



## Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS)

### SECTION 1: Identification

#### 1.1. Product Identifier

**Trade Name or Designation:** Potassium Dichromate Spectrophotometric Standard, 0.5 AU/cm at 280 nm, buffered pH 7

**Product Number:** R6087050

**Other Identifying Product Numbers:** R6087050-1A

#### 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.

This product is not categorized as hazardous in any GHS hazard class.

#### 2.2. GHS Label Elements

**Pictograms:** None Required.

**Signal Word:** None Required.

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**Hazard Statements:** None Required.

**Precautionary Statements:** None Required.

## 2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

## SECTION 3: Composition / Information on Ingredients

### 3.1. Components of Substance or Mixture

Chemical Name	Formula	Molecular Weight	CAS Number	Weight%
Water	H <sub>2</sub> O	18.01 g/mol	7732-18-5	98.59
Sodium Phosphate Dibasic	Na <sub>2</sub> HPO <sub>4</sub>	141.95 g/mol	7558-79-4	0.90
Potassium Dihydrogen Phosphate	KH <sub>2</sub> PO <sub>4</sub>	136.08 g/mol	7778-77-0	0.50
Proprietary	Proprietary	Data not available.	Proprietary	< 0.1
Potassium Dichromate	K <sub>2</sub> Cr <sub>2</sub> O <sub>7</sub>	294.18 g/mol	7778-50-9	< 0.1
Sodium Hydroxide	NaOH	39.99 g/mol	1310-73-2	< 0.1

## SECTION 4: First-Aid Measures

### 4.1. General First Aid Information

**Eye Contact:** May cause slight irritation.

**Inhalation:** Not expected to require first aid. If necessary, remove to fresh air.

**Skin Contact:** May cause slight irritation to those allergic to phosphates.

**Ingestion:** Dilute with water or milk. Call a physician if necessary.

### 4.2. Most Important Symptoms and Effects, Acute and Delayed

WARNING! Contains a minute amount of a Hexavalent Chromium compound, which is a known carcinogen. Avoid ingestion, and contact with skin, eyes or clothing. If ingested, dilute with water and induce vomiting. Call a physician. Wash areas of contact with plenty of water. For eyes, get medical attention. EYE CONTACT: May cause slight irritation. SKIN CONTACT: May cause slight irritation to those allergic to phosphates.

CHRONIC EFFECTS / CARCINOGENICITY: Chronic poisoning can lead to liver damage.

### 4.3. Medical Attention or Special Treatment Needed

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. Call a physician if necessary.



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### SECTION 5: Fire-Fighting Measures

#### 5.1. Extinguishing Media

Use any means suitable for extinguishing surrounding fire.

#### 5.2. Specific Hazards Arising from the Substance or Mixture

Not considered to be a fire or explosion hazard.

#### 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 appropriate PPE for the size and nature of the spill. As a general rule, wear safety glasses and gloves.

#### 6.2. Cleanup and Containment Methods and Materials

Absorb with suitable material (vermiculite, clay, etc.) and dispose of in accordance with local regulations. Check with local agencies for the proper disposal of phosphate containing solutions.

