RICCA CHEMICAL COMPANY®

Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation Sodium Dichromate Dihydrate, ACS Reagent Grade

Product Number RDCS0485

Other Identifying Product Numbers RDCS0485-2.5A5, RDCS0485-25F4, RDCS0485-500B1

1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

1.3. Details of the Supplier of the Safety Data Sheet

Company Ricca Chemical Company
Address 412 West Fork Drive

Arlington, TX 76012 USA

Telephone 888-467-4222

1.4. Emergency Telephone Number (24 hours)

CHEMTREC (USA)	800-424-9300
CHEMTREC (International)	1+ 703-527-3887

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SECTION 2: Hazard(s) Identification

2.1. Classification of the Substance or Mixture

Hazard Class	Category	Hazard Statements	Precautionary Statements
Acute Toxicity - Oral	Category 2	H300	P264,P270,P301+P310,P321,P330, P405,P501
Acute Toxicity - Dermal	Category 3	H311	P280,P302+P352,P312,P321, P361+P364,P405,P501
Acute Toxicity - Inhalation (Dusts and Mists)	Category 2	H330	P260,P271,P284,P304+P340,P310, P320,P403+P233,P405,P501
Skin Corrosion / Irritation	Category 2	H315	P264,P280,P302+P352,P321, P332+P313,P362+P364
Serious Eye Damage / Eye Irritation	Category 2	H319	P264,P280,P305+P351+P338, P337+P313
Respiratory Sensitization	Category 1	H334	P261,P284,P304+P340,P342+P311, P501
Skin Sensitization	Category 1A	H317	P261,P272,P280,P302+P352, P333+P313,P321,P362+P364,P501
Germ Cell Mutagenicity	Category 2	H341	P201,P202,P280,P308+P313,P405, P501
Carcinogenicity	Category 1A	H350	P201,P202,P280,P308+P313,P405, P501
Reproductive Toxicity	Category 1B	H360	P201,P202,P280,P308+P313,P405, P501
Oxidizing Solids	Category 2	H272	P210,P220,P280,P370+P378,P501
Hazardous to the Aquatic Environment, Short-term (Acute)	Acute 1	H400	P273,P391,P501
Hazardous to the Aquatic Environment, Long-term (Chronic)	Chronic 1	H410	P273,P391,P501

2.2. GHS Label Elements

Pictograms:

Signal Word: **Danger**

Hazard Statements:

NOTE: Hazard statements may be combined on labels to improve clarity and readability.

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Hazard Number	Hazard Statement
H272	May intensify fire; oxidizer
H300+H330	Fatal if swallowed or if inhaled
H311	Toxic in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H341	Suspected of causing genetic defects
H350	May cause cancer
H360	May damage fertility or the unborn child
H410	Very toxic to aquatic life with long lasting effects

Precautionary Statements:

NOTE: Precautionary statements may be combined or consolidated on labels to improve clarity and readability.

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Prevention

Precautionary Number	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, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P220	Keep away from clothing and other combustible materials.
P260	Do not breathe dust.
P264	Wash hands, arms, and face thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing must not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves and eye protection.
P284	In case of inadequate ventilation wear respiratory protection.

Response

Precautionary Number	Precautionary Statement
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P302+P352	IF ON SKIN: Wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	If exposed or concerned: Get medical advice or attention.
P310	Immediately call a poison center or doctor.
P330	Rinse mouth.
P337+P313	If eye irritation persists: Get medical advice or attention.
P342+P311	If experiencing respiratory symptoms: Call a poison center or doctor.
P361+P364	Take off immediately all contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use dry chemical, foam, or carbon dioxide to extinguish.
P391	Collect spillage.

Storage

Precautionary Number	Precautionary Statement
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

Disposal

Precautionary Number	Precautionary Statement
P501	Dispose of contents/container to suitable waste stream in accordance with local, state, federal, and international regulations.

2.3. Hazards not Otherwise Classified

No other hazards identified.

