

# Safety Data Sheet



## SECTION 1: Identification of the substance/mixture and the company/undertaking

### 1.1 Production identifiers

Product name : SODIUM DICHROMATE DIHYDRATE  
Brand : CJ Chemicals LLC  
CAS # : 7789-12-0

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : CJ Chemicals LLC  
3469 E Grand River Rd #112  
Howell, MI 48843  
United States

Telephone : +1 (888) 274-1044

### 1.4 Emergency Telephone

Emergency Phone # : 1-800-424-9300 CHEMTREC (USA)  
1-703-527-3887 CHEMTREC (international) 24 hours/day; 7 days/week

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

#### OSHA Hazards

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

#### Target Organs

Liver, Kidney

#### GHS Classification

Oxidizing solids (Category 2)  
Acute toxicity, Oral (Category 2)  
Acute toxicity, Inhalation (Category 4)  
Acute toxicity, Dermal (Category 4)  
Skin corrosion (Category 1B)  
Serious eye damage (Category 1)  
Respiratory sensitization (Category 1)  
Germ cell mutagenicity (Category 1B)  
Carcinogenicity (Category 1B)  
Reproductive toxicity (Category 1B)  
Specific target organ toxicity - repeated exposure, Inhalation (Category 1)  
Acute aquatic toxicity (Category 1)

#### GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H272 May intensify fire; oxidiser.  
H300 Fatal if swallowed.  
H312 + H332 Harmful in contact with skin or if inhaled  
H314 Causes severe skin burns and eye damage.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 H340 May cause genetic defects.  
 H350 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.  
 P220 Keep/Store away from clothing/ combustible materials.  
 P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
 P264 Wash hands thoroughly after handling.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face 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:** 3  
**Fire:** 0  
**Reactivity Hazard:** 3  
**Special hazard.:** OX

**Potential Health Effects**

**Inhalation** Toxic if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.  
**Skin** Causes skin burns.  
**Eyes** Causes eye burns.  
**Ingestion** May be fatal if swallowed.

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Synonyms : Sodium bichromate  
 Formula :  $Cr_2Na_2O_7 \cdot 2H_2O$   
 Molecular Weight : 298.00 g/mol

Component	Concentration
<b>Sodium dichromate dihydrate</b>	
CAS-No.	7789-12-0
EC-No.	234-190-3
Index-No.	024-004-00-7
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**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. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**

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

**If swallowed**

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

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**5. FIREFIGHTING MEASURES****Conditions of flammability**

Not flammable or combustible.

**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**Hazardous combustion products**

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

**Further information**

Use water spray to cool unopened containers.

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**6. ACCIDENTAL RELEASE MEASURES****Personal precautions**

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

**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**

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

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**7. HANDLING AND STORAGE****Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition.

**Conditions for safe storage**

Keep container tightly closed in a dry and well-ventilated place.

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Contains no substances with occupational exposure limit values.

**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. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Immersion protection

Material: Nitrile rubber  
Minimum layer thickness: 0.11 mm  
Break through time: > 480 min  
Material tested: Dermatril® (Aldrich Z677272, Size M)

Splash protection  
Material: Nitrile rubber  
Minimum layer thickness: 0.11 mm  
Break through time: > 30 min  
Material tested: Dermatril® (Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 873000, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

### Eye protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

### Skin and body protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### Hygiene measures

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

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form	solid
Colour	no data available

### Safety data

pH	no data available
Melting point/freezing point	Melting point/range: 91 °C (196 °F) - lit.
Boiling point	no data available
Flash point	not applicable
Ignition temperature	no data available
Autoignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapour pressure	no data available
Density	2.350 g/cm <sup>3</sup>
Water solubility	no data available
Partition coefficient: n-octanol/water	no data available
Relative vapour density	no data available
Odour	no data available
Odour Threshold	no data available

Evaporation rate no data available

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## 10. STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

no data available

### Conditions to avoid

no data available

### Materials to avoid

Strong reducing agents, Alcohols

### Hazardous decomposition products

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

Other decomposition products - no data available

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## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

#### Oral LD50

LD50 Oral - rat - 50 mg/kg

#### Inhalation LC50

#### Dermal LD50

#### Other information on acute toxicity

no data available

### 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

Genotoxicity in vitro - rat - Liver

DNA damage

Genotoxicity in vitro - Hamster - Lungs

Sister chromatid exchange

Genotoxicity in vivo - rat - Intratracheal

DNA damage

### Carcinogenicity

Carcinogenicity - rat - Intratracheal

Tumorigenic: Carcinogenic by RTECS criteria. Lungs, Thorax, or Respiration: Tumors.

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 dichromate dihydrate)

1 - Group 1: Carcinogenic to humans (Sodium dichromate dihydrate)

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: Known to be human carcinogen (Sodium dichromate dihydrate)

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### **Reproductive toxicity**

May cause reproductive disorders.

### **Teratogenicity**

May cause congenital malformation in the fetus.

Presumed human reproductive toxicant

### **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**

<b>Inhalation</b>	Toxic if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
<b>Ingestion</b>	May be fatal if swallowed.
<b>Skin</b>	Causes skin burns.
<b>Eyes</b>	Causes eye burns.

### **Signs and Symptoms of Exposure**

Ulceration, Liver injury may occur., Kidney injury may occur.

### **Synergistic effects**

no data available

### **Additional Information**

RTECS: HX7750000

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## **12. ECOLOGICAL INFORMATION**

### **Toxicity**

no data available

### **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 life.

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## **13. DISPOSAL CONSIDERATIONS**

### **Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. 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: 3086 Class: 6.1 (5.1) Packing group: I  
 Proper shipping name: Toxic solids, oxidizing, n.o.s. (Sodium dichromate dihydrate)  
 Reportable Quantity (RQ): 10 lbs  
 Marine pollutant: No  
 Poison Inhalation Hazard: No

**IMDG**

UN number: 3086 Class: 6.1 (5.1) Packing group: I EMS-No: F-A, S-Q  
 Proper shipping name: TOXIC SOLID, OXIDIZING, N.O.S. (Sodium dichromate dihydrate)  
 Marine pollutant: No

**IATA**

UN number: 3086 Class: 6.1 (5.1) Packing group: I  
 Proper shipping name: Toxic solid, oxidizing, n.o.s. (Sodium dichromate dihydrate)  
 IATA Passenger: Not permitted for transport

**15. REGULATORY INFORMATION****OSHA Hazards**

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

**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**

The following components are subject to reporting levels established by SARA Title III, Section 313:

	CAS-No.	Revision Date
Sodium dichromate dihydrate	7789-12-0	1993-04-24

**SARA 311/312 Hazards**

Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

	CAS-No.	Revision Date
Sodium dichromate dihydrate	7789-12-0	1993-04-24

**Pennsylvania Right To Know Components**

	CAS-No.	Revision Date
Sodium dichromate dihydrate	7789-12-0	1993-04-24

**New Jersey Right To Know Components**

	CAS-No.	Revision Date
Sodium dichromate dihydrate	7789-12-0	1993-04-24

**California Prop. 65 Components**

	CAS-No.	Revision Date
WARNING! This product contains a chemical known to the State of California to cause cancer. Sodium dichromate dihydrate	7789-12-0	2008-12-19

**California Prop. 65 Components**

	CAS-No.	Revision Date
WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. Sodium dichromate dihydrate	7789-12-0	2008-12-19

**16. OTHER INFORMATION**

**Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. CJ Chemicals LLC and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.cjchemicals.com](http://www.cjchemicals.com) and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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