

Safety Data Sheet

Classified according to WHMIS 2015

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation: Chromate Standard, 1000 ppm CrO₄²⁻

Product Number: 2070

Other Identifying Product Numbers: 2070-16, 2070-4

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: 448 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

SECTION 2: Hazard(s) Identification

2.1. Classification of the Substance or Mixture

For the full text of the Hazard and Precautionary Statements listed below, see Section 16.

Hazard Class	Category	Hazard Statements	Precautionary Statements:
Respiratory Sensitizer	Category 1	H334	P261, P285, P304+P341, P342+P311, P501
Skin Sensitizer	Category 1	H317	P261, P272, P280, P302+P352, P332+P313, P321, P363, P501
Carcinogenicity	Category 1	H350	P201, P202, P280, P308+P313, P405, P501
Reproductive Toxicity	Category 1	H360	P201, P202, P280, P308+P313, P405, P501
Hazardous to the Aquatic Environment (Chronic)	Category 3	H412	P273, P501

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2.2. GHS Label Elements

Pictograms:



Signal Word: **Danger**

Hazard Statements:

Hazard Number	Hazard Statement
H317	May cause an allergic skin reaction.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H350	May cause cancer.
H360	May damage fertility or the unborn child.
H412	Harmful to aquatic life with long lasting effects.

Precautionary Statements:

Precautionary Number	Precautionary Statement
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing fumes, mist, vapors, or spray.
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.
P285	In case of inadequate ventilation wear respiratory protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P304+P341	IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
P308+P313	IF exposed or concerned: Get medical attention.
P321	Specific treatment (Wash areas of contact with water).
P332+P313	If skin irritation occurs: Get medical attention.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER or physician.
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P501	Dispose of contents in accordance with local, state, federal and international regulations.

2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

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SECTION 3: Composition / Information on Ingredients

3.1. Components of Substance or Mixture

Chemical Name	Formula	Molecular Weight	CAS Number	Weight%
Water	H ₂ O	18.01 g/mol	7732-18-5	99.83
Potassium Chromate	K ₂ CrO ₄	194.19 g/mol	7789-00-6	0.17

SECTION 4: First-Aid Measures

4.1. General First Aid Information

Eye Contact: May cause slight irritation.

Inhalation: IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

Skin Contact: IF ON SKIN: Wash with plenty of soap and water. May cause slight irritation.

Ingestion: Dilute with water or milk. Do not induce vomiting for small amounts. Call a physician if necessary. For large amounts, induce vomiting and call a physician.

4.2. Most Important Symptoms and Effects, Acute and Delayed

May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause cancer. May damage fertility or the unborn child. Contains Hexavalent Chromium compound, which is a known carcinogen. May cause irritation to eyes and skin. Wash areas of contact with plenty of water. If ingested, dilute with water. Call a physician. EYE CONTACT: May cause slight irritation. SKIN CONTACT: May cause slight irritation.

4.3. Medical Attention or Special Treatment Needed

Specific treatment (Wash areas of contact 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. Flush with plenty of water for at least 15 minutes. Call a physician if irritation develops. Dilute with water or milk. Do not induce vomiting for small amounts. Call a physician if necessary. For large amounts, induce vomiting and call a physician.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

Use any means suitable for extinguishing surrounding fire (Water, water spray, foam, or dry chemical). If using water, do not allow water run off to enter sewer.

5.2. Specific Hazards Arising from the Substance or Mixture

Not considered to be a fire or explosion hazard. Contact with oxidizable substances may cause violent combustion, however, this is unlikely due to the low concentration of Potassium Chromate.



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5.3. Special Protective Equipment 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. In case of inadequate ventilation wear respiratory protection.

6.2. Cleanup and Containment Methods and Materials

Do not flush to sewer. Absorb with suitable material. Containerize for disposal with a hazardous waste disposal facility. Dispose of in accordance with local regulations.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

Store locked up. As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage.