### SECTION 7: Handling and Storage

#### 7.1. Precautions for Safe Handling and Storage Conditions

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
Sodium Hydroxide (1310-73-2)	TWA	USA	2 mg/m <sup>3</sup> TWA	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Sodium Hydroxide (1310-73-2)	TLV-Ceiling	USA	2 mg/m <sup>3</sup> Ceiling	ACGIH - Threshold Limit Values - Ceilings (TLV-C)
Potassium Dichromate (7778-50-9)	PEL	USA	"5 µg/m <sup>3</sup> TWA (See 29 CFR 1910.1026, as Cr); 2.5 µg/m <sup>3</sup> Action Level (as Cr)" As Chromium(VI) compounds [RR-00026-0]	U.S. - OSHA - Specifically Regulated Chemicals with PELs
Potassium Dichromate (7778-50-9)	TWA	USA	"5 µg/m <sup>3</sup> TWA" As Chromium(VI) compounds [RR-00026-0]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Potassium Dichromate (7778-50-9)	TLV-STEL	USA	"0.0005 mg/m <sup>3</sup> 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 Dichromate (7778-50-9)	TLV-TWA	USA	"0.0002 mg/m <sup>3</sup> 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 Dichromate (7778-50-9)	PEL-Ceiling	USA	"0.1 mg/m <sup>3</sup> 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 <sub>3</sub> )" As Chromates [RR-01554-3]	U.S. - OSHA - Final PELs - Ceiling Limits
Potassium Dichromate (7778-50-9)	TWA	USA	"5 µg/m <sup>3</sup> TWA" As Chromium(VI) compounds [RR-00026-0]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)

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Potassium Dichromate (7778-50-9)	PEL	USA	"5 µg/m <sup>3</sup> TWA (See 29 CFR 1910.1026, as Cr); 2.5 µg/m <sup>3</sup> Action Level (as Cr)" As Chromium(VI) compounds [RR-00026-0]	U.S. - OSHA - Specifically Regulated Chemicals with PELs
Potassium Dichromate (7778-50-9)	PEL	USA	5 µg/m <sup>3</sup> TWA (See 29 CFR 1910.1026, as Cr); 2.5 µg/m <sup>3</sup> Action Level (as Cr)	U.S. - OSHA - Specifically Regulated Chemicals with PELs
Potassium Dichromate (7778-50-9)	TWA	USA	5 µg/m <sup>3</sup> TWA	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Potassium Dichromate (7778-50-9)	PEL-Ceiling	USA	0.1 mg/m <sup>3</sup> 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 <sub>3</sub> )	U.S. - OSHA - Final PELs - Ceiling Limits
Potassium Dichromate (7778-50-9)	TWA	USA	"5 µg/m <sup>3</sup> TWA" As Chromium(VI) compounds [RR-00026-0]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Potassium Dichromate (7778-50-9)	PEL	USA	"5 µg/m <sup>3</sup> TWA (See 29 CFR 1910.1026, as Cr); 2.5 µg/m <sup>3</sup> Action Level (as Cr)" As Chromium(VI) compounds [RR-00026-0]	U.S. - OSHA - Specifically Regulated Chemicals with PELs
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Potassium Dichromate (7778-50-9)	TWA	USA	"5 µg/m <sup>3</sup> TWA" As Chromium(VI) compounds [RR-00026-0]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)

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Potassium Dichromate (7778-50-9)	TLV-TWA	USA	0.0002 mg/m <sup>3</sup> TWA (inhalable particulate matter, as Cr(VI))	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Potassium Dichromate (7778-50-9)	TLV-STEL	USA	0.0005 mg/m <sup>3</sup> STEL (inhalable particulate matter, as Cr(VI))	ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)

### 8.2. Exposure Controls

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

**Respiratory Protection:** Normal room ventilation is adequate.

**Skin Protection:** Chemical resistant gloves.

**Eye Protection:** Safety glasses or goggles.

### 8.3. Personal Protective Equipment

Normal room ventilation is adequate. Chemical resistant gloves. Safety glasses or goggles.



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### 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:** 7

**Melting/Freezing Point:** Approximately 0°C

**Initial Boiling Point/Range:** Approximately 100°C - Approximately 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.

### 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, Acetone plus Sulfuric Acid, Boron plus Silicon, Ethylene Glycol, Iron, Hydrazine, and Hydroxylamine.

#### 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:**

Not applicable.

**Acute Toxicity - Dermal Exposure:**

Not applicable.

**Acute Toxicity - Inhalation Exposure:**

Not applicable.

