



Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation Cadmium Sulfate Alloy Check

Product Number R1707600

Other Identifying Product Numbers R1707600-1A, R1707600-4A

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 3	H331	P261,P271,P304+P340,P311, P321,P403+P233,P405,P501
Corrosive to the Respiratory Tract	Corrosive		
Skin Corrosion / Irritation	Category 2	H315	P264,P280,P302+P352,P321, P332+P313,P362+P364
Serious Eye Damage / Eye Irritation	Category 1	H318	P280,P305+P351+P338,P310
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 2	H361	P201,P202,P280,P308+P313,P405, P501
Corrosive to Metals	Category 1	H290	P234,P390,P406
Specific Target Organ Toxicity - Repeated Exposure	Category 1	H372	P260,P264,P270,P314,P501
Hazardous to the Aquatic Environment, Short-term (Acute)	Acute 2	H401	P273,P501
Hazardous to the Aquatic Environment, Long-term (Chronic)	Chronic 2	H411	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
H290	May be corrosive to metals
H315	Causes skin irritation
H318	Causes serious eye damage
H331	Toxic if inhaled
H341	Suspected of causing genetic defects
H350	May cause cancer
H361	Suspected of damaging fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H411	Toxic to aquatic life with long lasting effects
	Corrosive to the respiratory tract

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.
P234	Keep only in original packaging.
P260	Do not breathe fumes or mist.
P264	Wash hands, arms, and face thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves and eye protection.

Response

Precautionary Number	Precautionary Statement
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.
P332+P313	If skin irritation occurs: Get medical advice or attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P390	Absorb spillage to prevent material damage.
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.

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2.4. Ingredients of Unknown Acute Toxicity

This product does not contain any ingredients of unknown acute toxicity.

SECTION 3: Composition / Information on Ingredients

3.1. Components of Mixture

Chemical Name (IUPAC)	Common Name and Synonyms	CAS Number	Weight%
water	Water	7732-18-5	87.09
cadmium(2+) sulfate hydrate	Cadmium Sulfate Hydrate; Sulfuric acid, cadmium salt (1:1), hydrate (3:8)	7790-84-3	9.27
chlorane	Hydrochloric Acid; Muriatic acid	7647-01-0	3.64

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. May cause irritation, redness, pain, and tearing.

Ingestion: Dilute immediately with water or milk. Induce vomiting. Call a physician.

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

Skin Contact: IF ON SKIN: Wash with plenty of water. May cause irritation, redness, and pain.

4.2. Most Important Symptoms and Effects, Acute and Delayed

Toxic if inhaled **WARNING!** Hazardous liquid. Contains a known carcinogen. Avoid ingestion and contact with skin, eyes, or clothing. If ingested, dilute immediately with water or milk and induce vomiting. Call a physician. Wash areas of contact with plenty of water. For eyes, get medical attention. **EYE CONTACT:** May cause irritation, redness, pain, and tearing. **SKIN CONTACT:** May cause irritation, redness, and pain. **CHRONIC EFFECTS / CARCINOGENICITY:** Chronic exposure may affect kidneys and liver.

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. Call a physician if irritation develops. 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. Dilute immediately with water or milk. Induce vomiting. Call a physician.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

Use any means suitable for extinguishing surrounding fire.

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

Not considered to be a fire or explosion hazard.

5.3. Special Protective Equipment and Precautions for Firefighters

Use protective clothing and 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

Absorb with suitable inert material (vermiculite, dry sand, etc) and place in a chemical waste container for proper disposal. Do not flush to sewer. Dispose of in accordance with local 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.

SECTION 8: Exposure Controls / Personal Protection

8.1. Exposure Limits

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

No limits found.

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

Chemical Name	CAS Number	Exposure Limit
Hydrochloric Acid	7647-01-0	5 ppm Ceiling; 7 mg/m ³ Ceiling

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
Cadmium Sulfate Hydrate	7790-84-3	"5 µg/m ³ TWA (See 29 CFR 1910.1027, as Cd); 2.5 µg/m ³ Action Level (as Cd)" As Cadmium compounds [RR-00559-4]

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

Chemical Name	CAS Number	Exposure Limit
Hydrochloric Acid	7647-01-0	2 ppm Ceiling

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

No limits found.

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

Chemical Name	CAS Number	Exposure Limit
Cadmium Sulfate Hydrate	7790-84-3	"0.01 mg/m ³ TWA (as Cd); 0.002 mg/m ³ TWA (respirable particulate matter, as Cd)" As Cadmium compounds [RR-00559-4]

8.2. Engineering Controls

Use only outdoors or in a well-ventilated area. 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.