2.4. Ingredients of Unknown Acute Toxicity

SECTION 3: Composition / Information on Ingredients

3.1. Components of Substance

Chemical Name (IUPAC)	Common Name and Synonyms	CAS Number	Weight%
disodium oxido-(oxido(dioxo)chromio)oxy-dioxochromium dihydrate	Sodium Dichromate Dihydrate	7789-12-0	100.00

SECTION 4: First-Aid Measures

4.1. Description of Necessary Measures

Eye Contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Eye contact may cause severe eye damage followed by loss of sight. Vapor exposure may cause watering and irritation to eyes.

Ingestion: IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do not induce vomiting. Give large quantity of water. Call a physician immediately.

Inhalation: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Skin Contact: IF ON SKIN: Wash with plenty of water. May produce pain, redness, severe irritation or full thickness burns. May be absorbed through the skin with possible systemic effects.

4.2. Most Important Symptoms and Effects, Acute and Delayed

Toxic in contact with skin DANGER! Toxic. Strong Oxidizer. Contact with other material may cause a fire. Corrosive. Causes severe burns to areas of contact. Harmful if swallowed or inhaled. May cause allergic reaction. Cancer hazard. Risk of cancer depends on duration and level of exposure. EYE CONTACT: Eye contact may cause severe eye damage followed by loss of sight. Vapor exposure may cause watering and irritation to eyes. SKIN CONTACT: May produce pain, redness, severe irritation or full thickness burns. May be absorbed through the skin with possible systemic effects. CHRONIC EFFECTS / CARCINOGENICITY: Repeated or prolonged exposure can cause ulceration and perforation of the nasal septum, respiratory irritation, liver and kidney damage and ulceration of the skin. Ulcerations at first may be painless, but may penetrate to the bone producing "chrome holes." Known to be a human carcinogen.

4.3. Immediate Medical Attention or Special Treatment Needed

Immediately call a poison center or doctor. Irrigate immediately with large quantity of water for at least 15 minutes. Get medical attention immediately. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Flush with plenty of water for at least 15 minutes. Call a physician if irritation develops. Do not induce vomiting. Give large quantity of water. Call a physician immediately.

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SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

In case of fire: Use dry chemical, foam, or carbon dioxide to extinguish. Use water spray, dry chemical, alcohol foam, or carbon dioxide for extinguishing the surrounding fire.

5.2. Specific Hazards Arising from the Substance or Mixture in a Fire

May intensify fire; oxidizer Not combustible, but substance is an oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition. Can react with metals to release flammable hydrogen gas.

5.3. Special Protective Equipment and Precautions for Firefighters

Use protective clothing and NIOSH-approved breathing equipment appropriate for the surrounding fire.

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves and eye protection.

6.2. Cleanup and Containment Methods and Materials

Wear gloves to protect from absorption through skin. Do not dispose of with normal refuse. Containerize for disposal with a RCRA hazardous waste disposal facility. Always comply with local, state and federal regulations.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

Store in a well-ventilated place. Keep container tightly closed. Store locked up. As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. Avoid storage on wooden floors.

SECTION 8: Exposure Controls / Personal Protection

8.1. Exposure Limits

U.S. OSHA - Permissible Exposure Limits (PEL) - Time Weighted Averages (TWA)

Chemical Name	CAS Number	Exposure Limit
Sodium Dichromate Dihydrate	7789-12-0	"5 µg/m3 TWA" As Chromium(VI) compounds [RR-00026-0]

U.S. OSHA - Permissible Exposure Limits (PEL) - Ceiling Limits

Chemical Name	CAS Number	Exposure Limit
Sodium Dichromate Dihydrate	7789-12-0	"0.1 mg/m3 Ceiling (applies to any operations or sectors for which the Hexavalent Chromium standard [29 CFR 1910.1026] is stayed or is otherwise not in effect, as CrO3)" As Chromates [RR-01554-3]

U.S. OSHA - Permissible Exposure Limits (PEL) - Short Term Exposure Limits (STEL)

No limits found.

