

Safety Data Sheet

Potassium Dichromate

CAROLINA[®]
www.carolina.com

Section 1

Product Description

Product Name: Potassium Dichromate
Recommended Use: Science education applications
Synonyms: Dichromic Acid, Potassium Salt; Bichromate of Potash, Dipotassium Dichromate
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2

Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

DANGER



May intensify fire; oxidizer. Fatal if swallowed or if inhaled. Harmful in contact with skin. Causes severe skin burns and eye damage. 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. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.

GHS Classification:

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

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

Section 3

Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Potassium Dichromate	7778-50-9	100

Section 4

First Aid Measures

Emergency and First Aid Procedures

Inhalation: 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.

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

Section 5

Firefighting Procedures

Extinguishing Media: Use dry chemical, CO2 or appropriate foam.

Safety Data Sheet

Fire Fighting Methods and Protection:	Firefighters 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:	Chromium (VI) compounds

Section 6 Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled:	Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits. Avoid the generation of dusts during clean-up. Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Do not allow the spilled product to enter public drainage system or open waterways. Collect spillage.
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Section 7 Handling and Storage

Handling:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Keep/Store away from clothing/.../combustible materials. Take any precaution to avoid mixing with combustibles. Do not breathe 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. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Wear respiratory protection.
Storage:	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Keep container tightly closed in a cool, well-ventilated place.
Storage Code:	Yellow - Reactive. Store separate and away from incompatible material.

Section 8 Protection Information

Chemical Name	ACGIH		OSHA PEL	
	(TWA)	(STEL)	(TWA)	(STEL)
Potassium Dichromate	0.05 mg/m3 TWA (as Cr)	N/A	5 µg/m3 TWA	N/A

Control Parameters	
Engineering Measures:	Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.
Personal Protective Equipment (PPE):	Lab coat, apron, eye wash, safety shower.
Respiratory Protection:	No respiratory protection required under normal conditions of use. Provide general room exhaust ventilation if symptoms of overexposure occur as explained Section 11. A respirator is not normally required.
Respirator Type(s):	None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection.
Eye Protection:	Wear chemical splash goggles when handling this product. Have an eye wash station available.
Skin Protection:	Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.
Gloves:	Nitrile

Section 9 Physical Data

Formula: K ₂ Cr ₂ O ₇	Vapor Pressure: No data available
Molecular Weight: 294.19	Evaporation Rate (BuAc=1): No data available
Appearance: Orange Crystalline Solid	Vapor Density (Air=1): No data available

Safety Data Sheet

Odor: No data available
Odor Threshold: No data available
pH: No data available
Melting Point: 398 C
Boiling Point: No data available
Flash Point: No data available
Flammable Limits in Air: No data available

Specific Gravity: 2.676 at 25°C
Solubility in Water: Soluble
Log Pow (calculated): No data available
Autoignition Temperature: No data available
Decomposition Temperature: 500 C
Viscosity: No data available
Percent Volatile by Volume: 0%

Section 10

Reactivity Data

Reactivity: No data available
Chemical Stability: Stable under normal conditions.
Conditions to Avoid: Dusting, contact with flammable materials
Incompatible Materials: Strong reducing agents, flammable liquids
Hazardous Decomposition Products: Cr (VI) compounds
Hazardous Polymerization: Will not occur

Section 11

Toxicity Data

Routes of Entry: Inhalation, ingestion, eye or skin contact.
Symptoms (Acute): Respiratory disorders, Coffee Ground Emesis, Circulatory Shock, Glottic Edema, urinary symptoms, Methemoglobinemia, Impaired Kidney Function, Dermatitis
Delayed Effects: Dermatitis

Acute Toxicity:

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Potassium Dichromate	7778-50-9	Oral LD50 Mouse 190 mg/kg Oral LD50 Rat 25 mg/kg	Dermal LD50 Rabbit 14 mg/kg	Inhalation LC50 (4h) Rat 29 MG/CU M

Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
Potassium Dichromate	7778-50-9	Listed	Listed	Listed

Chronic Effects:

Mutagenicity: Evidence of a mutagenic effect.
Teratogenicity: Evidence of a teratogenic effect (birth defect).
Sensitization: Evidence of a sensitization effect.
Reproductive: Evidence of negative reproductive effects.
Target Organ Effects:
Acute: Respiratory system
Chronic: May cause sensitisation by inhalation and skin contact.

Section 12

Ecological Data

Overview: Severe ecological hazard. This product may be toxic to plants and/or wildlife.
Mobility: This material is expected to have high mobility in soil. It absorbs weakly to most soil types.
Persistence: No data
Bioaccumulation: Bioconcentration may occur.
Degradability: Does not biodegrade readily.
Other Adverse Effects: No data

Chemical Name	CAS Number	Eco Toxicity
Potassium Dichromate	7778-50-9	Aquatic LC50 (96h) Bluegill Sunfish 320 MG/L

Section 13

Disposal Information

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): If discarded, this product is considered a RCRA toxic waste.

Safety Data Sheet

Section 14

Transport Information

Ground - DOT Proper Shipping Name:

UN3086
TOXIC SOLIDS, OXIDIZING, N.O.S. (Potassium Dichromate)
Division 6.1(5.1),
Packing Group I

Air - IATA Proper Shipping Name:

UN3086
TOXIC SOLIDS, OXIDIZING, N.O.S. (Potassium Dichromate)
Division 6.1(5.1),
Packing Group I

Section 15

Regulatory Information

TSCA Status:

All components in this product are on the TSCA Inventory.

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

California Prop 65:

WARNING: This product contains a chemical known to the state of California to cause cancer and birth defects or other reproductive harm.

Section 16

Additional Information

Revised: 05/29/2015

Replaces: 04/28/2015

Printed: 05-29-2015

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health