Material Safety Data Sheet
Sodium chromate

ACC# 21130

Section 1 - Chemical Product and Company Identification

MSDS Name: Sodium chromate
Catalog Numbers: AC377870000, AC377870050, AC377870250, AC377871000, 61139-5000, S272-250, S272-500
Synonyms: Chromic acid, disodium salt.
Company Identification:
  Fisher Scientific
  1 Reagent Lane
  Fair Lawn, NJ 07410
For information, call: 201-796-7100
Emergency Number: 201-796-7100
For CHEMTREC assistance, call: 800-424-9300
For International CHEMTREC assistance, call: 703-527-3887

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>7775-11-3</td>
<td>Sodium chromate</td>
<td>100</td>
<td>231-889-5</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: yellow solid.
Danger! Toxic if swallowed. Danger of serious damage to health by prolonged exposure through inhalation. May be fatal if inhaled. Causes burns by all exposure routes. Strong oxidizer. Contact with other material may cause a fire. May impair fertility. May cause harm to the unborn child. Harmful if absorbed through the skin. Cancer hazard. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. May cause heritable genetic damage. May cause sensitization by inhalation and by skin contact. Hygroscopic (absorbs moisture from the air).
Target Organs: Blood, kidneys, liver, respiratory system, gastrointestinal system, eyes, skin.

Potential Health Effects
Eye: Causes eye burns.
Skin: Harmful if absorbed through the skin. Causes skin burns. May cause sensitization by skin contact.
Ingestion: Causes gastrointestinal tract burns. Toxic if swallowed.
Inhalation: May be fatal if inhaled. Causes chemical burns to the respiratory tract. May cause respiratory sensitization.
**Chronic:** May cause cancer in humans. Repeated or prolonged exposure may cause allergic reactions in sensitive individuals. Possible risk of harm to the unborn child. May impair fertility.

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**Section 4 - First Aid Measures**

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

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

**Ingestion:** Do not induce vomiting. Get medical aid immediately. Call a poison control center.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

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

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**Section 5 - Fire Fighting Measures**

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

**Extinguishing Media:** Use foam, dry chemical, or carbon dioxide.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 4; Flammability: 1; Instability: 2; Special Hazard: OX

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**Section 6 - Accidental Release Measures**

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

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Avoid generating dusty conditions. Provide ventilation. Keep combustibles (wood, paper, oil, etc.,) away from spilled material. Evacuate unnecessary personnel. Do not let this chemical enter the environment.

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**Section 7 - Handling and Storage**

**Handling:** Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Avoid contact with clothing and other combustible materials. Do not ingest or inhale. Use only in a chemical fume hood.

**Storage:** Do not store near combustible materials. Store in a cool, dry place. Store in a tightly closed container.
Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

**Exposure Limits**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium chromate</td>
<td>0.05 mg/m3 TWA (as Cr) (listed under Chromium (VI) compounds - water soluble).</td>
<td>0.001 mg/m3 TWA (as Cr) (listed under Chromates). 15 mg/m3 IDLH (as Cr(VI)) (listed under Chromates).</td>
<td>5 æg/m3 TWA (listed under Chromium (VI) compounds). 0.1 mg/m3 Ceiling (as CrO3, applies to any operations or sectors for which the H, exavalent Chromium standard [29 CFR 1910.1026] is stayed or is otherwise not in effect) (listed under Chromates). 2.5 æg/m3 Action Level (as Cr); 5 æg/m3 TWA (as Cr, Cancer hazard - see 29 CFR 1910.1026) (listed under Chromium (VI) compounds).</td>
</tr>
</tbody>
</table>

**OSHA Vacated PELs:** Sodium chromate: No OSHA Vacated PELs are listed for this chemical.

**Personal Protective Equipment**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

**Physical State:** Solid

**Appearance:** yellow

**Odor:** odorless

**pH:** 9.2 (100 g/L aq. sol.)

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Freezing/Melting Point:** 792 deg C

**Decomposition Temperature:** Not available.

**Solubility:** 530 g/L (20°C)
Specific Gravity/Density: Not available.
Molecular Formula: CrNa2O4
Molecular Weight: 161.97

Section 10 - Stability and Reactivity

Chemical Stability: Hygroscopic: absorbs moisture or water from the air.
Conditions to Avoid: Incompatible materials, dust generation, combustible materials, exposure to moist air or water.
Incompatibilities with Other Materials: Strong oxidizing agents, strong reducing agents.
Hazardous Decomposition Products: Toxic fumes of sodium oxide, toxic chromium oxide fumes.
Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#: 
CAS# 7775-11-3: GB2955000
LD50/LC50:
CAS# 7775-11-3:
  Oral, rat: LD50 = 136 mg/kg;
  Dermal LDLo guinea pig: 206 mg/kg.
Carcinogenicity:
CAS# 7775-11-3:
  - ACGIH: A1 - Confirmed Human Carcinogen (listed as 'Chromium (VI) compounds- water soluble').
  - California: carcinogen, initial date 2/27/87 (listed as Chromium (VI) compounds).
  - NTP: Known carcinogen (listed as Chromium (VI) compounds).
  - IARC: Group 1 carcinogen

