



Common Name: **CALCIUM CHROMATE**

Synonyms: C.I. Pigment Yellow 33; Calcium Chrome Yellow  
 CAS No: 13765-19-0  
 Molecular Formula: CaCrO  
 RTK Substance No: 0315  
 Description: Odorless yellow, crystalline powder

HAZARD DATA

Hazard Rating	Firefighting	Reactivity
<p><b>4 - Health</b></p> <p><b>0 - Fire</b></p> <p><b>0 - Reactivity</b></p> <p><b>DOT#:</b> UN 3077</p> <p><b>ERG Guide #:</b> 171</p> <p><b>Hazard Class:</b> 9 (Environmentally Hazardous Material)</p>	<p>Extinguish fire using an agent suitable for type of surrounding fire. <b>Calcium Chromate</b> itself does not burn.</p> <p><b>Calcium Chromate</b> is not combustible but it is a <b>STRONG OXIDIZER</b> which enhances the combustion of other substances.</p> <p><b>POISONOUS GASES ARE PRODUCED IN FIRE</b>, including <i>Chromium fumes</i>.</p> <p>Use water spray to keep fire-exposed containers cool.</p> <p><b>Calcium Chromate</b> may ignite combustibles (wood, paper and oil).</p>	<p><b>Calcium Chromate</b> reacts explosively with HYDRAZINE.</p> <p><b>Calcium Chromate</b> is not compatible with <b>STRONG ACIDS</b> (such as HYDROCHLORIC, SULFURIC and NITRIC); <b>ORGANIC MATTER</b>; <b>ALUMINUM</b>; <b>SULFUR</b>; <b>BORON</b>; and <b>ETHANOL</b>.</p> <p>Store in tightly closed containers in a cool, well-ventilated area away from <b>PLASTICS</b> and <b>COMBUSTIBLES</b>.</p>

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.

PHYSICAL PROPERTIES

**Odor Threshold:** Odorless  
**Flash Point:** Nonflammable  
**Vapor Density:** 2.89 (air = 1)  
**Vapor Pressure:** <1 mm Hg at 68°F (20°C)  
**Specific Gravity:** 2.9 (water = 1)  
**Water Solubility:** Slightly soluble  
**Melting Point:** 392°F (200°C) (dihydrate)  
**Molecular Weight:** 156.1

EXPOSURE LIMITS

**OSHA:** 0.1 mg/m<sup>3</sup>, Ceiling (as *Chromates*)  
**NIOSH:** 0.001 mg/m<sup>3</sup>, 10-hr TWA (as *Chromates*)  
**ACGIH:** 0.001 mg/m<sup>3</sup>, 8-hr TWA  
**IDLH:** 15 mg/m<sup>3</sup> (as *Chromates*)

PROTECTIVE EQUIPMENT

**Gloves:** Butyl, Nitrile, Silver Shield®/4H® and Viton  
**Coveralls:** Tyvek®  
**Respirator:** >0.001 mg/m<sup>3</sup> - APR with High efficiency filter  
 >0.01 mg/m<sup>3</sup> - Supplied air

HEALTH EFFECTS

**Eyes:** Irritation and burns  
**Skin:** Irritation and burns, itching and ulcers  
**Inhalation:** Nose and throat irritation with coughing and wheezing  
**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.  
**Quickly** remove contaminated clothing. Immediately wash contaminated skin with large amounts of soap and water.  
**Begin** artificial respiration if breathing has stopped and CPR if necessary.  
**Transfer** promptly to a medical facility.