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SECTION 8: Exposure Controls / Personal Protection

8.1 Control Parameters

Chemical Name	Limit Type	Country	Exposure Limit	Information Source
Potassium Chromate (7789-00-6)	PEL	USA	"5 µg/m ³ TWA (See 29 CFR 1910.1026, as Cr); 2.5 µg/m ³ Action Level (as Cr)" As Chromium(VI) compounds [RR-00026-0]	U.S. - OSHA - Specifically Regulated Chemicals with PELs
Potassium Chromate (7789-00-6)	TLV-TWA	USA	"0.0002 mg/m ³ TWA (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)
Potassium Chromate (7789-00-6)	TWA	USA	"5 µg/m ³ TWA" As Chromium(VI) compounds [RR-00026-0]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Potassium Chromate (7789-00-6)	TLV-STEL	USA	"0.0005 mg/m ³ STEL (inhalable particulate matter, as Cr(VI))" As Hexavalent chromium inorganic water-soluble compounds [RR-53130-6]	ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)
Potassium Chromate (7789-00-6)	PEL-Ceiling	USA	"0.1 mg/m ³ 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 CrO ₃)" As Chromates [RR-01554-3]	U.S. - OSHA - Final PELs - Ceiling Limits
Potassium Chromate (7789-00-6)	TWA	USA	"5 µg/m ³ TWA" As Chromium(VI) compounds [RR-00026-0]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)

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Potassium Chromate (7789-00-6)	PEL	USA	"5 µg/m ³ TWA (See 29 CFR 1910.1026, as Cr); 2.5 µg/m ³ Action Level (as Cr)" As Chromium(VI) compounds [RR-00026-0]	U.S. - OSHA - Specifically Regulated Chemicals with PELs
Potassium Chromate (7789-00-6)	PEL	USA	5 µg/m ³ TWA (See 29 CFR 1910.1026, as Cr); 2.5 µg/m ³ Action Level (as Cr)	U.S. - OSHA - Specifically Regulated Chemicals with PELs
Potassium Chromate (7789-00-6)	TWA	USA	5 µg/m ³ TWA	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Potassium Chromate (7789-00-6)	PEL-Ceiling	USA	0.1 mg/m ³ 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 CrO ₃)	U.S. - OSHA - Final PELs - Ceiling Limits
Potassium Chromate (7789-00-6)	PEL	USA	"5 µg/m ³ TWA (See 29 CFR 1910.1026, as Cr); 2.5 µg/m ³ Action Level (as Cr)" As Chromium(VI) compounds [RR-00026-0]	U.S. - OSHA - Specifically Regulated Chemicals with PELs
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Potassium Chromate (7789-00-6)	TLV-TWA	USA	0.0002 mg/m ³ TWA (inhalable particulate matter, as Cr(VI))	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Potassium Chromate (7789-00-6)	TLV-STEL	USA	0.0005 mg/m ³ STEL (inhalable particulate matter, as Cr(VI))	ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)



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8.2. Exposure Controls

Engineering Controls: No specific controls are needed. Normal room ventilation is adequate.

Respiratory Protection: In case of inadequate ventilation wear respiratory protection. Normal room ventilation is adequate.

Skin Protection: Wear protective gloves and eye protection. Chemical resistant gloves.

Eye Protection: Wear protective gloves and eye protection. Safety glasses or goggles.

8.3. Personal Protective Equipment

Wear protective gloves and eye protection. In case of inadequate ventilation wear respiratory protection. Normal room ventilation is adequate. Chemical resistant gloves. Safety glasses or goggles.

SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Appearance: Yellow liquid

Physical State: Liquid

Odor: Data not available.

Odor Threshold: Data not available.

pH: alkaline

Melting/Freezing Point: 0.0°C

Initial Boiling Point/Range: 100°C - 100°C

Flash Point: Data not available.

Evaporation Rate: Data not available.

Flammability: Data not available.

Flammability/Explosive Limits: Data not available.

Vapor Pressure: Data not available.

Vapor Density: Data not available.

Relative Density: 1.00

Solubility: Miscible

Partition Coefficient: Data not available.

Auto-Ignition Temperature: Data not available.

Decomposition Temperature: Data not available.

Viscosity: Data not available.

Explosive Properties: Data not available.

