# SAFETY DATA SHEET

## 1. Identification

**Material name:** STAIN-CRETE CHEM STAIN - 5 GL BLACK  
**Material:** CSCR G005 080

**Recommended use and restriction on use**  
**Recommended use:** Additive  
**Restrictions on use:** Not known.

**Manufacturer/Importer/Supplier/Distributor Information**  
EUCLID CHEMICAL COMPANY  
19218 REDWOOD ROAD  
CLEVELAND OH 44110  
US

**Contact person:**  
**Telephone:** 216-531-9222  
**Emergency telephone number:** 1-800-424-9300 (US); 1-613-996-6666 (Canada)

## 2. Hazard(s) identification

**Hazard Classification**

**Health Hazards**

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity (Oral)</td>
<td>Category 4</td>
</tr>
<tr>
<td>Acute toxicity (Inhalation - dust and mist)</td>
<td>Category 2</td>
</tr>
<tr>
<td>Skin Corrosion/Irritation</td>
<td>Category 1A</td>
</tr>
<tr>
<td>Serious Eye Damage/Eye Irritation</td>
<td>Category 1</td>
</tr>
<tr>
<td>Respiratory sensitizer</td>
<td>Category 1</td>
</tr>
<tr>
<td>Skin sensitizer</td>
<td>Category 1</td>
</tr>
<tr>
<td>Germ Cell Mutagenicity</td>
<td>Category 1B</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Category 1A</td>
</tr>
<tr>
<td>Toxic to reproduction</td>
<td>Category 1B</td>
</tr>
</tbody>
</table>

**Unknown toxicity - Health**

<table>
<thead>
<tr>
<th>Toxicity</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity, oral</td>
<td>0 %</td>
</tr>
<tr>
<td>Acute toxicity, dermal</td>
<td>19.51 %</td>
</tr>
<tr>
<td>Acute toxicity, inhalation, vapor</td>
<td>32.98 %</td>
</tr>
<tr>
<td>Acute toxicity, inhalation, dust or mist</td>
<td>19.51 %</td>
</tr>
</tbody>
</table>

**Environmental Hazards**

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute hazards to the aquatic environment</td>
<td>Category 1</td>
</tr>
</tbody>
</table>
Unknown toxicity - Environment

Acute hazards to the aquatic environment 73.06 %
Chronic hazards to the aquatic environment 100 %

Label Elements

Hazard Symbol:

Signal Word: Danger

Hazard Statement:
Fatal if inhaled.
Harmful if swallowed.
Causes severe skin burns and eye damage.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
May cause genetic defects.
May cause cancer.
May damage fertility or the unborn child.
Very toxic to aquatic life.

Precautionary Statements

Prevention:
Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. [In case of inadequate ventilation] wear respiratory protection. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Contaminated work clothing should not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid release to the environment.

Response:
IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor/…. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. If skin irritation or rash occurs: Get medical advice/attention. IF SWALLOWED: Call a POISON CENTRE/doctor/…. if you feel unwell. Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Specific treatment is urgent (see on this label). Wash contaminated clothing before reuse. Collect spillage.

Storage:
Store in a well-ventilated place. Keep container tightly closed. Store locked
Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>CAS number</th>
<th>Content in percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromic acid, disodium salt</td>
<td>10588-01-9</td>
<td>10 - &lt;20%</td>
</tr>
<tr>
<td>Manganese Chloride</td>
<td>7773-01-5</td>
<td>10 - &lt;25%</td>
</tr>
<tr>
<td>Hydrogen chloride</td>
<td>7647-01-0</td>
<td>5 - &lt;10%</td>
</tr>
</tbody>
</table>

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Description of necessary first-aid measures

Inhalation: Call a physician or poison control center immediately. If breathing stops, provide artificial respiration. Move to fresh air. If breathing is difficult, give oxygen.

Skin Contact: Call a physician or poison control center immediately. Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately.

Ingestion: Rinse mouth. Call a physician or poison control center immediately. Never give liquid to an unconscious person. Do not induce vomiting without advice from poison control center.

