

# Safety Data Sheet

## POTASSIUM DICHROMATE, 2.5% AQUEOUS

### Section 1 - Chemical Product and Company Identification

**SDS Name:** Potassium Dichromate, 2.5% Aqueous

**Catalog Numbers:** SO-402, F-192A

**Company Identification:** Transene Company, Inc., DBA ROWLEY BIOCHEMICAL, Inc.  
10 ELECTRONICS AVENUE  
DANVERS, MA 01923

**For information, call:** 978-739-4883

**Emergency Number:** 800-424-9300

**For CHEMTREC assistance, call:** 800-424-9300

### Section 2 - Hazards Identification

#### GHS Classifications Category

H303-Acute toxicity, oral: 5

H315-Skin corrosion/irritation: 2

H317-Sensitisation, skin: 1

H319-Serious eye damage/eye irritation: 2A

H332-Acute toxicity, inhalation: 4

H334-Sensitisation, respiratory: 1

H335-Specific target organ toxicity, single exposure; Respiratory tract irritation: 3

H340-Germ cell mutagenicity: 1B

H350-Carcinogenicity: 1A

H360-Reproductive toxicity: 1B

H373-Specific target organ toxicity, repeated exposure: 2

#### Pictogram or Hazard Symbols and Hazard Statement(s):



Signal word: Danger

## **Hazard Statements:**

H303-May be harmful if swallowed  
H315-Causes skin irritation  
H317-May cause an allergic skin reaction  
H319-Causes serious eye irritation  
H332-Harmful if inhaled  
H334-May cause allergy or asthma symptoms or breathing difficulties if inhaled  
H335-May cause respiratory irritation  
H340-May cause genetic defects  
H350-May cause cancer  
H360-May damage fertility or the unborn child  
H373-May cause damage to organs through prolonged or repeated exposure (Respiratory system, cardiovascular system, kidney, liver, and blood)

## **Precautionary Statements:**

P201-Obtain special instructions before use.  
P202-Do not handle until all safety precautions have been read and understood.  
P260-Do not breathe dust/fume/gas/mist/vapours/spray.  
P261-Avoid breathing dust/fume/gas/mist/vapours/spray.  
P264-Wash thoroughly after handling.  
P271-Use only outdoors or in a well-ventilated area.  
P272-Contaminated work clothing should not be allowed out of the workplace.  
P280-Wear protective gloves/protective clothing/eye protection/face protection.  
P281-Use personal protective equipment as required.  
P285-In case of inadequate ventilation wear respiratory protection.  
P302+P352-If on skin: Wash with plenty of soap and water.  
P304+P340-If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P304+P341-If inhaled: If breathing is difficult, remove victim to fresh air and keep at rest in a position 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/attention.  
P312-Call a Poison Center or doctor/physician if you feel unwell.  
P314-Get medical advice/attention if you feel unwell.  
P332+P313-If skin irritation occurs: Get medical advice/attention.  
P333+P313-If skin irritation or rash occurs: Get medical advice/attention.  
P337+P313-If eye irritation persists: Get medical advice/attention.  
P342+P311-If experiencing respiratory symptoms: Call a Poison Center or doctor/physician.  
P362-Take off contaminated clothing and wash before reuse.  
P363-Wash contaminated clothing before reuse.  
P403+P233-Store in a well-ventilated place. Keep container tightly closed.  
P405-Store locked up.  
P501-Dispose of contents/container in accordance with local/regional/national/international regulations.

### Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
7778-50-9	Potassium Dichromate	2.5 w/v
7732-18-5	Water	balance

### Section 4 - First Aid Measures

**Eye Exposure:** In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Seek immediate medical attention.

**Dermal Exposure:** In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Seek medical advice.

**Oral Exposure:** If swallowed, seek immediate medical advice. Do NOT induce vomiting. Rinse mouth with water and then drink water.

**Inhalation Exposure:** If inhaled, remove to fresh air. If not breathing give artificial respiration. Seek immediate medical attention.

### Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating gases may be generated by thermal decomposition or combustion.

**Extinguishing Media:** Use dry chemical, carbon dioxide, dry sand, water spray, or alcohol-resistant foam.

**Hazardous Combustion Products:** Chromium oxides, potassium oxides, irritating toxic fumes and gases.

**Flash Point:** Not available

**Auto ignition Temperature:** Not available

**Explosion Limits, Lower:** Not available

**Upper:** Not available

**NFPA Rating:** (estimated) Health: 3; Flammability: 0; Instability: 0

**Note:** Do not allow this material to dry out. When dried from aqueous solution, remaining solids will have oxidizing properties and should be kept away from flammables or combustibles.

## Section 6 - Accidental Release Measures

### **Procedure(s) of Personal Precaution(s):**

Wear personal protective equipment. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Ensure adequate ventilation. Keep away from heat.

**Methods for Cleaning up:** Absorb with sand, earth, or vermiculite. Carefully sweep up and containerize for proper disposal. Do not release to the environment. Do not release to drains.

