

# CHROMIC ACETATE

CRT

## CAUTIONARY RESPONSE INFORMATION

|   |   |  |
|---|---|--|
| <b>Common Synonyms</b><br>Acetic acid, chromium salt<br>Chromic (III) acetate<br>Chromium acetate<br>Chromium triacetate  |   | Solid powder or aqueous solution<br><br>Dark green to violet<br><br>Acetic acid odor |
| Keep people away. Avoid contact with solid, dust, or liquid.<br>Avoid inhalation.<br>Wear goggles, self-contained breathing apparatus, and rubber clothing (including gloves).<br>Notify local health and pollution control agencies.<br>Protect water intakes. |   | Sinks and mixes with water.  |
| <b>Fire</b>   | Not flammable.  |  |
| <b>Exposure</b>   | CALL FOR MEDICAL AID.<br>DUST<br>Harmful if inhaled.<br>Move to fresh air.<br>If breathing has stopped, give artificial respiration.<br><br>LIQUID OR SOLID<br>Irritating to skin and eyes.<br>Harmful if swallowed.<br>Remove contaminated clothing and shoes.<br>Flush affected area with plenty of water.<br>IF IN EYES, hold eyelids open and flush with plenty of water.<br>IF SWALLOWED and victim is CONSCIOUS, have victim drink water or milk. |  |
| <b>Water Pollution</b>  | HARMFUL TO AQUATIC LIFE IN VERY LOW CONCENTRATIONS.<br>May be dangerous if it enters water intakes.<br>Notify local health and wildlife officials.<br>Notify operators of nearby water intakes.   |  |

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|---|---|
| <b>1. CORRECTIVE RESPONSE ACTIONS</b><br>Dilute and disperse<br>Stop discharge<br>Collection Systems: Dredge<br>Cover with organic material containing sulfides   | <b>2. CHEMICAL DESIGNATIONS</b><br><b>2.1 CG Compatibility Group:</b> Not listed.<br><b>2.2 Formula:</b> Cr(C <sub>2</sub> H <sub>3</sub> O <sub>2</sub> ) <sub>3</sub> Cr(C <sub>2</sub> H <sub>3</sub> O <sub>2</sub> ) <sub>3</sub> H <sub>2</sub> O<br>CrOH(C <sub>2</sub> H <sub>3</sub> O <sub>2</sub> ) <sub>2</sub> - basic acetate<br><b>2.3 IMO/UN Designation:</b> Not listed<br><b>2.4 DOT ID No.:</b> 9101<br><b>2.5 CAS Registry No.:</b> 1066-30-4<br><b>2.6 NAERG Guide No.:</b> 171<br><b>2.7 Standard Industrial Trade Classification:</b><br>51371 |
| <b>3. HEALTH HAZARDS</b><br><b>3.1 Personal Protective Equipment:</b> Rubber gloves, safety glasses, laboratory coat. If powder becomes airborne, wear approved mechanical filter respirator.<br><b>3.2 Symptoms Following Exposure:</b> INHALATION: Irritating. It can produce ulcerations in the respiratory system, perforation of the nasal septum, pneumonitis and bronchial carcinoma. EYES: Irritation. SKIN: May cause dermatitis to exposed skin. Can produce ulcerations and sensitizing reactions.<br><b>3.3 Treatment of Exposure:</b> Get medical aid. INHALATION: Move to fresh air. EYES: Wash with large amounts of water, get medical attention. SKIN: Wash with large amounts of water.<br><b>3.4 TLV-TWA:</b> 0.5 mg/m <sup>3</sup> as Cr.<br><b>3.5 TLV-STEL:</b> Not listed.<br><b>3.6 TLV-Ceiling:</b> Not listed.<br><b>3.7 Toxicity by Ingestion:</b> Currently not available<br><b>3.8 Toxicity by Inhalation:</b> Currently not available.<br><b>3.9 Chronic Toxicity:</b> Possible carcinogen.<br><b>3.10 Vapor (Gas) Irritant Characteristics:</b> Currently not available<br><b>3.11 Liquid or Solid Characteristics:</b> Currently not available<br><b>3.12 Odor Threshold:</b> Currently not available<br><b>3.13 IDLH Value:</b> 25 mg/m <sup>3</sup> as Cr <sup>III</sup><br><b>3.14 OSHA PEL-TWA:</b> 1.0 mg/m <sup>3</sup> as Cr.<br><b>3.15 OSHA PEL-STEL:</b> Not listed.<br><b>3.16 OSHA PEL-Ceiling:</b> Not listed.<br><b>3.17 EPA AEGL:</b> Not listed |   |