Personal Protection for First-aid Responders: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Most important symptoms/effects, acute and delayed

Symptoms: Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping. Extreme irritation of eyes and mucous membranes, including burning and tearing.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed
Treatment: Symptoms may be delayed.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

- **Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.
- **Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

- **Special fire fighting procedures:** No data available.
- **Special protective equipment for fire-fighters:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Ventilate closed spaces before entering them. Evacuate area. See Section 8 of the SDS for Personal Protective Equipment. Keep upwind. Keep unauthorized personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Accidental release measures: In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Methods and material for containment and cleaning up: Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

Environmental Precautions: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid release to the environment.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation): Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.
Safe handling advice: Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Do not taste or swallow. Wash hands thoroughly after handling. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Do not get in eyes. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, on clothing. Avoid contact with eyes, skin, and clothing.

Contact avoidance measures: No data available.

Hygiene measures: Do not eat, drink or smoke when using the product. Wash hands after handling. Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Do not get in eyes. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Wash contaminated clothing before reuse. Do not get this material in contact with skin. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin.

Storage

Safe storage conditions: Store locked up.

Safe packaging materials: No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromic acid, disodium salt - Inhalable fraction. - as Cr(VI)</td>
<td>TWA</td>
<td>0.0002 mg/m³</td>
<td>US. ACGIH Threshold Limit Values (03 2018)</td>
</tr>
<tr>
<td></td>
<td>STEL</td>
<td>0.0005 mg/m³</td>
<td>US. ACGIH Threshold Limit Values (03 2018)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>0.0002 mg/m³</td>
<td>US. ACGIH Threshold Limit Values (03 2018)</td>
</tr>
<tr>
<td></td>
<td>STEL</td>
<td>0.0005 mg/m³</td>
<td>US. ACGIH Threshold Limit Values (03 2018)</td>
</tr>
<tr>
<td>Chromic acid, disodium salt</td>
<td>TWA</td>
<td>0.005 mg/m³</td>
<td>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (02 2006)</td>
</tr>
<tr>
<td></td>
<td>OSHA_AC_T</td>
<td>0.0025 mg/m³</td>
<td>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (02 2006)</td>
</tr>
<tr>
<td></td>
<td>Ceiling</td>
<td>0.1 mg/m³</td>
<td>US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)</td>
</tr>
<tr>
<td>Manganese Chloride - Inhalable fraction. - as Mn</td>
<td>TWA</td>
<td>0.1 mg/m³</td>
<td>US. ACGIH Threshold Limit Values (02 2013)</td>
</tr>
<tr>
<td>Manganese Chloride - Respirable fraction. - as Mn</td>
<td>TWA</td>
<td>0.02 mg/m³</td>
<td>US. ACGIH Threshold Limit Values (02 2013)</td>
</tr>
<tr>
<td>Manganese Chloride - as Mn</td>
<td>Ceiling</td>
<td>5 mg/m³</td>
<td>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
</tr>
<tr>
<td>Hydrogen chloride</td>
<td>Ceiling</td>
<td>2 ppm</td>
<td>US. ACGIH Threshold Limit Values (2011)</td>
</tr>
<tr>
<td></td>
<td>Ceiling</td>
<td>5 ppm 7 mg/m³</td>
<td>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
</tr>
<tr>
<td>Chemical name</td>
<td>Type</td>
<td>Exposure Limit Values</td>
<td>Source</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>------------</td>
<td>-----------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Chromic acid, disodium salt - as Cr</td>
<td>TWA</td>
<td>0.05 mg/m3</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)</td>
</tr>
<tr>
<td>Chromic acid, disodium salt - as Cr</td>
<td>TWA</td>
<td>0.05 mg/m3</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)</td>
</tr>
<tr>
<td>Chromic acid, disodium salt - Total - as Cr</td>
<td>TWA</td>
<td>0.025 mg/m3</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2018)</td>
</tr>
<tr>
<td></td>
<td>CEILING</td>
<td>0.1 mg/m3</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2018)</td>
</tr>
<tr>
<td>Manganese Chloride - as Mn</td>
<td>TWA</td>
<td>0.2 mg/m3</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)</td>
</tr>
<tr>
<td>Manganese Chloride, total dust. - as Mn</td>
<td>TWA</td>
<td>0.2 mg/m3</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)</td>
</tr>
<tr>
<td>Manganese Chloride - Respirable. - as Mn</td>
<td>TWA</td>
<td>0.02 mg/m3</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2018)</td>
</tr>
<tr>
<td>Manganese Chloride - Total - as Mn</td>
<td>TWA</td>
<td>0.2 mg/m3</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2018)</td>
</tr>
<tr>
<td>Hydrogen chloride</td>
<td>CEILING</td>
<td>2 ppm</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
</tr>
<tr>
<td>Hydrogen chloride</td>
<td>CEV</td>
<td>2 ppm</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)</td>
</tr>
<tr>
<td>Hydrogen chloride</td>
<td>CEILING</td>
<td>5 ppm 7.5 mg/m3</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromic acid, disodium salt - as Cr</td>
<td>TWA</td>
<td>0.05 mg/m3</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)</td>
</tr>
<tr>
<td>Chromic acid, disodium salt - as Cr</td>
<td>TWA</td>
<td>0.05 mg/m3</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)</td>
</tr>
<tr>
<td>Chromic acid, disodium salt - Total - as Cr</td>
<td>TWA</td>
<td>0.025 mg/m3</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2018)</td>
</tr>
<tr>
<td></td>
<td>CEILING</td>
<td>0.1 mg/m3</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2018)</td>
</tr>
</tbody>
</table>
Manganese Chloride - as Mn  
TWA  
0.2 mg/m³  
Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)