U.S. OSHA - Specifically Regulated Chemicals

Chemical Name	CAS Number	Exposure Limit
Sodium Dichromate Dihydrate	7789-12-0	"5 µg/m3 TWA (See 29 CFR 1910.1026, as Cr); 2.5 µg/m3 Action Level (as Cr)" As Chromium(VI) compounds [RR-00026-0]

ACGIH - Threshold Limit Values - Ceilings (TLV-C)

No limits found.

ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)

Chemical Name	CAS Number	Exposure Limit
Sodium Dichromate Dihydrate	7789-12-0	"0.0005 mg/m3 STEL (inhalable particulate matter, as Cr(VI))" As Hexavalent chromium inorganic water-soluble compounds [RR-53130-6]

ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)

Chemical Name	CAS Number	Exposure Limit
Sodium Dichromate Dihydrate	7789-12-0	"0.0002 mg/m3 TWA (inhalable particulate matter, as Cr(VI))" As Hexavalent chromium inorganic water-soluble compounds [RR-53130-6]

8.2. Engineering Controls

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limit.

8.3. Individual Protective Measures and Personal Protective Equipment

Respiratory Protection: A system of local or general exhaust is recommended to keep exposure levels below the Airborne Exposure Limits. If necessary, wear a dust mask respirator to minimize exposure to dust particles.

Skin Protection: Chemical resistant gloves.

Eye Protection: Safety glasses or goggles.

SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Physical State:	Solid
Color:	Orange-red
Odor:	Data not available.
Odor Threshold:	Data not available.
Melting/Freezing Point:	357°C (anhydrous salt)
Boiling Point/Range:	Approximately 400°C (decomposes)
Flammability:	Data not available.
Flammability/Explosive Limits:	Data not available.
Flash Point:	Data not available.
Auto-Ignition Temperature:	Data not available.
Decomposition Temperature:	Becomes anhydrous on prolonged heating at 100°C
pH:	4.0 (1%), 3.5 (10%)
Kinematic Viscosity:	Data not available.
Solubility:	180 g in 100 mL
Vapor Pressure:	Data not available.
Evaporation Rate:	Data not available.
Relative Density:	2.35
Relative Vapor Density:	Data not available.
Particle Characteristics:	Data not available.
Partition Coefficient n-octanol/water, log	Data not available.

SECTION 10: Stability and Reactivity

10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage.

10.2. Possibility of Hazardous Reactions

Data not available.

10.3. Conditions to Avoid and Incompatible Materials

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing and other combustible materials. Reducing Agents, Acetone plus Sulfuric Acid, Boron plus Silicon, Ethylene Glycol, Iron, Hydrazine, and Hydroxylamine. Any combustible organic or other readily oxidizable material (paper, wood, sulfur, aluminum, or plastics).

10.4. Hazardous Decomposition Products

Will not occur.

SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:

Oral acute toxicity estimate (ATE): 46 mg/kg(calculated)

Chemical Name	CAS Number	Toxicity
Sodium Dichromate Dihydrate	7789-12-0	Oral LD50 Rat 46 mg/kg (Source: JAPAN_GHS) As Dichromic acid, disodium salt [10588-01-9]

Acute Toxicity - Dermal Exposure:

Dermal acute toxicity estimate (ATE): 960 mg/kg(calculated)

Chemical Name	CAS Number	Toxicity
Sodium Dichromate Dihydrate	7789-12-0	Dermal LD50 Rabbit 960 mg/kg (Source: JAPAN_GHS) As Dichromic acid, disodium salt [10588-01-9]

Acute Toxicity - Inhalation Exposure:

Inhalation acute toxicity estimate (ATE, dust or mist): 0.2000 mg/L, 4 h(calculated)

Chemical Name	CAS Number	Toxicity
Sodium Dichromate Dihydrate	7789-12-0	Inhalation LC50 Rat 200 mg/m3 4 h (aerosol, Source: EU_RAR) As Dichromic acid, disodium salt [10588-01-9]

11.2 Carcinogenicity:

International Agency for Research on Cancer (IARC)

Chemical Name	CAS Number	Classification
Sodium Dichromate Dihydrate	7789-12-0	Group 1 (Carcinogenic to Humans) - Monograph 100C [2012]; Monograph 49 [1990] (evaluated as a group)" As Chromium(VI) compounds

