

COYNE CHEMICAL SAFETY DATA SHEET

Chloric Acid

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identity: CMC 150

Recommended use of the chemical and restrictions on use:

Supplier: Coyne Chemical
3015 State Road
Croydon, PA 19021
Telephone: +1 (215) 785-3000

Emergency Phone: For Chemical Emergency
Spill, Leak, Fire, or Accident
Call **CHEMTREC** Day or Night
Within USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

SDS Date of Preparation: 6/8/15

2. HAZARDS IDENTIFICATION

GHS Classification:

Physical:	Health:	Environmental
Not Hazardous	Eye Damage Category 1 Skin Irritation Category 2	Not Hazardous

GHS Label Elements:

Danger!



Statements of Hazard

H315 Causes skin irritation
H318 Causes serious eye damage

Prevention

P264 Wash thoroughly after handling.
P280 Wear protective gloves, protective clothing and eye protection.
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 Immediately call a POISON CENTER or doctor.
P302+P352 IF ON SKIN: Wash with plenty of water.
P332+P313 If skin irritation occurs: Get medical attention.
P362+P364 Take off contaminated clothing and wash it before reuse.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Amount
Water	7732-18-5	50%
Citric Acid	77-92-9	50%

The exact concentration is being withheld as a trade secret.

4. FIRST AID MEASURES

Eye: Immediately flush eyes with plenty of water for at least 20 minutes while holding the eyelids apart. Remove contact lenses, if present and easy to do. Get immediate medical attention.

Skin: Flush skin with plenty of water for several minutes while removing contaminated clothing and shoes. Get medical attention if irritation or rash occurs and persists. Launder clothing before re-use. (Discard contaminated shoes).

Ingestion: Do not induce vomiting unless directed to do so by a medical professional. If conscious, give two 8 ounce glass of water to dilute. Never give anything by mouth to an unconscious or convulsing person. Get medical attention if symptoms occur.

Inhalation: Remove victim to fresh air. If breathing is difficult, oxygen should be administered by qualified personnel. Get medical attention if irritation develops or persists.

Most important Symptoms: May cause serious eye irritation and corneal damage. May cause skin irritation. Inhalation of mists may cause mucous membrane and respiratory irritation.

Indication of immediate medical attention/special treatment: Immediate medical attention is required eye contact.

5. FIRE FIGHTING MEASURES

Suitable (and Unsuitable) Extinguishing Media: Use media appropriate for surrounding fire. Cool fire exposed containers and structures with water.

Specific hazards arising from the chemical: Citric acid may burn after water has evaporated. Decomposition will produce oxides of carbon.

Special Protective Equipment and Precautions for Fire-Fighters: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water spray.

Explosion Data (sensitivity to mechanical impact or static discharge): None known.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures: Evacuate spill area and keep unprotected personnel away. Prevent contact with the eyes. Avoid contact with skin and clothing. Avoid breathing vapors or mists. Ventilate area. Wear appropriate protective clothing. Keep away from heat, flames and high temperatures.

Methods and Materials for Containment and Cleaning Up: Contain and recover liquid where possible. Collect using an inert absorbent material and place in appropriate containers for disposal. Prevent spill from entering sewers and water courses. Report releases as required by local, state and federal authorities.

7. HANDLING AND STORAGE

Precautions for Safe Handling: Prevent contact with the eyes. Avoid contact with skin and clothing. Avoid breathing vapors or mists. Wear protective clothing and equipment. Use only with adequate ventilation. Wash thoroughly with soap and water after handling. Keep containers closed when not in use.

Do not reuse containers. Empty containers retain product residues and contaminants that can be hazardous. Follow all SDS precautions when handling empty containers.

Conditions for Safe Storage, Including Any Incompatibilities: Store in a cool, dry, well-ventilated area away from heat and other incompatible materials. Keep container tightly closed. Protect from physical damage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

Citric Acid	None Established
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Engineering Controls: Use with adequate general or local exhaust ventilation to minimize exposures levels.

Respiratory Protection: In operations where the occupational exposure is excessive or irritation is experienced, an approved respirator with dust/mist cartridges or supplied air respirator should be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

Skin Protection: Impervious gloves such as butyl rubber or neoprene are recommended.

Eye Protection: Chemical safety goggles should be worn where splashing is possible.

Other: Impervious coveralls, apron and boots is required to avoid skin contact and contamination of personal clothing. An eye wash should be available in the immediate work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Clear, colorless liquid with no odor.

