

# Safety Data Sheet

## Sodium Dichromate

**CAROLINA**<sup>®</sup>  
www.carolina.com

### Section 1 Product Description

**Product Name:** Sodium Dichromate  
**Recommended Use:** Science education applications  
**Synonyms:** Sodium Bichromate, Dichromic Acid Sodium Salt, Disodium Dichromate  
**Distributor:** Carolina Biological Supply Company  
2700 York Road, Burlington, NC 27215  
1-800-227-1150  
**Chemical Information:** 800-227-1150 (8am-5pm (ET) M-F)  
**Chemtrec:** 800-424-9300 (Transportation Spill Response 24 hours)

### Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

**DANGER**



May intensify fire; oxidizer. Fatal if swallowed. Harmful in contact with skin or if inhaled. Causes severe skin burns and eye damage. Causes serious eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause genetic defects. May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life.

#### GHS Classification:

Skin Corrosion/Irritation Category 1B, Serious Eye Damage/Eye Irritation Category 1, Respiratory Sensitisation Category 1, Germ Cell Mutagenicity Category 1B, Reproductive Toxicity Category 1B, Specific Target Organ Systemic Toxicity (STOT) - Repeated Exposure Category 1, Hazardous to the aquatic environment - Acute Category 1, Oxidizing Solid Category 2, Acute Toxicity - Oral Category 2, Acute Toxicity - Inhalation Dust / Mist Category 4, Acute Toxicity - Dermal Category 4

**Other Safety Precautions:** IF exposed or concerned: Get medical advice/attention.

**Acute Toxicity Inhalation Gas Contains** 100 % of the mixture consists of ingredient(s) of unknown toxicity

**Acute Toxicity Inhalation Vapor Contains** 100 % of the mixture consists of ingredient(s) of unknown toxicity

### Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%
Sodium Dichromate, Dihydrate	7789-12-0	100

### Section 4 First Aid Measures

#### Emergency and First Aid Procedures

**Inhalation:** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

**Eyes:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Skin Contact:** IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

**Ingestion:** IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

# Safety Data Sheet

## Section 5

## Firefighting Procedures

<b>Extinguishing Media:</b>	Use alcohol resistant foam, carbon dioxide, dry chemical, or water spray when fighting fires. Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the fire. Do not direct a water stream directly into the hot burning liquid.
<b>Fire Fighting Methods and Protection:</b>	Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
<b>Fire and/or Explosion Hazards:</b>	Avoid Dusting. May become explosive when dispersed in air. Product is a strong oxidizer
<b>Hazardous Combustion Products:</b>	Chromium compounds,, Sodium Oxides

## Section 6

## Spill or Leak Procedures

<b>Steps to Take in Case Material Is Released or Spilled:</b>	Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits. Ventilate the contaminated area. Persons not wearing appropriate protective equipment should be excluded from area of spill until clean-up has been completed. Isolate area. Keep unnecessary personnel away. Avoid contact with clothing. Avoid creating and inhaling dust. Avoid contact with skin and eyes. Reduce airborne dust and prevent scattering by moistening with water Vacuum or sweep up material and place in a disposal container Contain the discharged material. Do not allow the spilled product to enter public drainage system or open waterways. Collect spillage.
---	---

## Section 7

## Handling and Storage

<b>Handling:</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Keep/Store away from clothing/.../combustible materials. Take any precaution to avoid mixing with combustibles. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do no eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required. In case of inadequate ventilation wear respiratory protection. Keep container tightly closed in a cool, well-ventilated place.
<b>Storage:</b>	Store locked up. Store in a secure area suitable for oxidizing agents. Store away from flammable materials, organic solvents and combustible materials.
<b>Storage Code:</b>	Yellow - Reactive. Store separate and away from incompatible material.

