**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

**PRODUCT NAME:** Chrome Acid Solution, 5%

**SYNONYMS:** Chrome Acid 5%, aqueous

**CATALOG CODES:** VCA

**MANUFACTURER:** Volu-Sol

**ADDRESS:** 5095 West 2100 South  
Salt Lake City, UT 84120

**EMERGENCY PHONE:** (800) 535-5053

**OTHER CALLS:** (801) 974-9474

**FAX:** (801) 974-9553

**CHEMICAL FAMILY:** -

**CHEMICAL FORMULA:** -

**PREPARED BY:** Volu-Sol

**RECOMMENDED USE:** Laboratory chemicals

**RESTRICTIONS ON USE:** Use as recommended

---

**SECTION 2: HAZARD(S) IDENTIFICATION**

**EMERGENCY OVERVIEW:**

**GHS Classification:**
- Acute toxicity, Oral (Category 4)
- Acute toxicity, Dermal (Category 3)
- Acute toxicity, Inhalation (Category 4)
- Skin corrosion (Category 1A)
- Respiratory sensitisation (Category 1)
- Skin sensitisation (Category 1)
- Germ cell mutagenicity (Category 1B)
- Carcinogenicity (Category 1A)
- Reproductive toxicity (Category 2)
- Specific Target Organ Toxicity (Category 1)
- Repeated Exposure Hazardous to aquatic life (Category 2)

**GHS LABEL ELEMENTS:**

**Pictogram:**

**Signal Word:** Danger

**Hazard Statement(s):**
- H302 Harmful if swallowed
- H311 Toxic in contact with skin
- H314 Causes severe skin burns and eye damage
- H317 May cause an allergic skin reaction
- H332 Harmful if inhaled
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H340 May cause genetic defects
- H350 May cause cancer
- H361 Suspected of damaging fertility or the unborn child
- H372 Causes damage to organs (kidneys, liver, respiratory system, skin, eyes) through prolonged or repeated exposure
- H411 Toxic to aquatic life with long lasting effects

**Precautionary Statement(s):**
- P201 Obtain special instructions before use
- P202 Do not handle until all safety precautions have been read and understood
- P260 Do not breathe mist/ vapours/ spray
- P264 Wash skin thoroughly after handling
- P270 Do not eat, drink or smoke when using this product
- P271 Use only outdoors or in a well-ventilated area
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P273 Avoid release to the environment
- P280 Wear protective gloves/ eye protection/ face protection
- P284 Wear respiratory protection
- P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

**INHALATION:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. Immediately call a POISON CENTER or doctor/physician. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

**INGESTION:** Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention

**SKIN:** Immediately call a POISON CENTER or doctor/physician. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention

**EYE:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician

---

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**INGREDIENT**

**CAS NO.**

**EC-NO.**

Chromium (VI) oxide (0 - <=5%)

1333-82-0

215-607-8

024-001-00-0

---

**SECTION 4: FIRST AID MEASURES**

**FLAMMABLE LIMITS IN AIR:**

<table>
<thead>
<tr>
<th>Percentage by Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper: %</td>
</tr>
<tr>
<td>Lower: %</td>
</tr>
</tbody>
</table>

**FLASH POINT:**

-  

**AUTOIGNITION TEMPERATURE:**

**EXTINGUISHING MEDIA:** Foam. Dry powder. Carbon Dioxide. Water spray. Sand. Do not use a heavy water stream

**FIRE FIGHTING PROCEDURES:** In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode

**FIRE AND EXPLOSION HAZARDS:** Use water spray to cool unopened containers

---

**SECTION 5: ACCIDENTAL RELEASE MEASURES**

**ACCIDENTAL RELEASE MEASURES:** Use personal protective equipment. Avoid breathing vapours, mist or gas. Evacuate unnecessary personnel. Equip cleanup crew with proper...
**SECTION 6: HANDLING AND STORAGE**

HANDLING AND STORAGE: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Use only outdoors or in a well-ventilated area. Do not breathe mist, vapours, spray. Avoid contact during pregnancy/while nursing. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Eliminate all ignition sources if safe to do so. Do not eat, drink or smoke when using this product. Wash exposed skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Keep only in the original container in a cool, well ventilated place away from incompatible materials, combustible materials. Keep container closed when not in use.


**SECTION 7: EXPOSURE CONTROLS/PERSOINAL PROTECTION**

EXPOSURE LIMITS: Reported in a time-weighted average (TWA)

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>OSHA ppm</th>
<th>ACGIH ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromium (VI) oxide</td>
<td>1333-82-0</td>
<td>0.005</td>
<td>0.05 TLV</td>
</tr>
</tbody>
</table>

VENTILATION SYSTEM: Local and/or general exhaust is recommended to keep exposure below limits. Local exhaust ventilation is preferred for control of the emissions at its source, preventing dispersion into the general work area. Please refer to the ACGIH document, *Industrial Ventilation: A Manual of Recommended Practices*, for details.

PERSONAL RESPIRATORS: If exposure limit is exceeded and engineering controls are not feasible, a half-face organic vapour respirator may be worn for up to ten times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier; whichever is lowest. A full-face piece organic vapour respirator may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-face, positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

SKIN PROTECTION: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

EYE PROTECTION: Tightly fitting safety goggles. Face shield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide adequate general and local exhaust ventilation. Material should be handled in a laboratory hood whenever possible.

**SECTION 8: PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE: liquid

ODOR: -

SOLUBILITY: soluble in water

pH: -

BOILING POINT: -

MELTING POINT: -

VAPOR PRESSURE: -

DENSITY: -

VISCOSITY: -

REFRACTIVE INDEX: -

**SECTION 9: TOXICOLOGICAL INFORMATION**

TOXICOLOGICAL INFORMATION:

Acute Toxicity: No data available

Skin/Eye Irritation: No data available

Carcinogenicity:

IARC: 1 - Group 1: Carcinogenic to humans (Chromium (VI) oxide)

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: OSHA specifically regulated carcinogen (Chromium (VI) oxide)

**SECTION 10: STABILITY AND REACTIVITY**

CHEMICAL STABILITY: Stable under recommended conditions of use and storage

CONDITIONS TO AVOID: Direct sunlight. Extremely high or low temperatures

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: No data available

**SECTION 11: ECOPHYSICAL INFORMATION**

ECOLOGICAL INFORMATION: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects

Toxicity: No data available

Persistence and degradability: No data available

Mobility in soil: No data available

PBT/vPvB Results: No data available

**SECTION 12: DISPOSAL CONSIDERATIONS**

WASTE DISPOSAL METHOD: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to comply with local, state and federal regulations. Hazardous waste due to toxicity. Avoid release to environment

**SECTION 13: TRANSPORT INFORMATION**

<table>
<thead>
<tr>
<th>US DOT</th>
<th>IATA</th>
<th>IMDG/IMO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipping Name:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hazard Class:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UN Number:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Packaging Group:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SECTION 14: REGULATORY INFORMATION**

| SARA 302 | 50-00-0 |
| SARA 313 | 1333-82-0 |

SARA 311/312 Hazards

| Reactivity Hazard, Acute Health Hazard, Chronic Health Hazard |
| State |
| Right-to-know lists: |
| MA: 1333-82-0 |
| PA: 7732-18-5, 1333-82-0 |
| NJ: 7732-18-5, 1333-82-0 |
| California Prop. 65 Components: 1333-82-0 |

**SECTION 15: OTHER INFORMATION**

Disclaimer: The information is provided without any representation or warranty, express or implied, regarding the accuracy or correctness. The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with the handling, storage, use, or disposal of the product.