Physical State: Liquid	Odor Threshold: Not available
Vapor Density: Not applicable	Initial Boiling Point/Range: Not available
Solubility In Water: Soluble	Vapor Pressure: Not available
Relative Density: 1.18	Evaporation Rate: Not available
Melting/Freezing Point: Not available	pH: 1.16 – 1.44
VOC Content: 0%	Octanol/Water Coefficient: Not available
Solubility: Soluble in water	Decomposition Temperature: Not available
Viscosity: Not applicable	Flammability (solid, gas): Not applicable
Flashpoint: None	Autoignition Temperature: Not applicable
Flammable Limits: LEL: Not applicable UEL: Not applicable	

10. STABILITY AND REACTIVITY

Reactivity: Not normally reactive.

Chemical Stability: Stable under normal storage and handling conditions.

Possibility of Hazardous Reactions: Potentially explosive reaction with metal nitrates. Citric acid will corrode copper, zinc, aluminum, and their alloys.

Conditions to Avoid: Keep away from heat, flames and high temperatures.

Incompatible Materials: Metal nitrates, alkali carbonates and bicarbonates, potassium tartrate and certain metals.

Hazardous Decomposition Products: When heated to decomposition emits oxides of carbon.

11. TOXICOLOGICAL INFORMATION

HEALTH HAZARDS:

Eye: May cause severe irritation and burns with pain, tearing, and redness. May cause permanent eye damage.

Skin: May cause irritation with redness and dermatitis. Citric acid was not found to be corrosive in a study performed with 50% citric acid on rabbit skin.

Ingestion: Ingestion may cause irritation of the mucous membranes, esophagus and stomach. May cause vomiting and diarrhea.

Inhalation: Inhalation of mists may cause irritation of the nose, throat and respiratory tract.

Chronic: None currently known.

Sensitization: This material is not known to cause sensitization.

Carcinogenicity: None of the components present are listed as a carcinogen or suspected carcinogen by IARC, NTP, or OSHA.

Germ Cell Mutagenicity: Citric acid was negative in the Ames test and in human and hamster cell culture assays.

Reproductive Toxicity: In a two-generation 90 days study with male and female rats fed 1.2 % citric acid, no adverse effect on reproductive parameters nor any teratogenicity were seen.

Numerical Measures of Toxicity:

Citric Acid: Oral rat LD50- 5400 mg/kg; Skin rabbit LD50- >2000 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Citric Acid: 96 hr LC50 Ide fish – 440-760 mg/L; 48 hr LC50 Saltwater crab-160 mg/L; 24 hr LC50 Daphnia magna -1535 mg/L

Persistence and Degradability: Citric acid is readily biodegradable -97% in 28 days.

Bioaccumulative Potential: The calculated BCF for citric acid is estimated to be 3.2.

Mobility in Soil: No data available.

Other Adverse Effects: No data available.

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with local and national environmental regulations.

14. TRANSPORT INFORMATION

DOT Hazardous Materials Description:

Proper Shipping Name: Not Regulated

UN Number: None

Hazard Class/Packing Group: None

Labels Required: None

IMDG Shipping Name: Not Regulated
UN Number: None
IMDG Hazard Class/Packing Group: None
IMDG Hazard Labels Required: None

IATA Shipping Name: Not Regulated
UN Number: None
IATA Hazard Class/Packing Group: None
IATA Hazard Labels Required: None

15. REGULATORY INFORMATION

CERCLA 103 Reportable Quantity: This product is not subject to CERCLA reporting requirements. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

Hazard Category for Section 311/312: Acute Health

Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: None

Section 302 Extremely Hazardous Substances (TPQ): None

INTERNATIONAL CHEMICAL INVENTORY STATUS:

Australia AICS: All the components are listed.
Canada DSL: All the components are listed.
China IECSC: All the components are listed.
European Union EINECS: All the components are listed.
Japan ENCS: All the components are listed.
Korea KECL: All the components are listed.
New Zealand: All the components are listed.
Philippines PICCS: All the components are listed.
United States TSCA: All the components are listed.

16. OTHER INFORMATION

NFPA Rating: Health = 3 Flammability = 0 Instability = 0
HMIS Rating: Health = 3 Flammability = 0 Physical Hazard = 0

Date of current revision: 7/28/15

Revision History: Updated classification and all sections.

Date of previous revision: 10/14/13

NOTICE

This above information is believed to be correct but does not propose to be all inclusive and shall be used only as a guide. Coyne Chemical shall not be held liable for any damage resulting from handling or from contact with the above product. This information relates only to the product designated herein and does not relate to its use in combination with any other material or process.

