#### Section 1 Chemical Product and Company Information



CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300 For laboratory use only. Not for drug, food or household use.

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Product SODIUM DICHROMATE
Synonyms Sodium Bichromate

Section 2 Hazards Identification

Signal word: DANGER

Pictograms: GHS03 / GHS05 / GHS06 / GHS08 / GHS09 Target organs: Kidneys, Heart, Respiratory system



#### **GHS Classification:**

Oxidizing solid (Category 2)
Acute toxicity, dermal (Category 4\*)
Skin sensitizer (Category 1)
Respiratory sensitizer (Category 1)
Carcinogenicity (Category 1B)
STOT - RE (Category 1)
Aquatic toxicity, chronic (Category 1)

Acute toxicity, oral (Category 3\*)
Skin corrosion (Category 1B)
Acute toxicity, inhalation (Category 2\*)
Mutagenicity (Category 1B)
Reproductive (Category 1B)
Aquatic toxicity, acute (Category 1)

#### GHS Label information: Hazard statement:

H272: May intensify fire; oxidizer.

H301: Toxic if swallowed.

H312: Harmful in contact with skin.

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H330: Fatal if inhaled.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H340: May cause genetic defects.

H350: May cause cancer.

H360FD: May damage fertility. May damage the unborn child.

H372\*\*: Causes damage to organs through prolonged or repeated exposure.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

#### Precautionary statement:

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 away from clothing/incompatible/combustible materials.

P221: Take any precaution to avoid mixing with combustibles and incompatible materials.

P260: Do not breathe dust.

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P271: Use only outdoors or in a well-ventilated area.

P272: Contaminated work clothing should not be allowed out of the workplace.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P284: Wear respiratory protection.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P310: Immediately call a POISON CENTER or doctor.

P302+P352: IF ON SKIN: Wash with plenty of water and soap.

P312: Call a POISON CENTER or doctor if you feel unwell.

P362+P364: Take off contaminated clothing and wash it before reuse.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P310: Immediately call a POISON CENTER or doctor.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P370+P378: In case of fire: Use dry chemical, CO<sub>2</sub> or water spray to extinguish.

P391: Collect spillage.

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

P501: Dispose of contents/container to a licensed chemical disposal agency in

accordance with local/regional/national regulations.

Ca Prop 65: This chemical is known to the State of California to cause cancer or reproductive toxicity (Chromium, hexavalent compounds, cancer and developmental).

Section 3 Composition / Information on Ingredients							
Chemical Name	CAS#	%	EINECS				
Sodium dichromate, dihydrate	7789-12-0	100%	234-190-3				

# Section 4 First Aid Measures

**INGESTION:** TOXIC IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: FATAL IF INHALED. MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR BREATHING DIFFICULTIES IF INHALED. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** CAUSES EYE DAMAGE. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** HARMFUL IN CONTACT WITH SKIN. CAUSES SEVERE SKIN BURNS. MAY CAUSE AN ALLERGIC SKIN REACTION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

#### Section 5 Fire Fighting Measures

Extinguishing Media: Dry chemical, CO<sub>2</sub> or water spray.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep

fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

# Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Recover for reuse if not contaminated. Remove all sources of ignition. Sweep or vacuum up and place in a suitable container for proper disposal.

Wash spill area with soap and water.

Section 7 Handling & Storage Page E2 of E2

**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from ignition sources.

Section 8	Exposure Controls / Personal Protection							
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)				
	As water soluble Cr(VI) inorganic compounds	TWA: 0.05 mg/m <sup>3(A1)</sup> *	TWA: 0.005 mg/m <sup>3</sup> *	TWA: 0.001 mg/m <sup>3</sup> *				

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

## Section 9 Physical & Chemical Properties

Appearance: Solid. Red-orange crystals

Odor: No odor

Odor threshold: Data not available

pH: Data not available

Melting / Freezing point: Loses H<sub>2</sub>O @ 82.6°C

**Boiling point:** Decomposes **Flash point:** Data not available

Flammability (solid/gas): Data not available Explosion limits: Lower / Upper: Data not available Vapor pressure (mm Hg): Data not available Vapor density (Air = 1): Data not available Relative density (Specific gravity): 2.348 Solubility(ies): 73 g/100 ml water @ 20°C

Evaporation rate ( = 1): Data not available

Partition coefficient: Data not available
Auto-ignition temperature: Data not available
Decomposition temperature: Data not available
Viscosity: Data not available

Molecular formula: Na<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>•2H<sub>2</sub>O Molecular weight: 298.05

## Section 10 Stability & Reactivity

Chemical stability: Stable Hazardous polymerization: Will not occur.

Conditions to avoid: Excessive temperatures and heat.

Incompatibilities with other materials: Strong alkalies, acids, combustibe materials, and oxidizing materials. Hazardous decomposition products: Chromic oxides, chromium oxides, sodium hydroxide or sodium oxide.

### Section 11 Toxicological Information

Acute toxicity: Oral-rat LD50: 51.10 mg/kg; Inhalation-rat LC50: 124.42 mg/cu m/4 hour (aerosol); Dermal-rabbit LD50: 1000 mg/kg

Skin corrosion/irritation: Skin-rabbit - Slight irritant.
Serious eye damage/irritation: Eyes-rabbit - Severe irritant.
Respiratory or skin sensitization: Data not available

Germ cell mutagenicity: Data not available

Carcinogenity: Data not available

NTP: Listed.

IARC classified: Group 1: Carcinogenic to humans.
OSHA: Listed as Chromium(VI) compound.
Reproductive toxicity: Data not available
STOT-single exposure: Data not available
STOT-repeated exposure: Data not available
Aspiration hazard: Data not available

Potential health effects:

Inhalation: May cause irritation of nasal septum and respiratory tract. Prolonged or repeated exposure may cause ulceration and perforation of the nasal septum. Symptoms may include burning sensation, sore throat, cough, wheezing, labored breathing.

Ingestion: Can cause severe tissue destruction. Kidney failure may follow and result in death. Symptoms include nausea, vomiting, abdominal pain, burning sensation,

diarrhea, shock or collapse

Skin: Symptoms include redness, pain, and skin burns.

Eyes: Contact causes severe irritation and potential permanent damage to the eyes. Symptoms include redness, pain, blurred vision, and severe deep burns.

Signs and symptoms of exposure: Exercise appropriate procedures to minimize potential hazards.

Additional information: RTECS #: HX7680000
Section 12 Ecological Information

Toxicity to fish: LC50 - Pimephales promelas (fathead minnow) - 33,200 ug/L/96 hour

Toxicity to daphnia and other aquatic invertebrates: No data available

Toxicity to algae: No data available

Persistence and degradability: No data available

Mobility in soil: No data available

Bioaccumulative potential: 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 life.

# Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

# Section 14 Transport Information (US DOT / CANADA TDG)

**UN/NA number:** UN3288 **Shipping name:** Toxic solid, inorganic, n.o.s., (Sodium dichromate)

Hazard class: 6.1 Packing group: III Reportable Quantity: Yes Marine pollutant: No

Exceptions: Limited quantity equal to or less than 1 L 2012 ERG Guide # 151

## Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Sodium dichromate	Listed	10 lbs. (4.54 kg)	Not listed	Listed	Not listed	C; D1A; D2A; D2B

# Section 16 Additional Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

Revision Date: August 1, 2014 Supercedes: August 1, 2014