

STRONTIUM CHROMATE

SCM

CAUTIONARY RESPONSE INFORMATION

Common Synonyms Chromic acid, strontium salt (1:1) Deep lemon yellow Strontium yellow	Solid powder Yellow Odorless
Sinks and mixes slowly with water.	
<p>Keep people away. Avoid contact with solid and dust. Wear goggles, self-contained breathing apparatus, and rubber overclothing (including gloves). Notify local health and pollution control agencies. Protect water intakes.</p>	
Fire	Not flammable.
Exposure	CALL FOR MEDICAL AID. SOLID OR DUST Irritating to skin, nose, and throat. Harmful if swallowed. Move to fresh air. Flush affected areas with plenty of water. IF IN EYES, hold eyelids open and flush with plenty of water. IF SWALLOWED and victim is CONSCIOUS, have victim drink water or milk and have victim induce vomiting.
Water Pollution	Dangerous to aquatic life in high concentrations. May be dangerous if it enters water intakes. Notify local health and wildlife officials. Notify operators of nearby water intakes.

1. CORRECTIVE RESPONSE ACTIONS Dilute and disperse Stop discharge Contain Collection Systems: Pump; Dredge	2. CHEMICAL DESIGNATIONS 2.1 CG Compatibility Group: Not listed. 2.2 Formula: SrCrO ₄ 2.3 IMO/UN Designation: Not listed 2.4 DOT ID No.: Not listed 2.5 CAS Registry No.: 7789-06-2 2.6 NAERG Guide No.: 171 2.7 Standard Industrial Trade Classification: 52389
3. HEALTH HAZARDS	
<p>3.1 Personal Protective Equipment: Chemical safety goggles. Full-cover work clothes, work gloves, and toxic dust respirator.</p> <p>3.2 Symptoms Following Exposure: INHALATION: Irritating to mucous membranes. SKIN: Repeated skin contact can cause eczematous dermatitis, with edema and ulceration. INGESTION: Dizziness, intense thirst, abdominal pain, vomiting, shock and oliguria or anuria.</p> <p>3.3 Treatment of Exposure: INHALATION: Remove to fresh air. EYES: Irrigate with running water for 15 minutes. Consult a physician. SKIN: Wash thoroughly with soap and water. INGESTION: Induce vomiting, give demulcents and fluids.</p> <p>3.4 TLV-TWA: 0.0005 mg/m³</p> <p>3.5 TLV-STEL: Not listed.</p> <p>3.6 TLV-Ceiling: Not listed.</p> <p>3.7 Toxicity by Ingestion: Grade 3; LD₅₀ = 50 to 500 mg/kg.</p> <p>3.8 Toxicity by Inhalation: Currently not available.</p> <p>3.9 Chronic Toxicity: Carcinogenic.</p> <p>3.10 Vapor (Gas) Irritant Characteristics: Not pertinent</p> <p>3.11 Liquid or Solid Characteristics: No appreciable hazard. Practically harmless to skin (not true for repeated contact, see 5.2).</p> <p>3.12 Odor Threshold: Odorless</p> <p>3.13 IDLH Value: Not listed.</p> <p>3.14 OSHA PEL-TWA: Not listed.</p> <p>3.15 OSHA PEL-STEL: Not listed.</p> <p>3.16 OSHA PEL-Ceiling: 0.1 mg/m³ as CrO₃</p> <p>3.17 EPA AEGL: Not listed</p>	

4. FIRE HAZARDS

- 4.1 **Flash Point:** Not flammable
- 4.2 **Flammable Limits in Air:** Not flammable
- 4.3 **Fire Extinguishing Agents:** Water
- 4.4 **Fire Extinguishing Agents Not to Be Used:** Currently not available
- 4.5 **Special Hazards of Combustion Products:** Currently not available
- 4.6 **Behavior in Fire:** Heat stable
- 4.7 **Auto Ignition Temperature:** Not flammable
- 4.8 **Electrical Hazards:** Currently not available
- 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:** Produces hazardous solution.
- 5.2 **Reactivity with Common Materials:** Avoid contact with water, acids, and bases.
- 5.3 **Stability During Transport:** Stable
- 5.4 **Neutralizing Agents for Acids and Caustics:** Not pertinent
- 5.5 **Polymerization:** Will not occur
- 5.6 **Inhibitor of Polymerization:** Not pertinent

6. WATER POLLUTION

- 6.1 **Aquatic Toxicity:**
For hexavalent Cr 110 to 113 ppm/96-hour/Sunfish/TL_m
135 ppm/96-hour/Sunfish/TL_m/hard water
103 ppm/96-hour/Bluegill/TL_m
213 ppm/48-hour/Bluegill/TL_m
300 ppm/24-hour/Bluegill/TL_m
- 6.2 **Waterfowl Toxicity:** Currently not available
- 6.3 **Biological Oxygen Demand (BOD):** Hexavalent Cr at 100 mg/l lowered the 5-day BOD by 50 percent.
- 6.4 **Food Chain Concentration Potential:** Cr will concentrate. Probable Sr accumulation factor = 150 for goldfish.
- 6.5 **GESAMP Hazard Profile:** Not listed

7. SHIPPING INFORMATION

- 7.1 **Grades of Purity:** Currently not available
- 7.2 **Storage Temperature:** Currently not available
- 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:** 10 pounds
- 8.7 **EPA Pollution Category:** A
- 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:** 203.64
- 9.3 **Boiling Point at 1 atm:** Currently not available
- 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:** 3.895 at 15°C
- 9.8 **Liquid Surface Tension:** Not pertinent
- 9.9 **Liquid Water Interfacial Tension:** Not pertinent
- 9.10 **Vapor (Gas) Specific Gravity:** Not pertinent
- 9.11 **Ratio of Specific Heats of Vapor (Gas):** Not pertinent
- 9.12 **Latent Heat of Vaporization:** Not pertinent
- 9.13 **Heat of Combustion:** Not flammable
- 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 SATURATED LIQUID DENSITY		9.21 LIQUID HEAT CAPACITY		9.22 LIQUID THERMAL CONDUCTIVITY		9.23 LIQUID VISCOSITY	
Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F	Temperature (degrees F)	British thermal unit inch per hour-square foot-F	Temperature (degrees F)	Centipoise
	N O T P E R T I N E N T		N O T P E R T I N E N T		N O T P E R T I N E N T		N O T P E R T I N E N T

9.24 SOLUBILITY IN WATER		9.25 SATURATED VAPOR PRESSURE		9.26 SATURATED VAPOR DENSITY		9.27 IDEAL GAS HEAT CAPACITY	
Temperature (degrees F)	Pounds per 100 pounds of water	Temperature (degrees F)	Pounds per square inch	Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F
60	0.139		N O T		N O T		N O T
70	0.327		P E R T I N E N T		P E R T I N E N T		P E R T I N E N T
80	0.515						
90	0.704						
100	0.892						
110	1.080						
120	1.268						
130	1.456						
140	1.645						
150	1.833						
160	2.021						
170	2.209						
180	2.398						
190	2.586						
200	2.774						
210	2.962						