Manganese Chloride - Fume, total dust. - as Mn  
TWA  
0.2 mg/m³  
Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)

Manganese Chloride - Respirable. - as Mn  
TWA  
0.02 mg/m³  
Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2018)

Manganese Chloride - Total - as Mn  
TWA  
0.2 mg/m³  
Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2018)

Hydrogen chloride  
CEILING  
2 ppm  
Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2018)

Hydrogen chloride  
CEV  
2 ppm  
Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)

Hydrogen chloride  
CEILING  
5 ppm  
7.5 mg/m³  
Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)

Sulfuric acid - Mist.  
TWA  
0.2 mg/m³  
Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2013)

Sulfuric acid - Thoracic fraction.  
TWA  
0.2 mg/m³  
Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)

Sulfuric acid  
STEL  
3 mg/m³  
Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)

TWA  
1 mg/m³  
Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)

**Biological Limit Values**

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromic acid, disodium salt (Total chromium: Sampling time: End of shift at end of work week.)</td>
<td>25 µg/l (Urine)</td>
<td>ACGIH BEI (03 2013)</td>
</tr>
<tr>
<td>Chromic acid, disodium salt (Total chromium: Sampling time: Increase during shift.)</td>
<td>10 µg/l (Urine)</td>
<td>ACGIH BEI (03 2013)</td>
</tr>
</tbody>
</table>

**Exposure guidelines**

Chromic acid, disodium salt  
US. ACGIH Threshold Limit Values  
Can be absorbed through the skin.

**Appropriate Engineering Controls**

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.
Individual protection measures, such as personal protective equipment

General information: Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Eye/face protection: Wear a full-face respirator, if needed. Wear safety glasses with side shields (or goggles) and a face shield.

Skin Protection
Hand Protection: Use suitable protective gloves if risk of skin contact.
Other: Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

Respiratory Protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

Hygiene measures: Do not eat, drink or smoke when using the product. Wash hands after handling. Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Do not get in eyes. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Wash contaminated clothing before reuse. Do not get this material in contact with skin. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin.

9. Physical and chemical properties

Appearance

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>liquid</td>
</tr>
<tr>
<td>Form</td>
<td>liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Black</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild sour/acidic</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available.</td>
</tr>
<tr>
<td>pH</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No data available.</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>No data available.</td>
</tr>
<tr>
<td>Flash Point</td>
<td>No data available.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Slower than Ether</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No</td>
</tr>
<tr>
<td>Upper/lower limit on flammability or explosive limits</td>
<td>No data available.</td>
</tr>
</tbody>
</table>
Flammability limit - upper (%): No data available.
Flammability limit - lower (%): No data available.
Explosive limit - upper (%): No data available.
Explosive limit - lower (%): No data available.
Vapor pressure: No data available.
Vapor density: Vapors are heavier than air and may travel along the floor and in the bottom of containers.
Relative density: 1.2317
Solubility(ies)
   Solubility in water: Miscible with water.
   Solubility (other): No data available.
Partition coefficient (n-octanol/water): No data available.
Auto-ignition temperature: No data available.
Decomposition temperature: No data available.
Viscosity: No data available.