**Acute Toxicity - Other Information:**

LD50, Oral, Rat: (Sodium Phosphate Dibasic) 17 gm/kg; LD50, Dermal, Rabbit: (Potassium Phosphate Monobasic) >4640 mg/kg; details of toxic effects not reported other than lethal dose value. LD50, Oral, Rat: 25 mg/kg (Potassium Dichromate), Behavioral and sensory effects noted. LD50, Dermal, Rabbit: 14 mg/kg (Potassium Dichromate) respiratory, gastrointestinal and skin effects noted.

**Skin Corrosion and Irritation:**

Not applicable.

**Serious Eye Damage and Irritation:**

Not applicable.

**Respiratory Sensitization:**

Not applicable.

**Skin Sensitization:**

Not applicable.

**Germ Cell Mutagenicity:**

Not applicable.

**Carcinogenicity:**

Not applicable.

**Reproductive Toxicity:**

Not applicable.

**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.





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### **SECTION 12: Ecological Information**

#### **12.1. Ecotoxicity**

Not applicable.

#### **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)**

Not regulated according to DOT Regulations.

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### 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.

## SECTION 15: Regulatory Information

### 15.1. Occupational Safety and Health Administration (OSHA) Hazards

Potassium Dichromate (CAS # 7778-50-9): "5 µg/m<sup>3</sup> TWA (See 29 CFR 1910.1026, as Cr); 2.5 µg/m<sup>3</sup> Action Level (as Cr)" As Chromium(VI) compounds [RR-00026-0]

Potassium Dichromate (CAS # 7778-50-9): 5 µg/m<sup>3</sup> TWA (See 29 CFR 1910.1026, as Cr); 2.5 µg/m<sup>3</sup> 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

Sodium Hydroxide (CAS # 1310-73-2): 1000 lb final RQ; 454 kg final RQ

Sodium Phosphate Dibasic (CAS # 7558-79-4): 5000 lb final RQ; 2270 kg final RQ

Potassium Dichromate (CAS # 7778-50-9): 10 lb final RQ; 4.54 kg final RQ

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

Potassium Dichromate (CAS # 7778-50-9): "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 Dichromate (CAS # 7778-50-9): 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

Sodium Hydroxide (CAS # 1310-73-2): Present

Sodium Phosphate Dibasic (CAS # 7558-79-4): Present

Potassium Dichromate (CAS # 7778-50-9): Present

### 15.6. Pennsylvania Right-to-Know Hazardous Substances

Sodium Hydroxide (CAS # 1310-73-2): Environmental hazard

Sodium Hydroxide (CAS # 1310-73-2): Present

Sodium Phosphate Dibasic (CAS # 7558-79-4): Environmental hazard

Sodium Phosphate Dibasic (CAS # 7558-79-4): Present

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

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

Potassium Dichromate (CAS # 7778-50-9): "Environmental hazard" As Chromium compounds [RR-00634-8]

Potassium Dichromate (CAS # 7778-50-9): "Environmental hazard" As Chromium compounds [RR-00634-8];

"Present (also regulated under Dichromates)" As Bichromates [RR-01620-6]

Potassium Dichromate (CAS # 7778-50-9): "Environmental hazard; Special hazardous substance" As Chromium compounds, hexavalent [RR-00026-0];

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

Potassium Dichromate (CAS # 7778-50-9): "Present" As Chromium compounds [RR-00634-8]

Potassium Dichromate (CAS # 7778-50-9): "Present" As Chromium compounds, hexavalent [RR-00026-0]

Potassium Dichromate (CAS # 7778-50-9): "Present" As Chromium compounds, hexavalent [RR-00026-0];

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

Potassium Dichromate (CAS # 7778-50-9): Environmental hazard

Potassium Dichromate (CAS # 7778-50-9): Environmental hazard; Special hazardous substance

Potassium Dichromate (CAS # 7778-50-9): Present

Potassium Dichromate (CAS # 7778-50-9): Present (also regulated under Dichromates)

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

Sodium Hydroxide (CAS # 1310-73-2): corrosive

Sodium Hydroxide (CAS # 1310-73-2): sn 1706

Sodium Phosphate Dibasic (CAS # 7558-79-4): sn 1723

Potassium Dichromate (CAS # 7778-50-9): "carcinogen" As Chromium(VI) compounds [RR-00026-0]

