

SUPPLIER MATERIAL SAFETY DATA SHEET (MSDS)

N/D=Not Determined
N/A=Not Applicable

Product: CITRIC ACID

Manufacturer: ESTEAM

Flammability: 0

Chem. Name: 8-Hydroxy-tri Carboxylic Acid

Trade Name: Citric Acid

Reactivity: 0

Chem. Family: Aliphatic Acid

Use:

Health: 1

Protection:

NFPA LEAST=0, SLIGHT=1, MODERATE=2, HIGH=3, EXTREME=4

HAZARDOUS INGREDIENTS

Citric Acid

CAS #

77-92-9

% WT

60-100

HAZARD DATA

LD50 11700 mg/kg (oral-rat)

EXPOSURE LIMITS (TLV)

N/A

PHYSICAL DATA

Physical State: Powder

Boiling Point (C): N/A

Solubility in Water: >50%

Evaporation Rate: N/A

Freeze/Thaw Stable:

Percent Volatile (vol): N/A

Odor/Appearance: White odourless fine granular powder

Freezing Point (C): N/D

Ph (undiluted): 2.2

Specific Gravity: 1.655

Vapor Pressure: N/A

FIRE & EXPLOSION HAZARD

Flammability: N

Means of Extinction: Water

Special Procedures: N/A

Explosion Sensitivity to Impact: N/A

Chemical Sensitivity to Static Discharge: N/A

Flashpoint (C) & Method: None

Conditions: N/A

Hazardous Combustion Products: N/A

Upper Explosion Limit (% by vol): N/A

Lower Explosion Limit (% by vol): N/A

Auto-ignition: N/D

Rate of Burning: N/A

Explosive Power: N/A

TDG/WHMIS: Non hazardous / D2B

REACTIVITY DATA

Chemical Stability: Stable

Hazardous Decomposition Product: None Known

Incompatible Substances: Usual incompatibilities of organic acids

TOXICOLOGICAL PROPERTIES

Route of Entry - Skin Contact: Y
Route of Entry - Skin Absorption: N
Route of Entry - Eye Contact: Y
Route of Entry - Inhalation: Y
Route of Entry - Ingestion: N

Reproductive Effects Y/N: N
Carcinogenicity Y/N: N
Mutagenicity Y/N: N
Teratogenicity Y/N: N/D
TLV: N/D

Effects of Overexposure:

Acute Effects:

Mild skin irritant. Eyes considered an irritant characteristic of mild organic acids. Inhalation may cause mild symptoms of respiratory irritation.

Chronic Effects:

Long term oral overexposure may cause damage to tooth enamel.

PREVENTATIVE MEASURES

Gloves: Standard work gloves

Footwear: N/A

Clothing: N/A

Eyes: Safety glasses

Respirator: Approved nuisance dust mask

Other: Local exhaust

Recommended Engineered Controls:

Use with adequate ventilation.

Leak & Spill Procedures:

Sweep up and flush area with water.

Waste Disposal Methods:

According to federal, provincial and municipal regulations.

Special Handling Procedures:

Keep out of the reach of children.

FIRST AID MEASURES

Inhalation: Move person to fresh air.

Ingestion: N/A (Material generally recognized as safe.)

Eye Contact: Immediately flush eyes with running water for at least 15 minutes. Call a physician.

Skin Contact: Wash affected area with water. Launder clothing before reuse.

Prep./Revised Date: January 8, 2010

Prepared By: R. Russell

Source Material: Manufacturer's MSDS

Emergency Response: 1-613-996-6666 (Transport Emergencies)

Mailing Address: Esteam Manufacturing Ltd.
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This information is complete to the best of our knowledge, however, users are encouraged to make their own investigations into the suitability of the information to their particular purposes. READ THE LABEL before using this or any product, and take any necessary precautions, dictated by the label or by common sense to ensure that your health is protected.