10. Stability and reactivity

Reactivity: No data available.
Chemical Stability: Material is stable under normal conditions.
Possibility of hazardous reactions: No data available.
Conditions to avoid: Avoid heat or contamination.
Incompatible Materials: Avoid contact with oxidizing agents (e.g. nitric acid, peroxides and chromates). Metals. Strong bases.
Hazardous Decomposition Products: Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. Toxicological information

Information on likely routes of exposure
   Inhalation: In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.
   Skin Contact: Causes severe skin burns. May cause an allergic skin reaction.
   Eye contact: Causes serious eye damage.
   Ingestion: Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics
   Inhalation: No data available.
   Skin Contact: No data available.
Eye contact: No data available.
Ingestion: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

**Oral**
Product: ATEmix: 435.7 mg/kg

**Dermal**
Product: Not classified for acute toxicity based on available data.

**Specified substance(s):**
Chromic acid, disodium salt
LD 50 (Rabbit): > 2,000 mg/kg

**Inhalation**
Product: ATEmix: 0.5 mg/l

Repeated dose toxicity
Product: No data available.

Skin Corrosion/Irritation
Product: No data available.

**Specified substance(s):**
Chromic acid, disodium salt
in vivo (Rabbit): Irritating
Manganese Chloride
in vivo (Rabbit): Not irritant

Serious Eye Damage/Eye Irritation
Product: No data available.

**Specified substance(s):**
Hydrogen chloride
Rabbit, 1 d: Category 1

Respiratory or Skin Sensitization
Product: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause sensitization by inhalation.

Carcinogenicity
Product: No data available.
IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

Chromic acid, disodium salt
Overall evaluation: Carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens:
Chromic acid, disodium salt
Known To Be Human Carcinogen.

Chromic acid, disodium salt
Cancer

Germ Cell Mutagenicity

In vitro
Product: No data available.

In vivo
Product: No data available.

Reproductive toxicity
Product: May damage fertility or the unborn child.

Specific Target Organ Toxicity - Single Exposure
Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure
Product: No data available.

Aspiration Hazard
Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish
Product: No data available.

Specified substance(s): 000000013822
Chromic acid, disodium salt

**Aquatic Invertebrates**

- **Product:** No data available.
- **Specified substance(s):**
  - Chromic acid, disodium salt
  - Manganese Chloride

**Chronic hazards to the aquatic environment:**

- **Fish**
  - **Product:** No data available.

- **Aquatic Invertebrates**
  - **Product:** No data available.

- **Toxicity to Aquatic Plants**
  - **Product:** No data available.

**Persistence and Degradability**

- **Biodegradation**
  - **Product:** No data available.

- **BOD/COD Ratio**
  - **Product:** No data available.

**Bioaccumulative potential**

- **Biotransportation Factor (BCF)**
  - **Product:** No data available.
  - **Specified substance(s):**
    - Manganese Chloride
      - Brown trout (Salmo trutta), Bioconcentration Factor (BCF): 17.8 (Renewal)

**Partition Coefficient n-octanol / water (log Kow)**

- **Product:** No data available.

**Mobility in soil:**

- No data available.

**Other adverse effects:**

- Very toxic to aquatic organisms.

**13. Disposal considerations**
Disposal methods: Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Contaminated Packaging: No data available.

14. Transport information

TDG:
UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Hydrochloric Acid), 8, PG III

CFR / DOT:
UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Hydrochloric Acid), 8, PG III

IMDG:
UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Hydrochloric Acid), 8, PG III

Further Information:
The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

15. Regulatory information

US Federal Regulations
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromic acid, disodium salt</td>
<td>De minimis concentration: TSCA 6% Annual Export Notification required.</td>
</tr>
</tbody>
</table>

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)
None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>OSHA hazard(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromic acid, disodium salt</td>
<td>Eye irritation</td>
</tr>
<tr>
<td></td>
<td>Skin sensitization</td>
</tr>
<tr>
<td></td>
<td>Cancer</td>
</tr>
</tbody>
</table>

CERCLA Hazardous Substance List (40 CFR 302.4):