Epidemiology: IARC Group 1: Proven human carcinogenic substance.
Teratogenicity: No information found.
Reproductive Effects: Adverse reproductive effects have occurred in experimental animals.
Mutagenicity: Mutagenic effects have occurred in humans.
Neurotoxicity: No information reported
Other Studies:

Section 12 - Ecological Information

Ecotoxicity: No data available. No information available.
Environmental: No information available.
Physical: No information available.
Other: Do not empty into drains.
Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

Section 14 - Transport Information

<table>
<thead>
<tr>
<th></th>
<th>US DOT</th>
<th>Canada TDG</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shipping Name:</strong></td>
<td>OXIDIZING SOLID, TOXIC, N.O.S.</td>
<td>OXIDIZING SOLID, TOXIC, N.O.S.</td>
</tr>
<tr>
<td><strong>Hazard Class:</strong></td>
<td>5.1</td>
<td>5.1</td>
</tr>
<tr>
<td><strong>UN Number:</strong></td>
<td>UN3087</td>
<td>UN3087</td>
</tr>
<tr>
<td><strong>Packing Group:</strong></td>
<td>III</td>
<td>III</td>
</tr>
</tbody>
</table>

Section 15 - Regulatory Information

**US FEDERAL**

**TSCA**
- CAS# 7775-11-3 is listed on the TSCA inventory.

**Health & Safety Reporting List**
- None of the chemicals are on the Health & Safety Reporting List.

**Chemical Test Rules**
- None of the chemicals in this product are under a Chemical Test Rule.

**Section 12b**
- CAS# 7775-11-3: Section 6, 0.1 % de minimus concentration [see 40 CFR 749.68]

**TSCA Significant New Use Rule**
- None of the chemicals in this material have a SNUR under TSCA.

**CERCLA Hazardous Substances and corresponding RQs**
- CAS# 7775-11-3: 10 lb final RQ; 4.54 kg final RQ

**SARA Section 302 Extremely Hazardous Substances**
- None of the chemicals in this product have a TPQ.

**SARA Codes**
- CAS # 7775-11-3: immediate, delayed.

**Section 313**
- This material contains Sodium chromate (listed as Chromium (VI) compounds), 100%, (CAS# 7775-11-3) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

**Clean Air Act:**
- This material does not contain any hazardous air pollutants.
- This material does not contain any Class 1 Ozone depletors.
- This material does not contain any Class 2 Ozone depletors.

**Clean Water Act:**
- CAS# 7775-11-3 is listed as a Hazardous Substance under the CWA.
- None of the chemicals in this product are listed as Priority Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:**
None of the chemicals in this product are considered highly hazardous by OSHA.

**STATE**
- CAS# 7775-11-3 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, (listed as Chromium (VI) compounds- water soluble), Minnesota, (listed as Chromium (VI) compounds), Massachusetts.

**California Prop 65**
The following statement(s) is(are) made in order to comply with the California Safe Drinking Water Act:
WARNING: This product contains Sodium chromate, listed as `Chromium (VI) compounds', a chemical known to the state of California to cause cancer.
California No Significant Risk Level: None of the chemicals in this product are listed.

**European/International Regulations**

**European Labeling in Accordance with EC Directives**

**Hazard Symbols:**
- T+ N

**Risk Phrases:**
- R 21 Harmful in contact with skin.
- R 25 Toxic if swallowed.
- R 26 Very toxic by inhalation.
- R 34 Causes burns.
- R 42/43 May cause sensitization by inhalation and skin contact.
- R 45 May cause cancer.
- R 46 May cause heritable genetic damage.
- R 48/23 Toxic: danger of serious damage to health by prolonged exposure through inhalation.
- R 60 May impair fertility.
- R 61 May cause harm to the unborn child.
- R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety Phrases:**
- S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- S 53 Avoid exposure - obtain special instructions before use.
- S 60 This material and its container must be disposed of as hazardous waste.
- S 61 Avoid release to the environment. Refer to special instructions /safety data sheets.

**WGK (Water Danger/Protection)**
- CAS# 7775-11-3: 3

**Canada - DSL/NDSL**
- CAS# 7775-11-3 is listed on Canada's DSL List.

**Canada - WHMIS**
- This product has a WHMIS classification of D1A, D2A, D2B, E.
- This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**
- CAS# 7775-11-3 is listed on the Canadian Ingredient Disclosure List.
Section 16 - Additional Information

**MSDS Creation Date:** 2/23/1998  
**Revision #12 Date:** 5/11/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.