National Toxicology Program (NTP)

Chemical Name	CAS Number	Classification
Sodium Dichromate Dihydrate	7789-12-0	Known Human Carcinogen (listed under Chromium hexavalent compounds); Male Rat - Clear Evidence; Female Rat - Clear Evidence; Male Mice - Clear Evidence; Female Mice - Clear Evidence (TR-546)

U.S. OSHA specifically regulated carcinogens

Chemical Name	CAS Number	Classification
Sodium Dichromate Dihydrate	7789-12-0	"see 29 CFR 1910.1026" As Chromium(VI) compounds [RR-00026-0]

11.3 Additional Toxicology Information:

Fatal if swallowed or if inhaled. Toxic in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Suspected of causing genetic defects. May cause cancer. May damage fertility or the unborn child.

SECTION 12: Ecological Information

12.1. Ecotoxicity

Chemical Name	CAS Number	Species	Exposure	Toxicity
Sodium Dichromate Dihydrate	7789-12-0	Freshwater Fish	Acute	"LC50 96 h Pimephales promelas 33.2 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 69 mg/L [flow-through]; LC50 96 h Lepomis macrochirus 213 mg/L [static]" As Disodium dichromate [10588-01-9]
Sodium Dichromate Dihydrate	7789-12-0	Water Flea	Acute	"EC50 48 h Daphnia magna 0.098 - 0.129 mg/L (EPA)" As Disodium dichromate [10588-01-9]

12.2. Persistence and Degradability

Data not available.

12.3. Bioaccumulative Potential

Data not available.

12.4. Mobility in soil

Data not available.

12.5. Other Adverse Ecological Effects

Data not available.

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SECTION 13: Disposal Considerations

13.1. Waste Treatment Methods

Data not available.

SECTION 14: Transportation Information

14.1 Transportation by Land - Department of Transportation (DOT, United States of America)

Sizes: 2.5 K, 25 K, 500 g

UN Number: UN3290

Proper Shipping Name: Toxic solid, corrosive, inorganic, n.o.s. (Sodium Dichromate)

Hazard Class: 6.1 (8)

Packing Group: II

Hazard Label(s):

14.2 Transportation by Air - International Air Transport Association (IATA)

Sizes: 2.5 K, 25 K, 500 g

UN Number: UN3290

Proper Shipping Name: Toxic solid, corrosive, inorganic, n.o.s. (Sodium Dichromate)

Hazard Class: 6.1 (8)

Packing Group: II

Hazard Label(s):

14.3 Transportation of Dangerous Goods (TDG, Canada)

Sizes: 2.5 K, 25 K, 500 g

UN Number: UN3290

Proper Shipping Name: TOXIC SOLID, CORROSIVE, INORGANIC, N.O.S. (sodium dichromate)

Hazard Class: 6.1 (8)

Packing Group: II

Hazard Label(s):

SECTION 15: Regulatory Information

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15.01. Occupational Safety and Health Administration (OSHA) Hazards

Chemical Name	CAS Number	Regulatory Information
Sodium Dichromate Dihydrate	7789-12-0	"5 µg/m3 TWA (See 29 CFR 1910.1026, as Cr); 2.5 µg/m3 Action Level (as Cr)" As Chromium(VI) compounds [RR-00026-0]

15.02. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances

Chemical Name	CAS Number	RQ
		No data found.

15.03. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

Chemical Name	CAS Number	Regulatory Information
Sodium Dichromate Dihydrate	7789-12-0	"10 lb final RQ; 4.54 kg final RQ" As Disodium dichromate [10588-01-9]

15.04. Superfund Amendments and Reauthorization Act (SARA) 313 Toxics Release Inventory (TRI)

Chemical Name	CAS Number	List	Regulatory Information
Sodium Dichromate Dihydrate	7789-12-0	Emission Reporting	"0.1 % de minimis concentration (includes any unique chemical substance that contains Chromium as part of that chemical's infrastructure except for Chromite ore mined in the Transvaal Region of South Africa and the unreacted ore component of the Chromite ore processing residue (COPR), no de minimis concentration has been assigned to this chemical category, listed under Chemical Category N090)" As Chromium(VI) compounds [RR-00026-0]

