



LTS Research Laboratories, Inc.  
Safety Data Sheet  
Calcium Chromate

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1. Product and Company Identification

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Trade Name: Calcium Chromate  
Chemical Formula:  $\text{CaCrO}_4$   
Recommended Use: Scientific research and development

Manufacturer/Supplier: LTS Research Laboratories, Inc.  
Street: 37 Ramland Road  
City: Orangeburg  
State: New York  
Zip Code: 10962  
Country: USA  
Tel #: 855-587-2436 / 855-lts-chem

24-Hour Emergency Contact: 800-424-9300 (US & Canada)  
+1-703-527-3887 (International)

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2. Hazards Identification

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Signal Word:

Danger



Hazard Statements:

H272: May intensify a fire; oxidizer.  
H302: Harmful if swallowed.  
H350: May cause cancer.  
H410: Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

P201: Obtain special instructions before use.  
P202: Do not handle until all safety precautions have been read and understood.  
P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking  
P220: Keep/Store away from clothing/.../combustible materials  
P221: Take any precaution to avoid mixing with combustibles  
P264: Wash skin thoroughly after handling.  
P270: Do not eat, drink or smoke when using this product.  
P273: Avoid release to the environment.  
P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P301+P312+P330: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.  
P308+P313: IF exposed or concerned: Get medical advice/ attention.  
P391: Collect spillage.  
P405: Store locked up.  
P501: Dispose of contents/ container to an approved waste disposal plant.

HMIS Health Ratings (0-4):

Health: 2  
Flammability: 0  
Physical: 2

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### 3. Composition

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|   |                        |
|---|------------------------|
| Chemical Family:                        | Nonmetal               |
| Additional Names:                       | Calcium Chromium oxide |
| Calcium Chromate (CaCrO <sub>4</sub> ): |                        |
| Percentage:                             | 100 wt%                |
| CAS #:                                  | 13765-19-0             |
| EC #:                                   | 237-366-8              |

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### 4. First Aid Procedures

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|                     |   |
|---------------------|---|
| General Treatment:  | Seek medical attention if symptoms persist.   |
| Special Treatment:  | None  |
| Important Symptoms: | None  |
| Inhalation:         | Remove victim to fresh air. Supply oxygen if breathing is difficult. Keep patient warm. Seek immediate medical attention.                                       |
| Ingestion:          | Seek immediate medical attention.   |
| Skin:               | Immediately wash affected area with mild soap and water. Remove any contaminated clothing. Seek immediate medical attention.                                    |
| Eyes:               | Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek immediate medical attention. |

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### 5. Firefighting Measures

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|                                |   |
|--------------------------------|---|
| Flammability:                  | Non-flammable, except as powder   |
| Extinguishing Media:           | No special restrictions – use suitable extinguishing agent for surrounding material and type of fire.   |
| Spec. Fire Fighting Procedure: | Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products. |

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### 6. Accidental Release Measures

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|                                  |   |
|----------------------------------|---|
| If Material Is Released/Spilled: | Wear appropriate respiratory and protective equipment specified in special protection information. Keep unprotected persons away. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Take care not to raise dust. |
| Environmental Precautions:       | Isolate runoff to prevent environmental pollution.  |

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## 7. Handling and Storage

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|                            |  |
|----------------------------|--|
| Handling Conditions:       | Avoid contact with skin and eyes. Wash thoroughly after handling. Open and handle container with care.   |
| Storage Conditions:        | Store in a cool dry place in a tightly sealed container. Store away from flammable substances, reducing agents, organic materials, metal powders, oxidizing agents. This substance is an oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition. Substance/product can reduce the ignition temperature of flammable substances. Store apart from materials and conditions listed in section 10. |
| Work/Hygienic Maintenance: | Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.   |
| Ventilation:               | Provide sufficient ventilation to maintain concentration at or below threshold limit.  |

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## 8. Exposure Controls and Personal Protection

