

Common Name: **LITHIUM CHROMATE**

Synonyms: Dilithium Chromate; Chromium Lithium Oxide

CAS No: 14307-35-8

Molecular Formula:  $\text{Li}_2\text{CrO}_4$ 

RTK Substance No: 1125

Description: Yellow, odorless powder

### HAZARD DATA

Hazard Rating	Firefighting	Reactivity
<b>4 - Health</b> <b>0 - Fire</b> <b>0 - Reactivity</b> <b>DOT#:</b> UN 3077 <b>ERG Guide #:</b> 171 <b>Hazard Class:</b> 5.1 (Oxidizer)	Extinguish fire using an agent suitable for type of surrounding fire. <b>Lithium Chromate</b> itself does not burn. POISONOUS GASES ARE PRODUCED IN FIRE, including <i>Lithium Oxides and Chromium Oxides</i> . Use water spray to keep fire-exposed containers cool. <b>Lithium Chromate</b> may ignite combustibles (wood, paper and oil).	<b>Lithium Chromate</b> is an OXIDIZER which can react with ORGANICS; COMBUSTIBLES; REDUCING AGENTS (such as LITHIUM, SODIUM, ALUMINUM and their HYDRIDES); and STRONG ACIDS (such as HYDROCHLORIC, SULFURIC and NITRIC). Mixtures of <i>Chromate</i> and ZIRCONIUM can be explosive.

### SPILL/LEAKS

**Isolation Distance:**

Spill: 25 meters (75 feet)

Fire: 800 meters (1/2 mile)

Moisten spilled material first or use a HEPA-filter vacuum for clean-up and deposit into sealed containers.

DO NOT wash into sewer.

May be detrimental to aquatic life.

### PHYSICAL PROPERTIES

<b>Odor Threshold:</b>	Odorless
<b>Flash Point:</b>	Nonflammable
<b>Vapor Density:</b>	5.72 (air = 1)
<b>Specific Gravity:</b>	2.2 (water = 1)
<b>Water Solubility:</b>	Soluble
<b>Melting Point:</b>	166°F (75°C)
<b>Molecular Weight:</b>	130

### EXPOSURE LIMITS

**OSHA:** 0.005 mg/m<sup>3</sup>, 8-hr TWA

**NIOSH:** 0.001 mg/m<sup>3</sup>, 10-hr TWA

**ACGIH:** 0.05 mg/m<sup>3</sup>, 8-hr TWA

**IDLH:** 15 mg/m<sup>3</sup> (as *Chromates*)

All of the above are for *hexavalent Chromium (Cr VI)*

### PROTECTIVE EQUIPMENT

<b>Gloves:</b>	Neoprene and Natural Rubber
<b>Coveralls:</b>	DuPont Tyvek®
<b>Respirator:</b>	>0.001 mg/m <sup>3</sup> - APR with High efficiency filters >0.01 mg/m <sup>3</sup> - Supplied air

### HEALTH EFFECTS

**Eyes:** Severe irritation and burns

**Skin:** Severe irritation and burns

**Inhalation:** Nose, throat and lung irritation with coughing and wheezing  
Nausea, muscle cramps and convulsions

**Chronic:** *Hexavalent Chromium* or *Chromium VI* compounds cause lung cancer in humans

### FIRST AID AND DECONTAMINATION

**Remove** the person from exposure.

**Flush** eyes with large amounts of water for at least 30 minutes. Remove contact lenses if worn. Seek medical attention immediately.

**Quickly** remove contaminated clothing and wash contaminated skin with large amounts of water. Seek medical attention immediately.

**Begin** artificial respiration if breathing has stopped and CPR if necessary.

**Transfer** promptly to a medical facility.