Potassium Dichromate (CAS # 7778-50-9): "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 Dichromate (CAS # 7778-50-9): "sn 2245" As Chromium compounds [RR-00634-8]

Potassium Dichromate (CAS # 7778-50-9): "sn 3575" As Chromium(VI) compounds [RR-00026-0];

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

Potassium Dichromate (CAS # 7778-50-9): carcinogen

Potassium Dichromate (CAS # 7778-50-9): carcinogen; mutagen

Potassium Dichromate (CAS # 7778-50-9): sn 1564

Potassium Dichromate (CAS # 7778-50-9): sn 2245

Potassium Dichromate (CAS # 7778-50-9): 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 Dichromate (CAS # 7778-50-9): sn 3575

### 15.8. California Proposition 65

Potassium Dichromate (CAS # 7778-50-9): "carcinogen, 2/27/1987" As Chromium hexavalent compounds [RR-00026-0]

Potassium Dichromate (CAS # 7778-50-9): "developmental toxicity, 12/19/2008" As Chromium(VI) compounds [RR-00026-0]

Potassium Dichromate (CAS # 7778-50-9): "female reproductive toxicity 12/19/08" As Chromium hexavalent compounds [RR-00026-0]

Potassium Dichromate (CAS # 7778-50-9): "male reproductive toxicity, 12/19/08" As Chromium hexavalent compounds [RR-00026-0]

Potassium Dichromate (CAS # 7778-50-9): carcinogen, 2/27/1987

Potassium Dichromate (CAS # 7778-50-9): developmental toxicity, 12/19/2008

Potassium Dichromate (CAS # 7778-50-9): female reproductive toxicity 12/19/08

Potassium Dichromate (CAS # 7778-50-9): male reproductive toxicity, 12/19/08

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

Sodium Hydroxide (CAS # 1310-73-2): Present (DSL)

Sodium Phosphate Dibasic (CAS # 7558-79-4): Present (DSL)

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

Potassium Dichromate (CAS # 7778-50-9): Present (DSL)

Potassium Dihydrogen Phosphate (CAS # 7778-77-0): 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.

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Sodium Hydroxide (CAS # 1310-73-2): Present (ACTIVE)  
Sodium Phosphate Dibasic (CAS # 7558-79-4): Present (ACTIVE)  
Water (CAS # 7732-18-5): Present (ACTIVE)  
Potassium Dichromate (CAS # 7778-50-9): Present [R] (ACTIVE)  
Potassium Dihydrogen Phosphate (CAS # 7778-77-0): Present (ACTIVE)

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

Sodium Hydroxide (CAS # 1310-73-2): 215-185-5  
Sodium Phosphate Dibasic (CAS # 7558-79-4): 231-448-7  
Sodium Phosphate Dibasic (CAS # 7558-79-4): 231-558-5  
Water (CAS # 7732-18-5): 231-791-2  
Potassium Dichromate (CAS # 7778-50-9): 231-906-6  
Potassium Dihydrogen Phosphate (CAS # 7778-77-0): 231-913-4  
Potassium Dihydrogen Phosphate (CAS # 7778-77-0): 240-213-8

## SECTION 16: Other Information

### 16.1. Full Text of Hazard Statements and Precautionary Statements

### 16.2. Miscellaneous Hazard Classes

**Canadian Carcinogenicity Hazard Class:** Not Applicable.

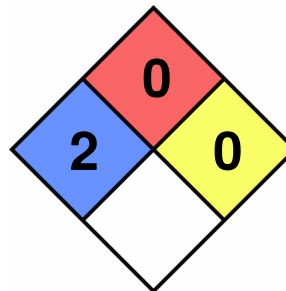
**Physical Hazards Not Otherwise Classified (PHNOC):** Not Applicable.

**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:** 2023-10-11

## 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.