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromic acid, disodium salt</td>
<td>10 lbs.</td>
</tr>
<tr>
<td>Hydrogen chloride</td>
<td>5000 lbs.</td>
</tr>
<tr>
<td>Sulfuric acid</td>
<td>1000 lbs.</td>
</tr>
</tbody>
</table>
Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
- Immediate (Acute) Health Hazards
- Delayed (Chronic) Health Hazard
- Acute toxicity (any route or exposure)
- Skin Corrosion or Irritation
- Serious eye damage or eye irritation
- Respiratory or Skin Sensitization
- Germ Cell Mutagenicity
- Carcinogenicity
- Reproductive toxicity

SARA 302 Extremely Hazardous Substance

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
<th>Threshold Planning Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen chloride</td>
<td>5000 lbs.</td>
<td>500 lbs.</td>
</tr>
<tr>
<td>Sulfuric acid</td>
<td>1000 lbs.</td>
<td>1000 lbs.</td>
</tr>
</tbody>
</table>

SARA 304 Emergency Release Notification

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromic acid, disodium salt</td>
<td>10 lbs.</td>
</tr>
<tr>
<td>Manganese Chloride</td>
<td></td>
</tr>
<tr>
<td>Hydrogen chloride</td>
<td>5000 lbs.</td>
</tr>
<tr>
<td>Sulfuric acid</td>
<td>1000 lbs.</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazardous Chemical

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Threshold Planning Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen chloride</td>
<td>500 lbs</td>
</tr>
<tr>
<td>Sulfuric acid</td>
<td>500 lbs</td>
</tr>
<tr>
<td>Chromic acid, disodium salt</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Manganese Chloride</td>
<td>10000 lbs</td>
</tr>
</tbody>
</table>

SARA 313 (TRI Reporting)

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromic acid, disodium salt</td>
<td></td>
</tr>
<tr>
<td>Manganese Chloride</td>
<td></td>
</tr>
<tr>
<td>Hydrogen chloride</td>
<td>lbs</td>
</tr>
</tbody>
</table>

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen chloride</td>
<td>lbs</td>
</tr>
<tr>
<td>Sulfuric acid</td>
<td>lbs</td>
</tr>
</tbody>
</table>

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65
WARNING
Cancer and Reproductive Harm - www.P65Warnings.ca.gov

US. New Jersey Worker and Community Right-to-Know Act
Chemical Identity
Chromic acid, disodium salt
Manganese Chloride
Hydrogen chloride

US. Massachusetts RTK - Substance List
Chemical Identity
Chromic acid, disodium salt
Hydrogen chloride
Sulfuric acid

US. Pennsylvania RTK - Hazardous Substances
Chemical Identity
Chromic acid, disodium salt
Manganese Chloride
Hydrogen chloride

US. Rhode Island RTK
Chemical Identity
Chromic acid, disodium salt
Hydrogen chloride

International regulations

Montreal protocol
Not applicable

Stockholm convention
Not applicable

Rotterdam convention
Not applicable

Kyoto protocol
Not applicable

VOC:
Regulatory VOC (less water and exempt solvent) : 0 g/l
VOC Method 310 : 0.00 %
Inventory Status:

Australia AICS: All components in this product are listed on or exempt from the Inventory.

Canada DSL Inventory List: All components in this product are listed on or exempt from the Inventory.

EINECS, ELINCS or NLP: All components in this product are listed on or exempt from the Inventory.

Japan (ENCS) List: One or more components in this product are not listed on or exempt from the Inventory.

China Inv. Existing Chemical Substances: All components in this product are listed on or exempt from the Inventory.

Korea Existing Chemicals Inv. (KECI): All components in this product are listed on or exempt from the Inventory.

Canada NDSL Inventory: One or more components in this product are not listed on or exempt from the Inventory.

Philippines PICCS: All components in this product are listed on or exempt from the Inventory.

US TSCA Inventory: All components in this product are listed on or exempt from the Inventory.

New Zealand Inventory of Chemicals: All components in this product are listed on or exempt from the Inventory.

Japan ISHL Listing: One or more components in this product are not listed on or exempt from the Inventory.

Japan Pharmacopoeia Listing: One or more components in this product are not listed on or exempt from the Inventory.

16. Other information, including date of preparation or last revision

Revision Date: 08/23/2019
Version #: 4.0
Further Information: No data available.
Disclaimer: For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.