## Section 8

## Protection Information

<b>Chemical Name</b>	<b>ACGIH</b>		<b>OSHA PEL</b>	
	<b>(TWA)</b>	<b>(STEL)</b>	<b>(TWA)</b>	<b>(STEL)</b>
Sodium Dichromate, Dihydrate	0.05 mg/m <sup>3</sup> TWA (as Cr)	N/A	5 µg/m <sup>3</sup> TWA	N/A

### Control Parameters

<b>Engineering Measures:</b>	No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use. Ventilation should effectively remove and prevent buildup of any vapor/mist/fume generated from the handling of this product.
<b>Personal Protective Equipment (PPE):</b>	Lab coat, apron, eye wash, safety shower.
<b>Respiratory Protection:</b>	No respiratory protection required under normal conditions of use. Respiratory protection may be required in addition to ventilation depending upon conditions of use. NIOSH approved air purifying respirator with dust/mist filter.
<b>Respirator Type(s):</b>	NIOSH approved air purifying respirator with dust/mist filter.
<b>Eye Protection:</b>	Wear chemical splash goggles when handling this product. Have an eye wash station available.
<b>Skin Protection:</b>	Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.
<b>Gloves:</b>	Nitrile

# Safety Data Sheet

## Section 9

## Physical Data

**Formula:** Na<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub> \* 2H<sub>2</sub>O

**Molecular Weight:** 298.03

**Appearance:** Red to Yellow Solid

**Odor:** No data available

**Odor Threshold:** No data available

**pH:** 4.0

**Melting Point:** 357 C

**Boiling Point:** 400 C

**Flash Point:** No data available

**Flammable Limits in Air:** N/A

**Vapor Pressure:** N/A

**Evaporation Rate (BuAc=1):** N/A

**Vapor Density (Air=1):** N/A

**Specific Gravity:** 2.5 g/cm<sup>3</sup> at 20°C

**Solubility in Water:** Soluble

**Log Pow (calculated):** No data available

**Autoignition Temperature:** No data available

**Decomposition Temperature:** No data available

**Viscosity:** No data available

**Percent Volatile by Volume:** 0%

## Section 10

## Reactivity Data

**Reactivity:**

No data available

**Chemical Stability:**

Stable under normal conditions.

**Conditions to Avoid:**

None known.

**Incompatible Materials:**

Alcohols, Strong reducing agents

**Hazardous Decomposition Products:**

Sodium Oxides, Chromium compounds,

**Hazardous Polymerization:**

Will not occur

## Section 11

## Toxicity Data

**Routes of Entry**

Inhalation, ingestion, eye or skin contact.

**Symptoms (Acute):**

Respiratory disorders, , Eye disorders, Liver disorders, Impaired Kidney Function

**Delayed Effects:**

No data available

**Acute Toxicity:**

**Chemical Name**

Sodium Dichromate, Dihydrate

**CAS Number**

7789-12-0

**Oral LD50**

Oral LD50 Rat 50  
mg/kg

**Dermal LD50**

Not determined

**Inhalation LC50**

Not determined

**Carcinogenicity:**

**Chemical Name**

Sodium Dichromate, Dihydrate

**CAS Number**

7789-12-0

**IARC**

Listed

**NTP**

Listed

**OSHA**

Not listed

**Chronic Effects:**

**Mutagenicity:**

Evidence of a mutagenic effect.

**Teratogenicity:**

Evidence of a teratogenic effect (birth defect).

**Sensitization:**

Evidence of a sensitization effect.

**Reproductive:**

Evidence of negative reproductive effects.

**Target Organ Effects:**

**Acute:**

See Section 2

**Chronic:**

Listed by NTP, IARC as causing cancer., Mutation data cited., Reproductive data cited.

## Section 12

## Ecological Data

**Overview:**

Severe ecological hazard. This product may be toxic to plants and/or wildlife. Keep out of waterways.

**Mobility:**

No data

**Persistence:**

No data

**Bioaccumulation:**

No data

**Degradability:**

No data

**Other Adverse Effects:**

No data

**Chemical Name**

N/A

**CAS Number**

7789-12-0

**Eco Toxicity**

## Section 13

## Disposal Information

**Disposal Methods:**

Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

# Safety Data Sheet

Waste Disposal Code(s): Not Determined

## Section 14 Transport Information

### Ground - DOT Proper Shipping Name:

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

### Air - IATA Proper Shipping Name:

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

## Section 15 Regulatory Information

### TSCA Status:

A component (or components) of this product is not listed on the TSCA Inventory of Existing Chemical Substances. Product is for research and development use only.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
No data available	7789-12-0	No	No	No	No	No

### California Prop 65:

WARNING: This product contains a chemical known to the state of California to cause cancer and birth defects or other reproductive harm.

## Section 16 Additional Information

Revised: 09/09/2015

Replaces: 09/03/2014

Printed: 10-29-2015

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

### Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health