LITHIUM CHROMATE

LCR

CAUTIONARY RESPONSE INFORMATION

Common Synonyms
Chromic acid, dilithium salt
Chromium lithium oxide
Dilithium chromate

Solid crystalline powder — Yellow

Mixes with water.

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.

Fire

Not flammable.
May cause fires on contact with combustibles.
Flood discharge area with water.

Exposure

CALL FOR MEDICAL AID.
DUST
Irritating to eyes, nose, and throat.
If inhaled, will cause difficult breathing.
Move to fresh air.
If breathing has stopped, give artificial respiration.
If breathing is difficult, give oxygen.

SOLID
Will burn skin and eyes.
If swallowed can cause dizziness, nausea, vomiting or coma.
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.
DO NOT 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

2. CHEMICAL DESIGNATIONS

2.1 CG Compatibility Group: Not listed.
2.2 Formula: $Li_2CrO_4 \cdot 2H_2O$
2.3 IMO/UN Designation: Not listed
2.4 DOT ID No.: Not listed.
2.5 CAS Registry No.: 14307-35-8
2.6 NAERG Guide No.: 171
2.7 Standard Industrial Trade Classification: 52499

3. HEALTH HAZARDS

3.1 Personal Protective Equipment: Approved filter-type respirator, close-fitting safety goggles, laboratory coat.
3.2 Symptoms Following Exposure: INHALATION: Corrosive to skin and mucous membranes causing dermatitis and slow healing ulcers. EYES: Conjunctivitis and lacrimation. INGESTION: Violent gastroenteritis, peripheral vascular collapse, vertigo, muscle cramps, coma, hemorrhagic diathesis, fever, liver damage and renal failure.
3.3 Treatment of Exposure: Call a doctor. INHALATION: Move to fresh air. EYES: Hold lids open and flush immediately with a slow stream of water. Continue for 10 to 15 minutes. SKIN: Wash with large amounts of water then apply a paste of sodium bicarbonate. INGESTION: Drink copious amounts of water. Administer a neutralizer like milk of magnesia, calcium hydroxide, etc. Do not induce vomiting. Call a physician.
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 to 500 mg/kg.
3.8 Toxicity by Inhalation: Currently not available.
3.9 Chronic Toxicity: A recognized carcinogen of the lungs, nasal cavity, and paranasal sinus. Lithium compounds may be teratogenic.
3.10 Vapor (Gas) Irritant Characteristics: Currently not available
3.11 Liquid or Solid Characteristics: Causes smarting of the skin and first-degree burns on short exposure; may cause second-degree burns on long exposure.
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
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: Not pertinent
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 Stoichometric 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: Can oxidize combustibles.
5.3 Stability During Transport: Currently not available
5.4 Neutralizing Agents for Acids and Caustics: Currently not available
5.5 Polymerization: Currently not available
5.6 Inhibitor of Polymerization: Currently not available

6. WATER POLLUTION

6.1 Aquatic Toxicity:
For hexavalent Cr compounds 103 mg/l 96-hour TL_m Bluegill
145 mg/l 24-hour TL_m Bluegill
100 mg/l 24-hour TL_m Trout
110 mg/l 96-hour TL_m Sunfish
6.2 Waterfowl Toxicity: Currently not available
6.3 Biological Oxygen Demand (BOD): Currently not available
6.4 Food Chain Concentration Potential: Cr can be accumulated and concentrated in fish.
6.5 GESAMP Hazard Profile: Not listed

7. SHIPPING INFORMATION

7.1 Grades of Purity: Currently not available
7.2 Storage Temperature: Cool
7.3 Inert Atmosphere: Currently not available
7.4 Venting: Well ventilated
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: Keep Away From Food
8.2 49 CFR Class: 6.1
8.3 49 CFR Package Group: III
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: 165.92
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: Currently not available
9.8 Liquid Surface Tension: Not pertinent
9.9 Liquid Water Interfacial Tension: Not pertinent
9.10 Vapor (Gas) Specific Gravity: 5.72 (calculated)
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: Not pertinent
9.14 Heat of Decomposition: Currently not available
9.15 Heat of Solution: Currently not available
9.16 Heat of Polymerization: Currently not available
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
	NOT PERTINENT		NOT PERTINENT		NOT PERTINENT		NOT PERTINENT

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
68 70 72 74 76 78 80 82 84 86	111.000 109.778 108.556 107.332 106.110 104.889 103.667 102.443 101.221 100.000		CURRENTLY NOT AVAILABLE		CURRENTLY NOT AVAILABLE		CURRENTLY NOT AVAILABLE