1) Oral: LD-50 (rat): Not available
2) Inhalation: LC-50 (rat): Not available
3) Dermal: LD-50 (rabbit): Not available
4) Skin Irritation: (rabbit): Not available

Chronic Toxicity Data
1) Repeated Skin Application: (rat): Not available
2) Eye Irritation: (rabbit): Not available

SECTION XII - ECOLOGICAL INFORMATION

This Material has not been Tested for Environmental Effects.

SECTION XIII - DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of in accordance with EPA regulations.

SECTION XIV - TRANSPORTATION
D.O.T. Proper Shipping Name: Non-Hazardous
Hazard Class: NA
Identification Number: NA
Packing Group: NA
Type D.O.T Label Required Information: NA
Waste Disposal Method: Dispose in accordance with EPA regulations

SECTION XV - REGULATORY INFORMATION

OSHA Hazardous Chemical According to 29 CFR 1910.1200: None

Carcinogenicity Classification (Components Present at 0.1% or More): Non-Carcinogenic
International Agency for Research on Cancer (IARC): Not Listed
American Conference of Governmental Industrial Hygienists (ACGIH): Not Listed
National Toxicology Program (NTP): Not Listed
Occupational Safety and Health Administration (OSHA): Not Listed

None of the Components of this Product are Listed on the U.S. Toxic Substances Control Act. Inventory or Otherwise Comply with TSCA Pre-manufacture Notification Requirements. This Product is RoHS Compliant.

SECTION XVI - OTHER INFORMATION

The labeling of this product is indicated in Section II. The full text of all abbreviations indicated by codes in the MSDS are as follows:

- R41 Risk of serious damage to eyes
- S-36/39 Wear suitable protective clothing and eye/face protection
- H319 Causes serious eye irritation
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
- P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor

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