

POTASSIUM CHROMATE

PCH

CAUTIONARY RESPONSE INFORMATION

Common Synonyms Neutral potassium chromate Potassium chromate (VI)		Solid Bright yellow Odorless
Sinks and mixes with water.		
Keep people away. Avoid contact with solid and dust. Shut off ignition sources and call fire department. Notify local health and pollution control agencies. Protect water intakes.		
Fire	Not flammable. Will increase the intensity of a fire. May cause fire on contact with combustibles. Flood discharge area with water. Cool exposed containers with water.	
Exposure	CALL FOR MEDICAL AID. DUST Irritating to eyes, nose and throat. If inhaled will cause coughing or difficult breathing. If in eyes, hold eyelids open and flush with plenty of water. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen. SOLID POISONOUS IF SWALLOWED. Irritating to skin and eyes. If swallowed will cause nausea, vomiting or loss of consciousness. Remove contaminated clothing and shoes. 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. IF SWALLOWED and victim is UNCONSCIOUS OR HAVING CONVULSIONS, do nothing except keep victim warm.	
Water Pollution	HARMFUL TO AQUATIC LIFE IN VERY LOW 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 Dredge contaminated sediment	2. CHEMICAL DESIGNATIONS 2.1 CG Compatibility Group: Not listed. 2.2 Formula: K_2CrO_4 2.3 IMO/UN Designation: Not listed 2.4 DOT ID No.: Not listed. 2.5 CAS Registry No.: 7789-00-6 2.6 NAERG Guide No.: 171 2.7 Standard Industrial Trade Classification: 52389
3. HEALTH HAZARDS 3.1 Personal Protective Equipment: Bu. of Mines approved filter-type respirator; close-fitting safety goggles; rubber boots and apron; safety hat; face shield 3.2 Symptoms Following Exposure: Inhalation causes local irritation of mucous membranes; continuing nose irritation can result in perforation of nasal septum. Ingestion may cause violent gastroenteritis, circulatory collapse, vertigo, coma, and toxic nephritis; ingestion of excessive quantities can be fatal. Contact with eyes causes severe irritation and conjunctivitis. Repeated or prolonged exposure to dust, mist, or solutions may cause dermatitis; contact with breaks in the skin may cause "chrome sores" appearing as slow-healing, hard-rimmed ulcers which leave the area vulnerable to infection. 3.3 Treatment of Exposure: INHALATION: move to fresh air. INGESTION: give large amount of water; induce vomiting; treat peripheral vascular shock vigorously; get medical attention. EYES: flush with water for at least 15 min.; get medical attention. SKIN: flush with water; if irritation persists, get medical attention. 3.4 TLV-TWA: Not listed. 3.5 TLV-STEL: Not listed. 3.6 TLV-Ceiling: Not listed. 3.7 Toxicity by Ingestion: Grade 3; LD_{50} = 50-500 mg/kg 3.8 Toxicity by Inhalation: Currently not available. 3.9 Chronic Toxicity: Lung cancer may occur. 3.10 Vapor (Gas) Irritant Characteristics: Currently not available 3.11 Liquid or Solid Characteristics: Currently not available 3.12 Odor Threshold: Currently not available 3.13 IDLH Value: Not listed. 3.14 OSHA PEL-TWA: Not listed. 3.15 OSHA PEL-STEL: Not listed. 3.16 OSHA PEL-Ceiling: Not listed. 3.17 EPA AEGL: Not listed	

4. FIRE HAZARDS

- 4.1 **Flash Point:**
Not flammable but may intensify fire.
- 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:** May increase intensity of fire if in contact with combustible materials. Cool containers and spilled material with plenty of water.
- 4.7 **Auto Ignition Temperature:** Not pertinent
- 4.8 **Electrical Hazards:** Not pertinent
- 4.9 **Burning Rate:** Not pertinent
- 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:** In contact with combustible materials may cause fire
- 5.3 **Stability During Transport:** Stable
- 5.4 **Neutralizing Agents for Acids and Caustics:** Not pertinent
- 5.5 **Polymerization:** Not pertinent
- 5.6 **Inhibitor of Polymerization:** Not pertinent

6. WATER POLLUTION

- 6.1 **Aquatic Toxicity:**
45.6 ppm/96 hr/fathead minnow/TL_m/soft water
17.8 ppm"/silver salmon/toxic/salt water *Time period not specified.
- 6.2 **Waterfowl Toxicity:** Currently not available
- 6.3 **Biological Oxygen Demand (BOD):** None
- 6.4 **Food Chain Concentration Potential:**
Plants can absorb compound from water and pass it on up the food chain. Bioconcentrative up to 2,000 fold. Not likely to be a problem in a spill situation.
- 6.5 **GESAMP Hazard Profile:** Not listed

7. SHIPPING INFORMATION

- 7.1 **Grades of Purity:** Reagent, 99%; CP; Technical
- 7.2 **Storage Temperature:** Ambient
- 7.3 **Inert Atmosphere:** No requirement
- 7.4 **Venting:** Open
- 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:** 194.20
- 9.3 **Boiling Point at 1 atm:** Not pertinent (decomposes)
- 9.4 **Freezing Point:** Not pertinent
- 9.5 **Critical Temperature:** Not pertinent
- 9.6 **Critical Pressure:** Not pertinent
- 9.7 **Specific Gravity:** 2.73 at 18°C (solid)
- 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 pertinent
- 9.14 **Heat of Decomposition:** Not pertinent
- 9.15 **Heat of Solution:** Not pertinent
- 9.16 **Heat of Polymerization:** Not pertinent
- 9.17 **Heat of Fusion:** 35.6 cal/g
- 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
34	57.390		N		N		N
36	57.780		O		O		O
38	58.170		T		T		T
40	58.550		P		P		P
42	58.940		E		E		E
44	59.330		R		R		R
46	59.720		T		T		T
48	60.110		I		I		I
50	60.500		N		N		N
52	60.890		E		E		E
54	61.280		N		N		N
56	61.670		T		T		T
58	62.050		E		E		E
60	62.440		N		N		N
62	62.830		T		T		T
64	63.220						
66	63.610						
68	64.000						
70	64.389						
72	64.780						
74	65.169						
76	65.549						
78	65.940						
80	66.330						
82	66.719						
84	67.110						