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SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Physical State:	liquid
Color:	Colorless
Odor:	Data not available.
Odor Threshold:	Data not available.
Melting/Freezing Point:	Data not available.
Boiling Point/Range:	Data not available.
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:	Acidic
Kinematic Viscosity:	Data not available.
Solubility:	Miscible
Vapor Pressure:	Data not available.
Evaporation Rate:	Data not available.
Relative Density:	1.1
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. Oxidizers (such as perchlorates, peroxides, permanganates, chlorates, and nitrates), metals, hydrogen azide, selenium, tellurium, zinc.

10.4. Hazardous Decomposition Products

Will not occur.

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SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:

Oral acute toxicity estimate (ATE): 2610 mg/kg(calculated)

Chemical Name	CAS Number	Toxicity
Hydrochloric Acid	7647-01-0	Oral LD50 Rat 700 mg/kg (Source: Canada_WHMIS)
Cadmium Sulfate Hydrate	7790-84-3	Oral LD50 Rat 280 mg/kg (Source: Canada_WHMIS)

Acute Toxicity - Dermal Exposure:

Not acutely toxic.

Chemical Name	CAS Number	Toxicity
Hydrochloric Acid	7647-01-0	Dermal LD50 Rabbit >5010 mg/kg (Source: JAPAN_GHS)
Cadmium Sulfate Hydrate	7790-84-3	Dermal LD50 Acute Toxicity Estimate 1100 mg/kg (Source: ECHA)

Acute Toxicity - Inhalation Exposure:

Inhalation acute toxicity estimate (ATE, dust or mist): 0.5190 mg/L, 4 h(calculated)

Chemical Name	CAS Number	Toxicity
Hydrochloric Acid	7647-01-0	Inhalation LC50 Acute Toxicity Estimate 0.5 mg/L 4 h (Source: ECHA)
Cadmium Sulfate Hydrate	7790-84-3	Inhalation LC50 Acute Toxicity Estimate 0.05 mg/L 4 h (Source: ECHA)

11.2 Carcinogenicity:

International Agency for Research on Cancer (IARC)

Chemical Name	CAS Number	Classification
Hydrochloric Acid	7647-01-0	Group 1 (Carcinogenic to Humans) - Monograph 100F [2012]; Monograph 54 [1992] As Acid mists, strong inorganic
Cadmium Sulfate Hydrate	7790-84-3	Group 1 (Carcinogenic to Humans) - Monograph 100C [2012]; Monograph 58 [1993]; Supplement 7 [1987] (evaluated as a group) As Cadmium compounds

National Toxicology Program (NTP)

Chemical Name	CAS Number	Classification
Cadmium Sulfate Hydrate	7790-84-3	"Known Human Carcinogen" As Cadmium compounds [RR-00559-4]

U.S. OSHA specifically regulated carcinogens

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Chemical Name	CAS Number	Classification
Cadmium Sulfate Hydrate	7790-84-3	"see 29 CFR 1910.1027" As Cadmium compounds [RR-00559-4]

11.3 Additional Toxicology Information:

Causes skin irritation. Causes serious eye damage. Toxic if inhaled. Suspected of causing genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. Corrosive to the respiratory tract.

SECTION 12: Ecological Information

12.1. Ecotoxicity

Chemical Name	CAS Number	Species	Exposure	Toxicity
	No data found.	None	None	

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.



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SECTION 14: Transportation Information

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

Sizes: 1 L, 4 L

UN Number: UN2922

Proper Shipping Name: Corrosive liquid, toxic, n.o.s. (Hydrochloric Acid, Cadmium Sulfate)

Hazard Class: 8 (6.1)

Packing Group: III

Hazard Label(s):



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

Not regulated according to IATA Dangerous Goods Regulations.

14.3 Transportation of Dangerous Goods (TDG, Canada)

1 L, 4 L

UN2922

CORROSIVE LIQUID, TOXIC, N.O.S. (hydrochloric acid, cadmium sulfate)

8 (6.1)

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SECTION 15: Regulatory Information

15.01. Occupational Safety and Health Administration (OSHA) Hazards

Chemical Name	CAS Number	Regulatory Information
Cadmium Sulfate Hydrate	7790-84-3	"5 µg/m ³ TWA (See 29 CFR 1910.1027, as Cd); 2.5 µg/m ³ Action Level (as Cd)" As Cadmium compounds [RR-00559-4]

