### **SECTION 1: Identification**

#### 1.1. Product Identifier

Trade Name or Designation: Hexavalent Chromium AA Standard, 1000 ppm Cr<sup>6+</sup> in H<sub>2</sub>O

Product Number: ACR61KW

Other Identifying Product Numbers: ACR61KW-100, ACR61KW-500

#### 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 hr)

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

## **SECTION 2: Hazard(s) Identification**

#### 2.1. Classification of the Substance or Mixture (in accordance with OSHA HCS 29 CFR 1910.1200)

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

	Hazard		
Hazard Class	Category	Statement	Precautionary Statements
Acute Toxicity - Oral	Category 4	H302	P264, P270, P301+P312, P330, P501
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
Germ Cell Mutagenicity	Category 1	H340	P201, P202, P280, P308+P313, P405, 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 (Acute)	Category 3	H402	P273, P501
Hazardous to the Aquatic Environment (Chronic)	Category 3	H402	P273, P501

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# 2.2. GHS Label Elements Pictograms:





Signal Word: Danger

#### **Hazard Statements:**

Hazard Number	Hazard Statement
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
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.
H402	Harmful to aquatic life.

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#### **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 dust, fumes or mist.
P264	Wash arms, hands 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.
P285	In case of inadequate ventilation wear respiratory protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell.
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 immediately).
P330	Rinse mouth.
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.

#### 2.3. WHMIS Classification

WHMIS classification is not included based on the recommended option (Option 4) found in the Canada Gazette Part II, Vol. 149, No.3, page 458

#### 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	<b>CAS Number</b>	Weight%
Water	$H_2O$	18.01 g/mol	7732-18-5	99.72%
Potassium Dichromate	$K_2Cr_2O_7$	294.18 g/mol	7778-50-9	0.28%

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## **SECTION 4: First-Aid Measures**

#### 4.1. General First Aid Information

**Eye Contact:** May cause irritation, redness, pain, and tearing.

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 irritation, redness, and pain.

Ingestion: IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Dilute immediately with water or milk. Induce vomiting.

Call a physician.

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

WARNING! Contains Hexavalent Chromium compound, which is a known carcinogen. Harmful if swallowed or absorbed through skin. Avoid ingestion and contact with skin, eyes, or clothing. May cause irritation to eyes and skin. Wash areas of contact with plenty of water. If ingested, dilute with water and induce vomiting. Call a physician. EYE CONTACT: May cause irritation, redness, pain, and tearing. SKIN CONTACT: May cause irritation, redness, and pain. CHRONIC EFFECTS / CARCINOGENICITY: Chronic poisoning can lead to liver damage.

#### 4.3. Medical Attention or Special Treatment Needed

Specific treatment (Wash areas of contact with water immediately).

# **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 ent 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.

#### 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.

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# **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.

# **SECTION 8: Exposure Controls / Personal Protection**

#### 8.1. Control Parameters

Chemical Name Limit Typ	e Country	Exposure Limit	Information Source
Potassium Dichromate (7778-50-9) TWA	USA	5 μg/m³ TWA	U.S OSHA - Final PELs - Time Weighted
			Averages (TWAs)
Potassium Dichromate (7778-50-9) TLV-TWA	USA	0.05 mg/m³ TWA (as Cr)	ACGIH - Threshold Limit Values - Time
			Weighted Averages (TLV-TWA)
Potassium Dichromate (7778-50-9) PEL-Ceiling	USA	0.1 mg/m³ Ceiling (applies to any	U.S OSHA - Final PELs - Ceiling Limits
		operations or sectors for which the	
		Hexavalent Chromium standard [29	
		CFR 1910.1026] is stayed or is	
		otherwise not in effect, as CrO3)	
Potassium Dichromate (7778-50-9) PEL	USA	5 μg/m³ TWA (See 29 CFR 1910.1026	6, U.S OSHA - Specifically Regulated
		as Cr)	Chemicals with PELs
		2.5 μg/m³ Action Level (as Cr)	

#### 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.

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## **SECTION 9: Physical and Chemical Properties**

#### 9.1. Basic Physical and Chemical Properties

Appearance: Yellow-orange liquid

Physical State: Liquid

Odor: Data not available.

Odor Threshold: Data not available.

pH: approximately 4

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 (n-Octanol/Water): Data not available.

Auto-Ignition Temperature: Data not available.

**Decomposition Temperature:** Data not available.

Viscosity: Data not available.

**ExplosiveProperties:** 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. Any combustible organic or o

#### 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:**

Harmful if swallowed. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. Dispose of contents in accordance with local, state, federal and international regulations.

#### **Acute Toxicity - Dermal Exposure:**

Not applicable.

#### **Acute Toxicity - Inhalation Exposure:**

Not applicable.

#### **Acute Toxicity - Other Information:**

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:**

May cause allergy or asthma symptoms or breathing difficulties if inhaled. Avoid breathing dust, fumes or mist. 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 dust, fumes or mist. 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 immediately). Wash contaminated clothing before reuse. Dispose of contents in accordance with local, state, federal and international regulations.

#### Germ Cell Mutagenicity:

May cause genetic defects. 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.

#### 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.

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

# **SECTION 15: Regulatory Information**

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

Potassium Dichromate (CAS # 7778-50-9): 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 Dichromate (CAS # 7778-50-9): 10 lb final RQ; 4.54 kg final RQ
- 15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

Potassium Dichromate (CAS # 7778-50-9): 0.1 % de minimis concentration (except for Chromite ore mined in the Transvaal Region of South Africa and the unreacted ore component of the Chromite ore processing residue (COPR), Chemical Category N090)

#### 15.5. Massachusetts Right-to-Know Substance List

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

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

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

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

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

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 TPQ: 500 lb (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): 0.001 µg/day NSRL (inhalation)

Potassium Dichromate (CAS # 7778-50-9): carcinogen, initial date 2/27/87

Potassium Dichromate (CAS # 7778-50-9): developmental toxicity, initial date 12/19/08

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

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

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

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

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

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

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

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

# 15.11. European Inventory of Existing Commercial Chemical Substances (EINECS),

European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Not listed.

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## **SECTION 16: Other Information**

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

Harmful if swallowed. May cause an allergic skin reaction. 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. Harmful to aquatic life.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust, fumes or mist. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. 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 SWALLOWED: Call a POISON CENTER or physician if you feel unwell. 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 immediately). Rinse mouth. 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.

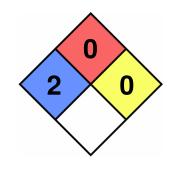
Physical Hazards Not Otherwise Classified (PHNOC): Not Applicable.

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

Not Applicable.

#### 16.3. National Fire Protection Association (NFPA) Rating

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



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#### 16.4. Document Revision

Last Revision Date: 5/1/2015

### **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.

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