



SIGMA-ALDRICH

Material Safety Data Sheet

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Version 1.40

Section 1 - Product and Company Information

Product Name Sodium chromate tetrahydrate, 99%
Product Number 216623
Brand Aldrich Chemical

Company Sigma-Aldrich
Street Address 3050 Spruce Street
City, State, Zip, Country SAINT LOUIS, MO 63103 US
Technical Phone: 800-325-5832
Fax: 800-325-5052

Emergency Phone: 314-776-6555

Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313	EC no	Annex I Index Number
SODIUM CHROMATE TETRAHYDRATE	10034-82-9	Yes	231-889-5	024-018-00-3

Formula Na₂CrO₄·4H₂O
Synonyms Sodium chromate tetrahydrate

Section 3 - Hazards Identification

Emergency Overview
Oxidizing. Highly Toxic (USA) Toxic (EU). Dangerous for the environment. May cause cancer by inhalation. Toxic in contact with skin. May cause sensitization by skin contact. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Target organ(s): Kidneys. Lungs.

HMIS Rating
Health: 3* Flammability: 0 Reactivity: 3 Special Hazard(s): Oxidizer

NFPA Rating
Health: 3 Flammability: 0 Reactivity: 3 Special Hazard(s): Oxidizer

*additional chronic hazards present.

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

Oral Exposure
If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately.

Inhalation Exposure
If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

Dermal Exposure

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

Eye Exposure

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

Autoignition Temp: N/A

Extinguishing Media Suitable

Carbon dioxide, dry chemical powder, or appropriate foam.

Firefighting Protective Equipment

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s)

Emits toxic fumes under fire conditions. Contact with other material may cause fire. May accelerate combustion.

Section 6 - Accidental Release Measures

Procedure to be Followed in Case of Leak or Spill

Evacuate area.

Procedure(s) of Personal Precaution(s)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

Methods for Cleaning Up

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

Handling

User Exposure

Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

Storage

Suitable

Keep tightly closed. Keep away from combustible materials, heat, sparks, and open flame.

Special Requirements

Hygroscopic.

Section 8 - Exposure Controls / PPE

Engineering Controls

Safety shower and eye bath. Use only in a chemical fume hood.

Personal Protective Equipment

Respiratory

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). 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.

Hand

Compatible chemical-resistant gloves.

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Eye

Chemical safety goggles.

General Hygiene Measures

Wash contaminated clothing before reuse. Wash thoroughly after handling.

Exposure Limits, RTECS

Country	Source	Type	Value
USA	ACGIH	TWA	0.05 MG(CR)/M3
USA	MSHA Standard-air	TWA	0.5 MG(CR)/M3

Section 9 - Physical/Chemical Properties**Appearance**Physical State
Solid

Molecular Weight: 234.04 AMU

pH	N/A
BP/BP Range	N/A
MP/MP Range	N/A
Freezing Point	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Saturated Vapor Conc.	N/A
SG/Density	N/A
Bulk Density	N/A
Odor Threshold	N/A
Volatile%	N/A
VOC Content	N/A
Water Content	N/A
Solvent Content	N/A
Evaporation Rate	N/A
Viscosity	N/A
Partition Coefficient	N/A
Decomposition Temp.	N/A
Flash Point °F	N/A
Flash Point °C	N/A

Explosion Limits N/A

Flammability	N/A
Autoignition Temp	N/A
Solubility	N/A

N/A = not available

Section 10 - Stability and Reactivity**Stability**

Stable

Stable.

Conditions to Avoid

Moisture.

Materials to Avoid

Strong reducing agents, Organic materials, Finely powdered metals.

Hazardous Decomposition Products**Hazardous Decomposition Products**

Carbon monoxide, Carbon dioxide.

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Hazardous Polymerization**Hazardous Polymerization**

Will not occur.

Section 11 - Toxicological Information**Route of Exposure****Skin Contact**

Causes burns.

Skin Absorption

Harmful if absorbed through skin.

Eye Contact

Causes severe eye irritation.

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.

Sensitization**Respiratory**

May cause allergic respiratory reaction.

Skin

May cause allergic skin reaction.

Target Organ(s) or System(s)

Lungs. Kidneys.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

RTECS Number: GB2958300

Toxicity Data

Skin - Rabbit: 101 mg/kg (LD50)

Remarks: Behavioral:Somnolence (general depressed activity).

Kidney, Ureter, Bladder:Other changes.

Skin and Appendages:Skin: After systemic exposure: Dermatitis, other

Chronic Exposure - Carcinogen

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

ACGIH Carcinogen List**Rating**

A1

Chronic Exposure - Teratogen

Result:May cause congenital malformation in the fetus.

Chronic Exposure - Mutagen**Species** **Dose**

Result: May alter genetic material.

Hamster 500 UG/L

Hamster 400 UMOL/L

Cell Type

Embryo

ovary

Mutation test

Morphological transformation.

DNA damage

Chronic Exposure - Reproductive Hazard

Result: May cause reproductive disorders.

Section 12 - Ecological Information

No data available.

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Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation

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.
Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT

Proper Shipping Name: Toxic solid, inorganic, n.o.s.
UN#: 3288
Class: 6.1
Packing Group: Packing Group II
Hazard Label: Toxic substances.
PIH: Not PIH

IATA

Proper Shipping Name: Toxic solid, inorganic, n.o.s.
IATA UN Number: 3288
Hazard Class: 6.1
Packing Group: II

Section 15 - Regulatory Information

EU Directives Classification

Symbol of Danger: T+ N

Indication of Danger

Very toxic. Dangerous for the environment.

Risk Statements R: 45 46 60 61 21 25 26 34 42/43 48/23 50/53

May cause cancer. May cause heritable genetic damage. May impair fertility. May cause harm to the unborn child. Also harmful in contact with skin. Also toxic if swallowed. Also very toxic by inhalation. Causes burns. May cause sensitization by inhalation and skin contact. Also toxic: danger of serious damage to health by prolonged exposure through inhalation. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Statements S: 53 45 60 61

Restricted to professional users. Attention - Avoid exposure - obtain special instructions before use. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/safety data sheets.

US Classification and Label Text

Indication of Danger

Oxidizing. Highly Toxic (USA) Toxic (EU). Dangerous for the environment.

Risk Statements

May cause cancer by inhalation. Toxic in contact with skin. May cause sensitization by skin contact. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Statements

Restricted to professional users. Attention - Avoid exposure - obtain special instructions before use. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Keep away from combustible material. This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/safety data sheets.

US Statements

Target organ(s): Kidneys. Lungs.

United States Regulatory Information

SARA Listed: Yes

DemInimis: 1.0 %

Notes: This product is subject to SARA section 313 reporting requirements - cadmium compounds.

Canada Regulatory Information

WHMIS Classification

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

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DSL: No
NDSL: No

Section 16 - Other Information

Disclaimer

For R&D use only. Not for drug, household or other uses.

Warranty

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. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2007 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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