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

Chemical Name	CAS Number	RQ	TPQ
Hydrochloric Acid	7647-01-0	500 lb TPQ (gas only)	5000 lb EPCRA RQ (gas only)

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

Chemical Name	CAS Number	Regulatory Information
Hydrochloric Acid	7647-01-0	5000 lb final RQ; 2270 kg final RQ

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

Chemical Name	CAS Number	List	Regulatory Information
Hydrochloric Acid	7647-01-0	Emission Reporting	1.0 % de minimis concentration (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)
Cadmium Sulfate Hydrate	7790-84-3	Emission Reporting	"0.1 % de minimis concentration (includes any unique chemical substance that contains Cadmium as part of that chemical's infrastructure, listed under Chemical Category N078)" As Cadmium compounds [RR-00559-4]

15.05. Massachusetts Right-to-Know Substance List

Chemical Name	CAS Number	Regulatory Information
Hydrochloric Acid	7647-01-0	Extraordinarily hazardous
Cadmium Sulfate Hydrate	7790-84-3	"Carcinogen; Extraordinarily hazardous" As Cadmium sulphate [10124-36-4]

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15.06. Pennsylvania Right-to-Know Hazardous Substances

Chemical Name	CAS Number	Regulatory Information
Hydrochloric Acid	7647-01-0	Environmental hazard
Cadmium Sulfate Hydrate	7790-84-3	"Environmental hazard; Special hazardous substance" As Sulfuric acid, cadmium salt (1:1) [10124-36-4]; "Environmental hazard" As Cadmium compounds [RR-00559-4]

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

Chemical Name	CAS Number	Regulatory Information
Hydrochloric Acid	7647-01-0	sn 1012
Cadmium Sulfate Hydrate	7790-84-3	"sn 3073" As Cadmium sulfate [10124-36-4]; "sn 2199" As Cadmium compounds [RR-00559-4]

15.08. California Proposition 65

Chemical Name	CAS Number	Regulatory Information
Cadmium Sulfate Hydrate	7790-84-3	"carcinogen, 10/1/1987" As Cadmium compounds [RR-00559-4]

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

Chemical Name	CAS Number	List	Status
Hydrochloric Acid	7647-01-0	DSL	Present
Water	7732-18-5	DSL	Present
Cadmium Sulfate Hydrate	7790-84-3	DSL	"Present" As Cadmium sulfate [10124-36-4]

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

Chemical Name	CAS Number	Status
Hydrochloric Acid	7647-01-0	Present (ACTIVE)
Water	7732-18-5	Present [XU] (ACTIVE)
Cadmium Sulfate Hydrate	7790-84-3	"Present (ACTIVE)" As Sulfuric acid, cadmium salt (1:1) [10124-36-4]

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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
Hydrochloric Acid	7647-01-0	EINECS	231-595-7
Water	7732-18-5	EINECS	231-791-2
Cadmium Sulfate Hydrate	7790-84-3	EINECS	"233-331-6" As Cadmium sulphate [10124-36-4]

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

Chemical Name	CAS Number	Status
Hydrochloric Acid	7647-01-0	Present [37053]
Water	7732-18-5	Present [32224]
Cadmium Sulfate Hydrate	7790-84-3	Present [23102]

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

Chemical Name	CAS Number	List	Status
Hydrochloric Acid	7647-01-0	Annex 1	Present [KE-20189]
Water	7732-18-5	Annex 1	Present [KE-35400]
Cadmium Sulfate Hydrate	7790-84-3	Annex 1	"Present [KE-04431]" As Cadmium sulfate [10124-36-4]
Cadmium Sulfate Hydrate	7790-84-3	Annex 3	"Present (97-1-250)" As Cadmium compounds [RR-00559-4]

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

Chemical Name	CAS Number	MITI No.
Hydrochloric Acid	7647-01-0	(1)-215
Water	7732-18-5	- (listed on Japanese Pharmacopoeia 8th Edition)
Cadmium Sulfate Hydrate	7790-84-3	(1)-663 (not considered as a new chemical substance)

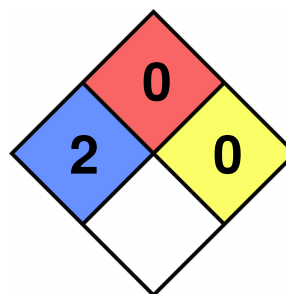
SECTION 16: Other Information

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16.1 National Fire Protection Associate (NFPA) Rating

Health: 2
Flammability: 0
Reactivity 0
Special Hazard:



16.2 Document Revision

Last Revision Date:
2026-05-24

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.