## 4. FIRE HAZARDS

- 4.1 Flash Point:**  
Not flammable
- 4.2 Flammable Limits in Air:** Not flammable
- 4.3 Fire Extinguishing Agents:** Not pertinent
- 4.4 Fire Extinguishing Agents Not to Be Used:** Not pertinent
- 4.5 Special Hazards of Combustion Products:** Not pertinent
- 4.6 Behavior in Fire:** Currently not available
- 4.7 Auto Ignition Temperature:** Not flammable
- 4.8 Electrical Hazards:** Not pertinent
- 4.9 Burning Rate:** Not flammable
- 4.10 Adiabatic Flame Temperature:** Currently not available
- 4.11 Stoichiometric Air to Fuel Ratio:** Not pertinent
- 4.12 Flame Temperature:** Currently not available
- 4.13 Combustion Molar Ratio (Reactant to Product):** Not pertinent
- 4.14 Minimum Oxygen Concentration for Combustion (MOCC):** Not listed

## 5. CHEMICAL REACTIVITY

- 5.1 Reactivity with Water:** No reaction
- 5.2 Reactivity with Common Materials:** No reaction
- 5.3 Stability During Transport:** Stable
- 5.4 Neutralizing Agents for Acids and Caustics:** Currently not available
- 5.5 Polymerization:** Will not occur
- 5.6 Inhibitor of Polymerization:** Not pertinent

## 6. WATER POLLUTION

- 6.1 Aquatic Toxicity:**  
Trivalent chromium will not interfere with fish life at a concentration of 1.0 mg/l, and other aquatic life at 0.05 mg/l.
- 6.2 Waterfowl Toxicity:** Currently not available
- 6.3 Biological Oxygen Demand (BOD):** 50%, 5 days (trivalent Cr)
- 6.4 Food Chain Concentration Potential:** Currently not available
- 6.5 GESAMP Hazard Profile:**  
**Bioaccumulation:** 0  
**Damage to living resources:** 1  
**Human Oral hazard:** 1  
**Human Contact hazard:** II  
**Reduction of amenities:** XX

## 7. SHIPPING INFORMATION

- 7.1 Grades of Purity:** Currently not available
- 7.2 Storage Temperature:** Ambient
- 7.3 Inert Atmosphere:** Currently not available
- 7.4 Venting:** Currently not available
- 7.5 IMO Pollution Category:** Currently not available
- 7.6 Ship Type:** Currently not available
- 7.7 Barge Hull Type:** Currently not available

## 8. HAZARD CLASSIFICATIONS

- 8.1 49 CFR Category:** Not listed.
- 8.2 49 CFR Class:** Not pertinent
- 8.3 49 CFR Package Group:** Not listed.
- 8.4 Marine Pollutant:** No
- 8.5 NFPA Hazard Classification:** Not listed
- 8.6 EPA Reportable Quantity:** 1000 pounds
- 8.7 EPA Pollution Category:** C
- 8.8 RCRA Waste Number:** Not listed
- 8.9 EPA FWPCA List:** Yes

