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 Acid Dichromate Cleaning Solution

Product Number R0261000

Other Identifying Product Numbers R0261000-1C1

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 - Inhalation (Dusts and Mists)	Category 2	H330	P260,P271,P284,P304+P340,P310, P320,P403+P233,P405,P501
Skin Corrosion / Irritation	Category 1	H314	P260,P264,P280,P301+P330+P331, P303+P361+P353,P363,P304+P340, P310,P321,P305+P351+P338,P405, P501
Serious Eye Damage / Eye Irritation	Category 1	H318	P280,P305+P351+P338,P310
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 1B	H340	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
Corrosive to Metals	Category 1	H290	P234,P390,P406

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
H290	May be corrosive to metals
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
H360	May damage fertility or the unborn child

Precautionary Statements:

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

Prevention

Precautionary Number	Precautionary Statement
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P234	Keep only in original packaging.
P260	Do not breathe fumes or mist.
P264	Wash hands, arms, and face thoroughly after handling.
P272	Contaminated work clothing must not be allowed out of the workplace.
P280	Wear protective gloves and eye protection.
P284	In case of inadequate ventilation wear respiratory protection.

Response

Precautionary Number	Precautionary Statement
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
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.
P320	Specific treatment is urgent: Wash areas of contact with water. If possible, wipe off areas of contact with dry cloth before flushing with water.
P342+P311	If experiencing respiratory symptoms: Call a poison center or doctor.
P362+P364	Take off contaminated clothing and wash it before reuse.
P390	Absorb spillage to prevent material damage.

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

97.9 percent of this mixture consists of ingredient(s) of unknown acute dermal toxicity.

SECTION 3: Composition / Information on Ingredients

3.1. Components of Mixture

Chemical Name (IUPAC)	Common Name and Synonyms	CAS Number	Weight%
sulfuric acid	Sulfuric Acid	7664-93-9	97.87
water	Water	7732-18-5	2.00
dipotassium oxido-(oxido(dioxo)chromio)oxy-dioxochromium	Potassium Dichromate	7778-50-9	0.13

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 causes tissue damage and blindness.

Ingestion: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. 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 (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Skin contact causes burns, blistering, local necrosis, and membrane ulceration. Burns may be 2nd or 3rd degree.

4.2. Most Important Symptoms and Effects, Acute and Delayed

May damage fertility or the unborn child Corrosive liquid. Causes severe burns. Contains Hexavalent Chromium compound, which is a known carcinogen. Eye contact causes tissue damage and blindness. Ingestion causes corrosion of the mucosa of the mouth, throat and esophagus with stomach discomfort and pain. If ingested, dilute with large quantity of water. Do not induce vomiting. Call a physician. Wash areas of contact with plenty of water for at least 15 minutes. If possible, wipe off areas of contact with dry cloth before flushing with water, as water contact will generate heat. EYE CONTACT: Eye contact causes tissue damage and blindness. SKIN CONTACT: Skin contact causes burns, blistering, local necrosis, and membrane ulceration. Burns may be 2nd or 3rd degree. CHRONIC EFFECTS / CARCINOGENICITY: May affect the skin, liver, kidneys and blood.

4.3. Immediate Medical Attention or Special Treatment Needed

Immediately call a poison center or doctor. Specific treatment is urgent: Wash areas of contact with water. If possible, wipe off areas of contact with dry cloth before flushing with water. Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen. If possible, wipe off areas of contact with dry cloth before flushing contact areas with water for at least 15 minutes. Flushing immediately with water will generate a large amount of heat upon contact with sulfuric acid. Call a physician. Dispose of cloth by soaking in water. Neutralize the soaking solution with dilute sodium hydroxide solution, then flush the neutralized rinse water down the drain with excess water and treat the cloth as solid refuse. Do not induce vomiting. Give large quantity of water. Call a physician immediately.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

Dry chemical, foam, or carbon dioxide. Reacts with water producing heat and toxic fumes.

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

Not combustible. Strong dehydrating agent, which may cause ignition of finely divided materials on contact. Reaction with metals may produce hydrogen gas. Oxides of sulfur may be produced in fire.

5.3. Special Protective Equipment and Precautions for Firefighters

Wear special protective clothing and positive pressure self-contained breathing apparatus. Butyl rubber, natural rubber, Neoprene, polyethylene, polyvinyl chloride, Teflon, Viton, or Saranex barrier recommended.

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

Keep water away from release. Stop or control the leak, if this can be done without undue risk. Control runoff and isolate discharged material for proper disposal.

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. Do not mix with bases. Contact with water will generate heat.

