Medical Chemical Corp.
19430 Van Ness Ave.
Torrance, CA 90501
Customer Service: Phone (310)787-6800
FAX (310)787-4464
CHEMTREC Emergency Response Telephone Number: (800)424-9300
Note: The CHEMTREC phone number is only for emergencies involving spills, leaks, fire, exposure or accident. Please direct all other inquiries to our customer service phone number.

Section I - Product Identification
An aqueous solution of chromic acid.

Section II - Hazards Identification
Danger: causes severe skin burns and eye damage. Wash thoroughly after handling. Wear protective clothing, eye and face protection. If swallowed: rinse mouth but do not induce vomiting. Immediately contact a poison control center. Remove contaminated clothing and rinse skin with water. Wash clothing before reuse.

Safety Ratings

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Contact</th>
<th>Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severe</td>
<td>None</td>
<td>Reactive</td>
<td>Hazardous</td>
<td>General storage</td>
</tr>
</tbody>
</table>

NFPA Ratings
Health = 3   Flammability = 0   Reactivity = 2

Potential Health Effects
Chromic acid is a carcinogen and should be handled with care. It is also a strong oxidizer that will cause tissue damage and severe ulcers on contact with skin or eyes.

Inhalation: Extremely corrosive to mucous membranes and other structures in the respiratory tract. Will cause pulmonary edema.

Ingestion: Can cause severe burns to mouth, esophagus and stomach. Also causes nausea, vomiting, diarrhea, etc.

Skin contact: Can cause burns and ulceration.

Eye contact: Even brief contact can cause severe damage.

Chronic Exposure: Unknown
Aggravation of preexisting conditions: Unknown

Section III - Composition/Information on Components

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS#</th>
<th>OSHA Pel</th>
<th>ACGIH TLV</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromic acid</td>
<td>7738-94-5</td>
<td>0.1 mg/m3 (CrO3) Ceil</td>
<td>0.05 mg/m3 (Cr) TWA</td>
<td>4% w/v</td>
</tr>
</tbody>
</table>

Section IV - First Aid Measures

Inhalation: Because of the low vapor pressure, inhalation is unlikely to be a problem with this product. In case of difficulty, remove from source of exposure and get immediate medical attention. Be prepared to assist breathing.

Ingestion: Do not induce vomiting. If the victim is conscious administer large quantities of water. Never give anything by mouth to an unconscious person.

Skin Contact: Wash affected area with soap and water. Get medical advice if irritation develops.

Eye Contact: Rinse thoroughly with running water. Get immediate medical attention.
Section V - Fire Fighting Measures
Flash point: Not applicable.
Flammable Limits: Not applicable.
Fire: Not normally a fire Hazard.
Explosion: Not Normally an explosion hazards.
Fire Extinguishing Media: Any means suitable for surrounding fire.
Special information: Pyrolysis will release corrosive oxides of chromium.

Section VI - Accidental Release Measures
Absorb with a suitable absorbent and store in a suitable container for disposal.

Section VII - Handling and Storage
Store in a closed container, protected from freezing.

Section VIII - Exposure Control/Personal Protection
Airborne Exposure Limits: See section III.
Ventilation System: Usually not required. When required, Refer to the ACGIH document, “Industrial Ventilation, a Manual of Recommended Practices” for details about ventilation.
Personal Respirator: Usually not required. In case of emergency, or when exposure levels are unknown, use a positive pressure, full face piece, air supplied respirator.
Skin protection: Protective gloves are recommended as part of good laboratory practice.
Eye Protection: Laboratory safety goggles or similar products are recommended as part of good laboratory practice.

Section IX - Physical and Chemical Properties
Boiling Point: 102 °C
Vapor pressure (mm Hg): 18 @ 20 °C
Vapor Density (air = 1): 0.6
Appearance and Odor: A clear, dark red liquid.

Section X - Stability and Reactivity
Stability: Freezes at low temperature.
Hazardous Decomposition Products: Nothing unusual.
Hazardous polymerization: Will not occur.
Incompatibilities: Nothing unusual.
Conditions to avoid: Excessive cold/heat and light.

Section XI - Toxicological Information
None relating to normal exposure.
Cancer lists

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Known Carcinogenicity?</th>
<th>Anticipated?</th>
<th>IARC Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromic Acid</td>
<td>Yes</td>
<td>No</td>
<td>1</td>
</tr>
</tbody>
</table>

Section XII - Ecological Information
Environmental Fate: Not biodegradable.
Environmental Toxicity: Toxic to marine life.

Section XIII - Disposal Considerations
Local governments usually restrict the amounts of chromium compounds that may be flushed down the drain. Insure compliance with all government regulation.
Section XIV - Transportation Information
DOT Shipping name: Chromic acid solution  Hazard Class: 8 Packing Group: II
DOT Hazard Label: Corrosive  DOT Identification Number: UN1755

Section XV - Regulatory Information

Chemical Inventory Status

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>TSCA</th>
<th>EC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromic Acid</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Federal, State and International Regulations

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>SARA 302</th>
<th>SARA 313</th>
<th>RCRA</th>
<th>TSCA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RQ</td>
<td>TPQ</td>
<td>List</td>
<td>Category</td>
</tr>
<tr>
<td>Chromic Acid</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Chromium Cmpd</td>
</tr>
</tbody>
</table>

Chemical Weapons Convention: No, TSCA 12(b): Yes, CDTA: Yes
SARA 311/312: Acute: Yes, Chronic: Yes, Fire: Yes

Section XVI - Other Information
This information is believed to be correct but is not warranted as such, nor does it purport to be all inclusive.

Revision Date: Nov. 2, 2017