## 9. PHYSICAL & CHEMICAL PROPERTIES

- 9.1 Physical State at 15° C and 1 atm:** Solid
- 9.2 Molecular Weight:** 229.14 (anhydrous); 247.16 (hydrate)
- 9.3 Boiling Point at 1 atm:** 212°F = 100°C = 373.2°K For aqueous solution
- 9.4 Freezing Point:** Currently not available
- 9.5 Critical Temperature:** Currently not available
- 9.6 Critical Pressure:** Currently not available
- 9.7 Specific Gravity:** 1.30
- 9.8 Liquid Surface Tension:** Currently not available
- 9.9 Liquid Water Interfacial Tension:** Currently not available
- 9.10 Vapor (Gas) Specific Gravity:** Currently not available
- 9.11 Ratio of Specific Heats of Vapor (Gas):** Currently not available
- 9.12 Latent Heat of Vaporization:** Currently not available
- 9.13 Heat of Combustion:** Currently not available
- 9.14 Heat of Decomposition:** Currently not available
- 9.15 Heat of Solution:** Currently not available
- 9.16 Heat of Polymerization:** Not pertinent
- 9.17 Heat of Fusion:** Currently not available
- 9.18 Limiting Value:** Currently not available
- 9.19 Reid Vapor Pressure:** Currently not available

## NOTES

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| 9.20<br>SATURATED LIQUID DENSITY |   | 9.21<br>LIQUID HEAT CAPACITY |   | 9.22<br>LIQUID THERMAL CONDUCTIVITY |   | 9.23<br>LIQUID VISCOSITY   |   |
|----------------------------------|---|------------------------------|---|-------------------------------------|---|----------------------------|---|
| Temperature<br>(degrees F)       | Pounds per cubic foot   | Temperature<br>(degrees F)   | British thermal unit per<br>pound-F   | Temperature<br>(degrees F)          | British thermal unit inch<br>per hour-square foot-F   | Temperature<br>(degrees F) | Centipoise  |
|                                  | C<br>U<br>R<br>R<br>E<br>N<br>T<br>L<br>Y<br><br>N<br>O<br>T<br><br>A<br>V<br>A<br>I<br>L<br>A<br>B<br>L<br>E |                              | C<br>U<br>R<br>R<br>E<br>N<br>T<br>L<br>Y<br><br>N<br>O<br>T<br><br>A<br>V<br>A<br>I<br>L<br>A<br>B<br>L<br>E |                                     | C<br>U<br>R<br>R<br>E<br>N<br>T<br>L<br>Y<br><br>N<br>O<br>T<br><br>A<br>V<br>A<br>I<br>L<br>A<br>B<br>L<br>E |                            | C<br>U<br>R<br>R<br>E<br>N<br>T<br>L<br>Y<br><br>N<br>O<br>T<br><br>A<br>V<br>A<br>I<br>L<br>A<br>B<br>L<br>E |

| 9.24<br>SOLUBILITY IN WATER |                                   | 9.25<br>SATURATED VAPOR PRESSURE |   | 9.26<br>SATURATED VAPOR DENSITY |   | 9.27<br>IDEAL GAS HEAT CAPACITY |   |
|-----------------------------|-----------------------------------|----------------------------------|---|---------------------------------|---|---------------------------------|---|
| Temperature<br>(degrees F)  | Pounds per 100 pounds<br>of water | Temperature<br>(degrees F)       | Pounds per square inch  | Temperature<br>(degrees F)      | Pounds per cubic foot   | Temperature<br>(degrees F)      | British thermal unit per<br>pound-F   |
|                             | S<br>O<br>L<br>U<br>B<br>L<br>E   |                                  | C<br>U<br>R<br>R<br>E<br>N<br>T<br>L<br>Y<br><br>N<br>O<br>T<br><br>A<br>V<br>A<br>I<br>L<br>A<br>B<br>L<br>E |                                 | C<br>U<br>R<br>R<br>E<br>N<br>T<br>L<br>Y<br><br>N<br>O<br>T<br><br>A<br>V<br>A<br>I<br>L<br>A<br>B<br>L<br>E |                                 | C<br>U<br>R<br>R<br>E<br>N<br>T<br>L<br>Y<br><br>N<br>O<br>T<br><br>A<br>V<br>A<br>I<br>L<br>A<br>B<br>L<br>E |