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
Sulfuric Acid	7664-93-9	1 mg/m3 TWA
Potassium Dichromate	7778-50-9	"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
Potassium Dichromate	7778-50-9	"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
Potassium Dichromate	7778-50-9	"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
Potassium Dichromate	7778-50-9	"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
Sulfuric Acid	7664-93-9	0.2 mg/m3 TWA (thoracic particulate matter)
Potassium Dichromate	7778-50-9	"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

No specific controls are needed. Normal room ventilation is adequate.

8.3. Individual Protective Measures and Personal Protective Equipment

Respiratory Protection: Normal room ventilation is adequate.

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:	Liquid
Color:	Brown
Odor:	Data not available.
Odor Threshold:	Data not available.
Melting/Freezing Point:	Data not available.
Boiling Point/Range:	Approximately 300°C
Flammability:	Data not available.
Flammability/Explosive Limits:	Data not available.
Flash Point:	Not flammable
Auto-Ignition Temperature:	Data not available.
Decomposition Temperature:	Data not available.
pH:	<1
Kinematic Viscosity:	Data not available.
Solubility:	Miscible
Vapor Pressure:	Data not available.
Evaporation Rate:	Data not available.
Relative Density:	1.8
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 only in original packaging. Organics, chlorates, carbides, fulminates, picrates, alkalines, reducing agents, nitrates, Acetic Acid, oxidizing agents, metals, reducing agents.

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): 2126 mg/kg(calculated)

Chemical Name	CAS Number	Toxicity
Sulfuric Acid	7664-93-9	Oral LD50 Rat 2140 mg/kg (Source: JAPAN_GHS)
Potassium Dichromate	7778-50-9	Oral LD50 Acute Toxicity Estimate 100 mg/kg (Source: Canada_WHMIS)

Acute Toxicity - Dermal Exposure:

Not acutely toxic.

Chemical Name	CAS Number	Toxicity
Potassium Dichromate	7778-50-9	Dermal LD50 Acute Toxicity Estimate 1100 mg/kg (Source: Canada_WHMIS)

Acute Toxicity - Inhalation Exposure:

Inhalation acute toxicity estimate (ATE, dust or mist): 0.3813 mg/L, 4 h(calculated)

Chemical Name	CAS Number	Toxicity
Sulfuric Acid	7664-93-9	Inhalation LC50 Rat 0.375 mg/L 4 h (aerosol, Source: OECD_SIDS)
Potassium Dichromate	7778-50-9	Inhalation LC50 Rat 99 mg/m3 4 h (aerosol, Source: EU_RAR)

11.2 Carcinogenicity:

International Agency for Research on Cancer (IARC)

Chemical Name	CAS Number	Classification
Sulfuric Acid	7664-93-9	Group 1 (Carcinogenic to Humans) - Monograph 54 [1992] (occupational exposure to mists and vapours from sulfuric acid and other strong inorganic acids)
Potassium Dichromate	7778-50-9	Group 1 (Carcinogenic to Humans) - Monograph 49 [1990] (listed under Chromium[VI]); Supplement 7 [1987]; Monograph 23 [1980]; Monograph 2 [1973]

National Toxicology Program (NTP)

Chemical Name	CAS Number	Classification
Sulfuric Acid	7664-93-9	Known Human Carcinogen (listed under Strong inorganic acid mists containing sulfuric acid)
Potassium Dichromate	7778-50-9	Known Human Carcinogen (listed under Chromium hexavalent compounds)

U.S. OSHA specifically regulated carcinogens

Chemical Name	CAS Number	Classification
Potassium Dichromate	7778-50-9	"see 29 CFR 1910.1026" As Chromium(VI) compounds [RR-00026-0]

11.3 Additional Toxicology Information:

Causes severe skin burns and eye damage. May cause an allergic skin reaction. Fatal if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause 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
Sulfuric Acid	7664-93-9	Freshwater Fish	Acute	LC50 96 h Brachydanio rerio >500 mg/L [static] (IUCLID)
Potassium Dichromate	7778-50-9	Freshwater Fish	Acute	LC50 96 h Cyprinus carpio >139 mg/L [static] (EPA); LC50 96 h Lepomis macrochirus 113.6 - 155.7 mg/L [flow-through] (EPA); LC50 96 h Lepomis macrochirus 320 mg/L (EPA); LC50 96 h Lepomis macrochirus 65.6 - 137.6 mg/L [static] (EPA); LC50 96 h Oncorhynchus mykiss 12.3 mg/L [semi-static] (EPA); LC50 96 h Oryzias latipes 21.209 - 30.046 mg/L [semi-static] (EPA); LC50 96 h Pimephales promelas 15.41 - 30.36 mg/L [flow-through] (EPA); LC50 96 h Pimephales promelas 14 - 20.9 mg/L [static] (EPA); LC50 96 h Poecilia reticulata 24.81 - 34.55 mg/L [semi-static] (EPA); LC50 96 h Poecilia reticulata 23 - 41.2 mg/L [static] (EPA)

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.