Oxidizing Properties: Data not available.

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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

Reducing Agents, organic compounds.

10.4. Hazardous Decomposition Products

Will not occur.

SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:

Not applicable.

Acute Toxicity - Dermal Exposure:

Not applicable.

Acute Toxicity - Inhalation Exposure:

Not applicable.

Acute Toxicity - Other Information:

LD50, Oral, Mouse: 180 mg/kg (Potassium Chromate), details of toxic effects not reported other than lethal dose value. Investigated as a tumorigen.

Skin Corrosion and Irritation:

Not applicable.

Serious Eye Damage and Irritation:

Not applicable.

Respiratory Sensitization:

May cause allergy or asthma symptoms or breathing difficulties if inhaled. Avoid breathing fumes, mist, vapors, or spray. In case of inadequate ventilation wear respiratory protection. IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or physician. Dispose of contents in accordance with local, state, federal and international regulations.

Skin Sensitization:

May cause an allergic skin reaction. Avoid breathing fumes, mist, vapors, or spray. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves and eye protection. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical attention. Specific treatment (Wash areas of contact with water). Wash contaminated clothing before reuse. Dispose of contents in accordance with local, state, federal and international regulations.



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Germ Cell Mutagenicity:

Not applicable.

Carcinogenicity:

May cause cancer. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Reproductive Toxicity:

May damage fertility or the unborn child. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Specific Target Organ Toxicity from Single Exposure:

Not applicable.

Specific Target Organ Toxicity from Repeated Exposure:

Not applicable.

Aspiration Hazard:

Not applicable.

Additional Toxicology Information:

Data not available.

SECTION 12: Ecological Information

12.1. Ecotoxicity

Harmful to aquatic life with long lasting effects. Avoid release to the environment. Dispose of contents in accordance with local, state, federal and international regulations.

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)

Not regulated according to DOT Regulations.

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)

Not regulated according to TDG Regulations.

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SECTION 15: Regulatory Information

15.1. Occupational Safety and Health Administration (OSHA) Hazards

Potassium Chromate (CAS # 7789-00-6): "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]

Potassium Chromate (CAS # 7789-00-6): 5 µg/m³ TWA (See 29 CFR 1910.1026, as Cr); 2.5 µg/m³ Action Level (as Cr)

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

Not listed.

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

Potassium Chromate (CAS # 7789-00-6): 10 lb final RQ; 4.54 kg final RQ

15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

Potassium Chromate (CAS # 7789-00-6): "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]

Potassium Chromate (CAS # 7789-00-6): 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)

15.5. Massachusetts Right-to-Know Substance List

Potassium Chromate (CAS # 7789-00-6): Present

15.6. Pennsylvania Right-to-Know Hazardous Substances

Water (CAS # 7732-18-5): "Present" As Ethyl alcohol and water [RR-00802-6]

Water (CAS # 7732-18-5): Present

Potassium Chromate (CAS # 7789-00-6): "Environmental hazard" As Chromium compounds [RR-00634-8]

Potassium Chromate (CAS # 7789-00-6): "Environmental hazard; Special hazardous substance" As Chromium compounds, hexavalent [RR-00026-0];

"Environmental hazard" As Chromium compounds [RR-00634-8]

Potassium Chromate (CAS # 7789-00-6): "Present" As Chromium compounds [RR-00634-8]

Potassium Chromate (CAS # 7789-00-6): "Present" As Chromium compounds, hexavalent [RR-00026-0]

Potassium Chromate (CAS # 7789-00-6): "Present" As Chromium compounds, hexavalent [RR-00026-0];

"Present" As Chromium compounds [RR-00634-8]

Potassium Chromate (CAS # 7789-00-6): Environmental hazard

Potassium Chromate (CAS # 7789-00-6): Environmental hazard; Special hazardous substance

Potassium Chromate (CAS # 7789-00-6): Present

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

Potassium Chromate (CAS # 7789-00-6): "carcinogen" As Chromium(VI) compounds [RR-00026-0]

