

1. PRODUCT AND COMPANY IDENTIFICATION

Product name **Potassium Dichromate**
 Supplier The Science Company
 7625 W Hampden Ave, #14
 Lakewood, CO 80227
 Telephone (303) 777-3777
 Fax (303) 777-3331
 Emergency Phone Number CHEM-TEL (800) 255-3924

2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazardous

Oxidizing Solid, Carcinogen, Target Organ Effect, Toxic by ingestion, Skin sensitizer, Irritant, Mutagen

Target Organs: Lungs, Kidney, Liver, Blood, Skin, Eyes

Signal Words: DANGER

Classification

 Oxidizing Solid 2, Skin Corrosion/Irritation Category 1B Germ Cell Mutagenicity Category 1B Carcinogenicity
 Category 1B Reproductive Toxicity Category 1B Specific Target Organ Systemic Toxicity (STOT) - Repeated Exposure
 Category 1 Hazardous to the aquatic environment - Chronic Category 1 Acute Toxicity - Inhalation Dust / Mist Category 2
 Acute Toxicity - Inhalation Vapor Category 2 Acute Toxicity - Inhalation Gas Category 2 Acute Toxicity - Oral Category 3
 Acute Toxicity - Dermal Category 4

GH3 Label elements, including precautionary statements

Pictogram



Signal word Danger

May intensify fire. Toxic if swallowed. Harmful in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Fatal if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause genetic defects. May cause cancer. H360F - May damage fertility. Ca uses damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.

Other Safety Precautions: IF exposed or concerned: Get medical advice/attention.

HMIS Classification

Health hazard: 3
Fire: 0
Reactivity: 2
Personal: E

NFPA Rating

Health hazard: 3
Fire: 0
Reactivity Hazard: 0
Special hazard: OX

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS #
Potassium Dichromate	100	7778-50-9

4. FIRST AID MEASURES

Inhalation: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Skin Contact: IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention.

Ingestion: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use dry chemical, CO₂ or appropriate foam.

Special protective equipment for firefighters

Fire fighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

Fire and/or Explosion Hazards

Fire or excessive heat may produce hazardous decomposition products. Substance is an oxidizer.

Hazardous Combustion Products

Carbon dioxide, Carbon monoxide

6. ACCIDENTAL RELEASE MEASURES

Steps to Take in Case Material Is Released or Spilled

No adverse health effects expected from the clean-up of spilled material. Follow personal protective equipment recommendations found in Section 8 of this MSDS.

No special spill clean-up considerations. Collect and discard in regular trash. Collect spillage.

7. HANDLING AND STORAGE

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required. Wear respiratory protection. In case of inadequate ventilation wear respiratory protection. Keep container tightly closed in a cool, well-ventilated place.

Conditions for safe storage

Store in a well-ventilated place. Keep container tightly closed. Store locked up

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<u>Chemical Name</u>	<u>ACGIH</u>		<u>OSHA PEL</u>	
	<u>(TWA)</u>	<u>(STEL)</u>	<u>(TWA)</u>	<u>(STEL)</u>
Potassium Dichromate	0.05 mg/m ³ TWA (as Cr)	N/A	5 µg/m ³ TWA	N/A
Control Parameters				

Engineering Measures: No exposure limits exist for the constituents of this product. No engineering controls are likely to be required to maintain operator comfort under normal conditions of use.

Lab coat, apron, eye wash, safety shower.

Personal Protective Equipment (PPE)

Lab coat, apron, eye wash, safety shower.

Respiratory Protection:

No respiratory protection required under normal conditions of use.

Skin Protection

Not normally considered a skin hazard. Where use can result in skin contact, practice good personal hygiene. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves

No information available

9. PHYSICAL AND CHEMICAL PROPERTIES

Formula: K₂Cr₂O₇

Molecular Weight: 294.19

Appearance: Odorless orange-red solid.

Odor: None

Odor Threshold: ND **pH:** No data available **Melting Point:** 398°C **Flash Point:** N/A

Evaporation Rate (BuAc=1): N/A

Flammable Limits in Air: N/A

Vapor Pressure: N/A

Vapor Density (Air=1): N/A

Specific Gravity (H₂O=1): 2.676 at 25°C

Solubility in Water: 45g/L

Log Pow (calculated): No data available **Autoignition Temperature:** N/A **Decomposition Temperature:** N/A

Viscosity: No data available

Percent Volatile by Volume: 0%

10. STABILITY AND REACTIVITY

Reactivity: No data available
Chemical Stability: Stable under normal conditions.
Conditions to Avoid: None known.
Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Routes of Entry Inhalation, ingestion, eye or skin contact.

Symptoms (Acute): Respiratory disorders

Delayed Effects: N/A

Acute Toxicity:

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Potassium Dichromate	7778-50-9		ORAL LD50 RAT 25 MG/KG	DERMAL LD50 NA RABBIT 14 MG/KG

Chronic Effects:

Mutagenicity: Evidence of a mutagenic effect.
Teratogenicity: No evidence of a teratogenic effect (birth defect).
Sensitization: Evidence of a sensitization effect.
Reproductive: Evidence of negative reproductive effects.

Target Organ Effects:

Acute: See Section 2

Chronic: Listed by NTP, IARC as causing cancer. Mutation data cited. Tumorigenic data cited. Reproductive data cited. May cause sensitisation by inhalation and skin contact.

12. ECOLOGICAL INFORMATION

Overview: Severe ecological hazard. This product may be toxic to plants and/or wildlife.
Mobility: No data
Persistence: No data
Bioaccumulation: No data
Other Adverse Effects: No data available

Chemical Name	CAS Number	ECO Toxicity
Potassium Dichromate	7778-50-9	96 HR LC50 MORONE SAXATILIS 26 MG/L [STATIC] (FINGERLING) 96 HR LC50 CYPRINUS CARPIO 139 MG/L [STATIC] 96 HR LC50 LEPOMIS MACROCHIRUS 320 MG/L

13. DISPOSAL CONSIDERATIONS

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

Waste Disposal Code(s): Not Determined

14. TRANSPORT INFORMATION

DOT (US)

UN number: 3288 Class: 6.1 Packing group: III
 Proper shipping name: Toxic solid, inorganic, n.o.s. (Potassium Dichromate)
 Pollutant: No
 Poison Inhalation Hazard: No

IMDG

UN number: 3288 Class: 6.1 Packing group: III
 Proper shipping name: Toxic solid, inorganic, n.o.s. (Potassium Dichromate)
 Pollutant: No

IATA

UN number: 3288 Class: 6.1 Packing group: III
 Proper shipping name: Toxic solid, inorganic, n.o.s. (Potassium Dichromate)

15. REGULATORY INFORMATION

TSCA Status: All components in this product are on the TSCA Inventory.

Chemical Name	CAS No.	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
	7778-50-9	No	10lb RQ	10 lb final RQ; 4.54 kg final RQ	No	No

16. OTHER INFORMATION

Further information:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. The Science Company shall not be held liable for any damage resulting from handling or from contact with the above product.