1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Sodium chromate
Product Number : 307831
Brand : Aldrich
Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO  63103
USA
Telephone : +18003255832
Fax : +18003255052
Emergency Phone # : (314) 776-6555

2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards
Carcinogen, Target Organ Effect, Highly toxic by inhalation, Toxic by ingestion, Harmful by skin absorption., Respiratory sensitiser, Corrosive, Reproductive hazard

Target Organs
Lungs, Kidney

GHS Label elements, including precautionary statements

Pictogram

Signal word Danger

Hazard statement(s)
H301 Toxic if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H330 Fatal if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H340 May cause genetic defects.
H345 May cause cancer.
H360 May damage fertility or the unborn child.
H372 Causes damage to organs through prolonged or repeated exposure if inhaled.
H400 Very toxic to aquatic life.

Precautionary statement(s)
P201 Obtain special instructions before use.
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P284 Wear respiratory protection.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/ physician.

HMIS Classification
Health hazard: 3
Chronic Health Hazard: *
Flammability: 0
Physical hazards: 0

NFPA Rating
Health hazard: 4
Fire: 0
Reactivity Hazard: 0

Potential Health Effects
- **Inhalation**: May be fatal if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
- **Skin**: Harmful if absorbed through skin. Causes skin burns. May be fatal if absorbed through skin.
- **Eyes**: Causes eye burns.
- **Ingestion**: Toxic if swallowed. Causes burns.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Formula</th>
<th>CrNa₂O₄</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molecular Weight</td>
<td>161.97 g/mol</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Index-No.</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>7775-11-3</td>
<td>231-889-5</td>
<td>024-018-00-3</td>
<td>-</td>
</tr>
</tbody>
</table>

### 4. FIRST AID MEASURES

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.

**In case of skin contact**
Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Continue rinsing eyes during transport to hospital. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment for fire-fighters**
Wear self contained breathing apparatus for fire fighting if necessary.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions**
Wear respiratory protection. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

**Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**Methods and materials for containment and cleaning up**
Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.
7. HANDLING AND STORAGE

Precautions for safe handling
Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value</th>
<th>Control parameters</th>
<th>Update</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium chromate</td>
<td>7775-11-3</td>
<td>TWA</td>
<td>0.005 mg/m³</td>
<td>2006-11-27</td>
<td>USA, Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants</td>
</tr>
<tr>
<td>Sodium chromate</td>
<td></td>
<td>CEIL</td>
<td>0.001 mg/m³</td>
<td>2006-11-27</td>
<td>USA, Occupational Exposure Limits (OSHA) - Table Z2</td>
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<tr>
<td>Sodium chromate</td>
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<td>CEIL</td>
<td>0.1 mg/m³</td>
<td>1989-03-01</td>
<td>USA, OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000</td>
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<td>Sodium chromate</td>
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<td>TWA</td>
<td>0.05 mg/m³</td>
<td>1994-09-01</td>
<td>USA, ACGIH Threshold Limit Values (TLV)</td>
</tr>
<tr>
<td>Sodium chromate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Confirmed human carcinogen: The agent is carcinogenic to humans based on the weight of evidence from epidemiologic studies. NOC = not otherwise classified. 1994-1995 Adoption</td>
</tr>
<tr>
<td>Sodium chromate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Substances for which there is a Biological Exposure Index or Indices (see BEI® section) Substances for which the TLV is higher than the OSHA Permissible Exposure Limit (PEL) and/or the NIOSH Recommended Exposure Limit (REL). See CFR 58(124) :36338-33351, June 30, 1993, for revised OSHA PEL. Substance identified by other sources as a suspected or confirmed human carcinogen. Refers to Appendix A -- Carcinogens.</td>
</tr>
<tr>
<td>Sodium chromate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Substance listed; for more information see OSHA document 1910.1026</td>
</tr>
<tr>
<td>Sodium chromate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>See 1910.1026. See Table Z-2 for the exposure limit for any operations or sectors where the exposure limit in 1910.1026 is stayed or are otherwise not in effect.</td>
</tr>
</tbody>
</table>

Personal protective equipment

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection
Handle with gloves.