Potassium Chromate (CAS # 7789-00-6): "SN 2245 500 lb TPQ (Category Code N090. Includes any unique chemical substance that contains the named metal as part of that chemical structure)" As Chromium compounds [RR-00634-8]

Potassium Chromate (CAS # 7789-00-6): "sn 2245" As Chromium compounds [RR-00634-8]

Potassium Chromate (CAS # 7789-00-6): "sn 3575" As Chromium(VI) compounds [RR-00026-0];

"sn 2245" As Chromium compounds [RR-00634-8]

Potassium Chromate (CAS # 7789-00-6): carcinogen

Potassium Chromate (CAS # 7789-00-6): carcinogen; mutagen

Potassium Chromate (CAS # 7789-00-6): sn 1561

Potassium Chromate (CAS # 7789-00-6): sn 2245

Potassium Chromate (CAS # 7789-00-6): SN 2245 500 lb TPQ (Category Code N090. Includes any unique chemical substance that contains the named metal as part of that chemical structure)

Potassium Chromate (CAS # 7789-00-6): sn 3575

15.8. California Proposition 65

Potassium Chromate (CAS # 7789-00-6): "carcinogen, 2/27/1987" As Chromium hexavalent compounds [RR-00026-0]

Potassium Chromate (CAS # 7789-00-6): "developmental toxicity, 12/19/2008" As Chromium(VI) compounds [RR-00026-0]

Potassium Chromate (CAS # 7789-00-6): "female reproductive toxicity 12/19/08" As Chromium hexavalent compounds [RR-00026-0]

Potassium Chromate (CAS # 7789-00-6): "male reproductive toxicity, 12/19/08" As Chromium hexavalent compounds [RR-00026-0]

Potassium Chromate (CAS # 7789-00-6): carcinogen, 2/27/1987

Potassium Chromate (CAS # 7789-00-6): developmental toxicity, 12/19/2008

Potassium Chromate (CAS # 7789-00-6): female reproductive toxicity 12/19/08

Potassium Chromate (CAS # 7789-00-6): male reproductive toxicity, 12/19/08

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

Water (CAS # 7732-18-5): Present (DSL)

Potassium Chromate (CAS # 7789-00-6): Present (DSL)

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

All components of this solution are listed as active on the TSCA Inventory or are mixtures (hydrates) of active items listed on the TSCA Inventory.

Water (CAS # 7732-18-5): Present (ACTIVE)

Potassium Chromate (CAS # 7789-00-6): 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)

Water (CAS # 7732-18-5): 231-791-2

Potassium Chromate (CAS # 7789-00-6): 232-140-5

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SECTION 16: Other Information

16.1. Full Text of Hazard Statements and Precautionary Statements

May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause cancer. May damage fertility or the unborn child. Harmful to aquatic life with long lasting effects.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing fumes, mist, vapors, or spray. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves and eye protection. In case of inadequate ventilation wear respiratory protection.

IF ON SKIN: Wash with plenty of soap and water. IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. IF exposed or concerned: Get medical attention. Specific treatment (Wash areas of contact with water). If skin irritation occurs: Get medical attention. If experiencing respiratory symptoms: Call a POISON CENTER or physician. Wash contaminated clothing before reuse.

Store locked up.

Dispose of contents in accordance with local, state, federal and international regulations.

16.2. Miscellaneous Hazard Classes

Canadian Carcinogenicity Hazard Class: Not Applicable.

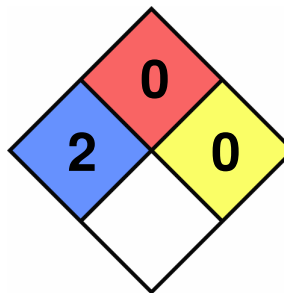
Physical Hazards Not Otherwise Classified (PHNOC): Not Applicable.

Health Hazards Not Otherwise Classified (HHNOC): Not Applicable.

Biohazardous Infectious Materials Hazard Class: Not Applicable.

16.3. National Fire Protection Association (NFPA) Rating

Health: 2
Flammability: 0
Reactivity: 0
Special Hazard:



16.4. Document Revision

Last Revision Date: 2023-09-11

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.