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|                              |   |
|------------------------------|---|
| Permissible Exposure Limits: | 0.005 mg/m <sup>3</sup> as Cr, long-term value  |
| Threshold Limit Value:       | 0.01 mg/m <sup>3</sup> as Cr, long-term value   |
| Special Equipment:           | Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute. |
| Respiratory Protection:      | Dust Respirator   |
| Protective Gloves:           | Rubber gloves   |
| Eye Protection:              | Safety glasses or goggles   |
| Body Protection:             | Protective work clothing. Wear close-toed shoes and long sleeves/pants.   |

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## 9. Physical and Chemical Characteristics

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|                           |  |
|---------------------------|--|
| Color                     | Yellow   |
| Form:                     | Powder, Granules, Pellets, Sputtering target, Custom parts |
| Odor:                     | N/A  |
| Water Solubility:         | 163 g/L  |
| Boiling Point:            | N/A  |
| Melting Point:            | N/A  |
| Flash Point:              | N/A  |
| Autoignition Temperature: | N/A  |
| Density:                  | 3.12 g/cc  |
| Molecular weight:         | 156.07 g/mol   |

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## 10. Reactivity

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|                                   |  |
|-----------------------------------|--|
| Stability:                        | Stable under recommended storage conditions  |
| Reacts With:                      | Oxidizing agents, reducing agents, flammable substances, organic materials, metal powders, azides, aluminum, hydrogen peroxide, hydrazine, magnesium |
| Incompatible Conditions:          | None   |
| Hazardous Decomposition Products: | Metal oxide fume, calcium oxide, chromium oxide  |

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## 11. Toxicological Information

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### Potential Health Effects:

|             |                      |
|-------------|----------------------|
| Eyes:       | May cause irritation |
| Skin:       | May cause irritation |
| Ingestion:  | Harmful if swallowed |
| Inhalation: | May cause irritation |
| Chronic:    | N/A                  |

### Signs & Symptoms:

Exposure to chromate salts has been reported to produce skin and nasal ulcerations with continued exposure leading to perforation of the nasal septa.

### Aggravated Medical Conditions:

N/A

### Median Lethal Dose:

327 mg/kg for rat by mouth

### Carcinogen:

May cause cancer  
IARC-1: Carcinogenic to humans: sufficient evidence of carcinogenicity  
ACGIH A2: Suspected human carcinogen: Agent is carcinogenic in experimental animals at dose levels, by route(s) of administration, at site(s), of histologic type(s), or by mechanism(s) considered relevant to worker exposure. Available epidemiologic studies are conflicting or insufficient to confirm an increased risk of cancer in exposed humans.  
NTP-K: Known to be carcinogenic: sufficient evidence from human studies.  
OSHA: OSHA specifically regulated carcinogen (calcium chromate)

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## 12. Ecological Information

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### Aquatic Toxicity:

N/A

### Persistent Bioaccumulation Toxicity:

N/A

### Very Persistent, Very Bioaccumulative:

N/A

### Notes:

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
Very toxic to aquatic life with long lasting effects.  
Do not allow product to reach ground water, water course or sewage system, even in small quantities.  
Danger to drinking water if even small quantities leak into the ground.  
Poisonous for fish and plankton in water bodies.  
Avoid transfer into the environment.

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## 13. Disposal Considerations

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Dispose of in accordance with local, state, national, and international regulations.

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#### 14. Transportation Data

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Hazardous: Hazardous as powder only.



Hazard Class: 5.1 Oxidizing solid  
Secondary Class: 6.1 Toxic substance  
Packing Group: III  
UN Number: UN3087  
Proper Shipping Name: Oxidizing solid, toxic, n.o.s. (Calcium chromate)

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#### 15. Regulatory Information

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Sec 302 Extremely Hazardous: No  
Sec 304 Reportable Quantities: 10 lbs  
Sec 313 Toxic Chemicals: Yes

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#### 16. Other Information

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This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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