Eye protection
Face shield and safety glasses
Skin and body protection
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Form solid
Colour yellow

Safety data
pH no data available
Melting point 792 °C (1,458 °F)
Boiling point no data available
Flash point not applicable
Ignition temperature no data available
Lower explosion limit no data available
Upper explosion limit no data available
Water solubility no data available

10. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Conditions to avoid
no data available

Materials to avoid
Strong reducing agents

Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Sodium oxides, Chromium oxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity
LD50 Oral - rat - 52 mg/kg
LC50 Inhalation - rat - 4 h - 100 mg/m3
LD50 Dermal - rabbit - 1,600 mg/kg

Skin corrosion/irritation
no data available

Serious eye damage/eye irritation
no data available

Respiratory or skin sensitization
May cause allergic respiratory reaction.

Germ cell mutagenicity
May alter genetic material.
In vivo tests showed mutagenic effects

Carcinogenicity
This is or contains a component that has been reported to be carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification.

Possible human carcinogen
IARC: 1 - Group 1: Carcinogenic to humans (Sodium chromate)
NTP: Known to be human carcinogen (Sodium chromate)
OSHA: 1910.1026 (Sodium chromate)

**Reproductive toxicity**

Presumed human reproductive toxicant
May cause reproductive disorders.

**Specific target organ toxicity - single exposure (Globally Harmonized System)**
no data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**
Inhalation - Causes damage to organs through prolonged or repeated exposure.

**Aspiration hazard**
no data available

**Potential health effects**

**Inhalation**
May be fatal if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

**Ingestion**
Toxic if swallowed. Causes burns.

**Skin**
Harmful if absorbed through skin. Causes skin burns. May be fatal if absorbed through skin.

**Eyes**
Causes eye burns.

**Additional Information**
RTECS: GB2955000

12. ECOLOGICAL INFORMATION

**Toxicity**

Toxicity to fish 
LC50 - Pimephales promelas (fathead minnow) - 17.6 mg/l - 96.0 h

Toxicity to daphnia and other aquatic invertebrates.

EC50 - Daphnia magna (Water flea) - 0.021 mg/l - 48 h

**Persistence and degradability**
no data available

**Bioaccumulative potential**
no data available

**Mobility in soil**
no data available

**PBT and vPvB assessment**
no data available

**Other adverse effects**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

**Product**
Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

**DOT (US)**
- UN-Number: 3288
- Class: 6.1
- Packing group: II
- Proper shipping name: Toxic solid, inorganic, n.o.s. (Sodium chromate)
- Reportable Quantity (RQ): 10 lbs
- Marine pollutant: No
- Poison Inhalation Hazard: No

**IMDG**
- UN-Number: 3288
- Class: 6.1
- Packing group: II
- EMS-No: F-A, S-A
- Proper shipping name: TOXIC SOLID, INORGANIC, N.O.S. (Sodium chromate)
- Marine pollutant: No

**IATA**
- UN-Number: 3288
- Class: 6.1
- Packing group: II
- Proper shipping name: Toxic solid, inorganic, n.o.s. (Sodium chromate)

15. REGULATORY INFORMATION

**OSHA Hazards**
- Carcinogen, Target Organ Effect, Highly toxic by inhalation, Toxic by ingestion, Harmful by skin absorption., Respiratory sensitiser, Corrosive, Reproductive hazard

**DSL Status**
- All components of this product are on the Canadian DSL list.

**SARA 302 Components**
- SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

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**SARA 311/312 Hazards**
- Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

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**Pennsylvania Right To Know Components**

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**New Jersey Right To Know Components**

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**California Prop. 65 Components**

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16. OTHER INFORMATION

Further information
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