Material Safety Data Sheet
Potassium dichromate

Section 1 - Chemical Product and Company Identification

MSDS Name: Potassium dichromate
Catalog Numbers: LC18940
Synonyms: Potassium dichromate, oxidimetric standard
Company Identification: LabChem, Inc.
200 William Pitt Way
Pittsburgh, PA 15238
Company Phone Number: (412) 826-5230
Emergency Phone Number: (800) 424-9300
CHEMTREC Phone Number: (800) 424-9300

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name:</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>7778-50-9</td>
<td>Potassium dichromate</td>
<td>100</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

Emergency Overview

**Appearance:** Orange Crystals

**Danger!** May cause eye and skin irritation. Cancer Hazard.

**Target Organs:** Blood, kidneys, liver, lungs, teeth.

Potential Health Effects

Eye:
- May cause eye irritation.

Skin:
- May cause skin irritation.

Ingestion:
- May cause irritation of the digestive tract.

Inhalation:
- May cause respiratory tract irritation.

Chronic:
- May cause dermatitis, conjunctivitis, digestive and respiratory tract irritation. May cause cancer.
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Section 4 - First Aid Measures

**Eyes:**
Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids until no evidence of chemical remains. Get medical aid at once.

**Skin:**
Get medical aid. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Remove contaminated clothing and shoes.

**Ingestion:**
Get medical aid at once. If victim is conscious, give 2-4 glasses of water.

**Inhalation:**
Give artificial respiration if necessary. Get medical aid. Keep victim warm, at rest. Move victim to fresh air.

**Notes to Physician:**
Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

**General Information:**
Oxidizer. Greatly increases the burning rate of combustible materials. Negligible fire and explosion hazard when exposed to heat or flame. Move container if possible, avoid breathing vapors or dust.

**Extinguishing Media:**
For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

**Autoignition Temperature:**
No information found.

**Flash Point:**
No information found.

**NFPA Rating:**
CAS#  7778-50-9: Not published.

**Explosion Limits:**
Lower: Upper:

Section 6 - Accidental Release Measures

**General Information:**
Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:**
Absorb spills with absorbent (vermiculite, sand, fuller's earth) and place in plastic bags for later disposal. Area may be washed down with water.

Section 7 - Handling and Storage

**Handling:**
Wash thoroughly after handling. Avoid breathing dust, vapor, mist, or gas.
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Storage:
Store capped at room temperature. Protect from heat and incompatibles.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:
Provide local exhaust or general dilution ventilation.

Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium dichromate</td>
<td>None of the components</td>
<td>None of the components</td>
<td>None of the components</td>
</tr>
<tr>
<td></td>
<td>are on this list.</td>
<td>are on this list.</td>
<td>are on this list.</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs:

Personnel Protective Equipment

Eyes:
Do not wear contact lenses when working with chemicals. An eye wash fountain should be available in the immediate work area. Wear splash-proof safety goggles.

Skin:
Wear appropriate protective gloves to prevent skin exposure.

Clothing:
Wear appropriate protective clothing to prevent skin exposure.

Respirators:
Not required for normal use. Firefighting— any self-contained breathing apparatus with full facepiece operated in pressure-demand mode.

Section 9 - Physical and Chemical Properties

Physical State: Crystals.
Color: Orange
Odor: Odorless
pH: 4.0 (1% solution)
Vapor Pressure: No information found.
Vapor Density: No information found.
Evaporation Rate: No information found.
Viscosity: No information found.
Boiling Point: 500°C
Freezing/Melting Point: 398°C
Decomposition Temperature: No information found.
Solubility in water: Soluble.
Specific Gravity/Density: 2.676
Molecular Formula: K₂Cr₂O₇
Molecular Weight: 294.18
Section 10 - Stability and Reactivity

Chemical Stability:
Stable under normal temperatures and pressures.

Conditions to Avoid:
Incompatible materials.

Incompatibilities with Other Materials:
Oxidizable materials, organic matter, hydrazine, iron.

Hazardous Decomposition Products:
Oxides of potassium, chromium dioxide.

Hazardous Polymerization:
Not known to occur.

Section 11 - Toxicological Information

RTECS:
CAS# 7778-50-9: HX7680000.

LD50/LC50:
CAS# 7778-50-9:
Oral, mouse: LD50 = 190 mg/kg. Oral, rat: LD50 = 25 mg/kg.

Carcinogenicity:
CAS# 7778-50-9: IARC Group I.

Epidemiology:

Teratogenicity:
TDLo = 1g/kg oral-rat (female 0-19 days after conception) specific developmental abnormalities musculoskeletal system, TDLo = 1g/kg (female 20 days pre-mating) effects on embryo.

Reproductive:
TDLo = 525 mg/kg oral-rat (female 21 days after conception) Fertility – pre-implantation mortality.

Mutagenicity:
Micronucleus test: Human, lymphocyte = 300ug/L; DNA damage: Human fibroblast = 500 nmol/L.

Neurotoxicity:

Section 12 - Ecological Information

No information found.

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.
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Section 14 - Transport Information

US DOT
Shipping Name: Oxidizing solid, n.o.s.
(Potassium dichromate)
Hazard Class: 5.1
UN Number: UN1479
Packing Group: II

Section 15 - Regulatory Information

US Federal
TSCA:
   CAS# 7778-50-9 is listed on the TSCA Inventory.
SARA Reportable Quantities (RQ):
   CAS# 7778-50-9: final RQ = 10 pounds (4.54 kg)
CERCLA/SARA Section 313:
   None of the components are on this list.
OSHA - Highly Hazardous:
   None of the components are on this list.

US State
State Right to Know:
   Potassium dichromate can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Massachusetts.

California Regulations:

European/International Regulations
Canadian DSL/NDSL:
   CAS# 7778-50-9 is listed on Canada's DSL List.
Canada Ingredient Disclosure List:
   CAS# 7778-50-9 is listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: November 22, 2004
Revision Date: October 22, 2008

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