## Section 7 - Handling and Storage

Use care when handling. Wear personal protective equipment. Use only under a chemical hood. Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Do not ingest. Do not breathe vapors/mist. Store in a tightly closed container at room temperature. Keep away from incompatible materials. Keep away from clothing and other combustible materials.

**Note: Do not allow this material to dry out. When dried from aqueous solution, remaining solids will have oxidizing properties and should kept away from flammables or combustibles.**

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

### **Personal Protective Equipment**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

### **Exposure Limits:**

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Potassium Dichromate CAS#7778-50-9	0.0002 mg/m3 TWA 0.0005 mg/m3 Skin STEL	0.0002 mg/m3 TWA 15 mg/m3 IDLH	0.1 mg/m3 Ceiling

**OSHA Vacated PELs:** Potassium Dichromate: 0.1 mg/m3 Ceiling

## Section 9 - Physical and Chemical Properties

**Physical State:** Liquid  
**Appearance:** Orange  
**Odor:** Odorless  
**Vapor Pressure:** Not available  
**Odor threshold:** Not available  
**Vapor Density:** Not available  
**pH:** Not available  
**Relative density:** Not available  
**Melting point/freezing point:** Not available  
**Solubility:** Soluble in water  
**Boiling Point:** Not available  
**Flash point:** Not available  
**Evaporation Rate:** Not available  
**Flammability (solid, gas):** Not applicable  
**Partition coefficient: n-octanol/water:** Not available  
**Auto-ignition temperature:** Not available  
**Decomposition temperature:** Not available  
**Viscosity:** Not available  
**Specific Gravity/Density:** Not available

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.  
**Conditions to Avoid:** Incompatible materials.  
**Incompatibilities with Other Materials:** Strong oxidizing agents, reducing agents, strong bases, acids, acid anhydrides, and combustible material.  
**Hazardous Decomposition Products:** Chromium oxides, potassium oxides, irritating toxic fumes and gases.

**Note: Do not allow this material to dry out. When dried from aqueous solution, remaining solids will have oxidizing properties and should be kept away from flammables or combustibles.**

## Section 11 - Toxicological Information

**CAS#7778-50-9: Potassium Dichromate: RTECS#: HX7680000**

LD50 Oral: 90.5 mg/kg (rat)  
LD50 Dermal: 1150 mg/kg (rabbit)  
LC50 Inhalation: 0.09 mg/L 4h (rat)

**Carcinogenicity:** Potassium Dichromate CAS#7778-50-9 is not listed by OSHA. Potassium Dichromate is listed by IARC (Group 1, Carcinogenic to Humans), NTP (Known

Carcinogen), ACGIH (A1, Known Human Carcinogen), and California Prop. 65 as a developmental carcinogen (female and male reproductive).

**Epidemiology:** Not available

**Teratogenicity:** May cause harm to the unborn child.

**Reproductive Effects:** May impair fertility.

**Developmental Effects:** Component substance is listed on California Prop. 65 as a developmental hazard.

**Neurotoxicity:** Not available

**Mutagenicity:** May cause heritable genetic damage.

**Specific Target Organ Toxicity, Single Exposure:** Not available

**Specific Target Organ Toxicity, Repeated Exposure:** Respiratory system, cardiovascular system, kidney, liver, and blood.

**The toxicological properties of this material have not been thoroughly investigated.**

## Section 12 - Ecological Information

**Ecotoxicity:** Do not release to the environment. Do not release to drains. Very toxic to aquatic life. May cause long-term adverse effects in the aquatic environment.

### **CAS#7778-50-9 Potassium Dichromate:**

LC50, freshwater fish: 14-20.9 mg/L 96h (pimephales promelas)

LC50, freshwater fish: 24.81-34.55 mg/L 96h semi-static (poecilia reticulata)

LC50, freshwater fish: 23-41.2 96h static (poecilia reticulata)

LC50, freshwater fish: 15.41-30.36 mg/L 96h flow-through (pimephales promelas)

LC50, freshwater fish: >139 mg/L 96h static (cyprinus carpio)

LC50, freshwater fish: 113.6-155.7 mg/L 96h flow-through (lepomis macrochirus)

LC50, freshwater fish: 320 mg/L 96h (lepomis macrochirus)

LC50, freshwater fish: 65.6-137.6 mg/L 96h static (lepomis macrochirus)

LC50, freshwater fish: 12.3 mg/L 96h semi-static (oncorhynchus mykiss)

LC50, freshwater fish: 21.209-30.046 mg/L 96h semi-static (oryzias latipes)

EC50, water flea: 1.4 mg/L 24h

**Persistence and degradability:** Not available

**Bio-accumulative potential:** Not available

**Mobility:** Will likely be mobile in the environment due to its water solubility.

## Section 13 - Disposal Considerations

**DISPOSAL:** Dispose of in accordance with all federal, state, and local regulations.

Section 14 – Transport Information
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**DOT**

Non-Regulated

Section 15 - Regulatory Information
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**Canada Regulatory Information**

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the SDS contains all the information required by the CPR.

Section 16 - Additional Information
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**SDS Creation Date:** 10-15-12

**Revision #1.** 5-22-15 RC

**Revision #2.** 4-21-22

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