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: 1 L

UN Number: UN1830

Proper Shipping Name: Sulfuric Acid Solution

Hazard Class: 8

Packing Group: II

Hazard Label(s):

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

Sizes: 1 L

UN Number: UN1830

Proper Shipping Name: Sulfuric Acid Solution

Hazard Class: 8

Packing Group: II

Hazard Label(s):

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14.3 Transportation of Dangerous Goods (TDG, Canada)

Sizes: 1 L

UN Number: UN1830

Proper Shipping Name: SULFURIC ACID SOLUTION

Hazard Class: 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
Potassium Dichromate	7778-50-9	"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	TPQ
Sulfuric Acid	7664-93-9	1000 lb TPQ	1000 lb EPCRA RQ

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

Chemical Name	CAS Number	Regulatory Information
Sulfuric Acid	7664-93-9	1000 lb final RQ; 454 kg final RQ
Potassium Dichromate	7778-50-9	10 lb final RQ; 4.54 kg final RQ

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

Chemical Name	CAS Number	List	Regulatory Information
Sulfuric Acid	7664-93-9	Emission Reporting	1.0 % de minimis concentration (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)
Potassium Dichromate	7778-50-9	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
Sulfuric Acid	7664-93-9	Extraordinarily hazardous
Potassium Dichromate	7778-50-9	Present

15.06. Pennsylvania Right-to-Know Hazardous Substances

Chemical Name	CAS Number	Regulatory Information
Sulfuric Acid	7664-93-9	Environmental hazard
Potassium Dichromate	7778-50-9	Environmental hazard

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

Chemical Name	CAS Number	Regulatory Information
Sulfuric Acid	7664-93-9	sn 1761
Potassium Dichromate	7778-50-9	sn 1564

15.08. California Proposition 65

Chemical Name	CAS Number	Regulatory Information
Sulfuric Acid	7664-93-9	"carcinogen, 3/14/2003" As Strong inorganic acid mists containing sulfuric acid [RR-03978-1]
Potassium Dichromate	7778-50-9	"carcinogen, 2/27/1987" As Chromium hexavalent compounds [RR-00026-0]
Potassium Dichromate	7778-50-9	"developmental toxicity, 12/19/2008" As Chromium(VI) compounds [RR-00026-0]
Potassium Dichromate	7778-50-9	"male reproductive toxicity, 12/19/08" As Chromium hexavalent compounds [RR-00026-0]
Potassium Dichromate	7778-50-9	"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
Sulfuric Acid	7664-93-9	DSL	Present
Water	7732-18-5	DSL	Present
Potassium Dichromate	7778-50-9	DSL	Present

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

Chemical Name	CAS Number	Status
Sulfuric Acid	7664-93-9	Present (ACTIVE)
Water	7732-18-5	Present [XU] (ACTIVE)
Potassium Dichromate	7778-50-9	Present [R] (ACTIVE)

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
Sulfuric Acid	7664-93-9	EINECS	231-639-5
Water	7732-18-5	EINECS	231-791-2
Potassium Dichromate	7778-50-9	EINECS	231-906-6

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

Chemical Name	CAS Number	Status
Sulfuric Acid	7664-93-9	Present [23017]
Water	7732-18-5	Present [32224]
Potassium Dichromate	7778-50-9	Present [42253]

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

Chemical Name	CAS Number	List	Status
Sulfuric Acid	7664-93-9	Annex 1	Present [KE-32570]
Water	7732-18-5	Annex 1	Present [KE-35400]
Potassium Dichromate	7778-50-9	Annex 1	Present [KE-29094]
Potassium Dichromate	7778-50-9	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.
Sulfuric Acid	7664-93-9	(1)-430
Water	7732-18-5	- (listed on Japanese Pharmacopoeia 8th Edition)
Potassium Dichromate	7778-50-9	(1)-278

SECTION 16: Other Information

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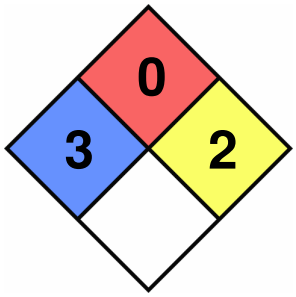
16.1 National Fire Protection Associate (NFPA) Rating

Health: 3
Flammability: 0
Reactivity 2
Special Hazard:



16.2 Document Revision

Last Revision Date:
2026-05-22

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.