15.05. Massachusetts Right-to-Know Substance List

Chemical Name	CAS Number	Regulatory Information
Sodium Dichromate Dihydrate	7789-12-0	"Present" As Disodium dichromate [10588-01-9]

15.06. Pennsylvania Right-to-Know Hazardous Substances

Chemical Name	CAS Number	Regulatory Information
Sodium Dichromate Dihydrate	7789-12-0	"Environmental hazard" As Chromic acid (H2Cr2O7), disodium salt [10588-01-9]; "Environmental hazard; Special hazardous substance" As Chromium compounds, hexavalent [RR-00026-0]; "Environmental hazard" As Chromium compounds [RR-00634-8]; "Present (also regulated under Dichromates)" As Bichromates [RR-01620-6]

15.07. New Jersey Worker and Community Right-to-Know Components

Chemical Name	CAS Number	Regulatory Information
Sodium Dichromate Dihydrate	7789-12-0	"sn 1695" As Disodium dichromate [10588-01-9]; "sn 3575" As Chromium(VI) compounds [RR-00026-0]; "sn 2245" As Chromium compounds [RR-00634-8]

15.08. California Proposition 65

Chemical Name	CAS Number	Regulatory Information
Sodium Dichromate Dihydrate	7789-12-0	"carcinogen, 2/27/1987" As Chromium hexavalent compounds [RR-00026-0]
Sodium Dichromate Dihydrate	7789-12-0	"developmental toxicity, 12/19/2008" As Chromium(VI) compounds [RR-00026-0]
Sodium Dichromate Dihydrate	7789-12-0	"male reproductive toxicity, 12/19/08" As Chromium hexavalent compounds [RR-00026-0]
Sodium Dichromate Dihydrate	7789-12-0	"female reproductive toxicity 12/19/08" As Chromium hexavalent compounds [RR-00026-0]

15.09. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Chemical Name	CAS Number	List	Status
Sodium Dichromate Dihydrate	7789-12-0	DSL	"Present" As Sodium dichromate [10588-01-9]

15.10. United States of America Toxic Substances Control Act (TSCA) List

Chemical Name	CAS Number	Status
Sodium Dichromate Dihydrate	7789-12-0	"Present [R] (ACTIVE)" As Chromic acid (H2Cr2O7), sodium salt (1:2) [10588-01-9]

15.11. European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Chemical Name	CAS Number	List	Number
Sodium Dichromate Dihydrate	7789-12-0	EINECS	"234-190-3" As Sodium dichromate [10588-01-9]

15.12. China - Inventory of Existing chemical Substances (IECSC)

Chemical Name	CAS Number	Status
Sodium Dichromate Dihydrate	7789-12-0	Present [11071]

15.13. Korea - Existing Chemicals Inventory (KECI/KECL)

Chemical Name	CAS Number	List	Status
Sodium Dichromate Dihydrate	7789-12-0	Annex 1	"Present [KE-31410]" As Disodium dichromate [10588-01-9]
Sodium Dichromate Dihydrate	7789-12-0	Annex 3	"Present (06-5-10)" As Chromium(6+) compounds [RR-00026-0]; "Present (99-1-506)" As Dichromic acid, salts [RR-04234-2]

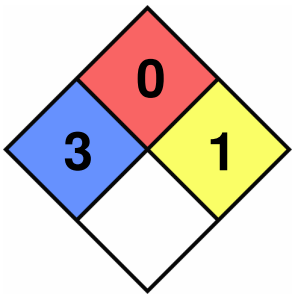
15.14. Japan - Existing and New Chemical Substances Inventory (ENCS)

Chemical Name	CAS Number	MITI No.
Sodium Dichromate Dihydrate	7789-12-0	(1)-283 (not considered as a new chemical substance)

SECTION 16: Other Information

16.1 National Fire Protection Associate (NFPA) Rating

Health: 3
Flammability: 0
Reactivity 1
Special Hazard:



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16.2 Document Revision

Last Revision Date:
2026-05-06

DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.