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### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Potassium dichromate

Product Number : 207802

Brand : Sigma-Aldrich

Supplier : Sigma-Aldrich  
3050 Spruce Street  
SAINT LOUIS MO 63103  
USA

Telephone : +1 800-325-5832

Fax : +1 800-325-5052

Emergency Phone # (For both supplier and manufacturer) : (314) 776-6555

Preparation Information : Sigma-Aldrich Corporation  
Product Safety - Americas Region  
1-800-521-8956

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### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

#### OSHA Hazards

Oxidizer, Carcinogen, Target Organ Effect, Highly toxic by inhalation, Toxic by ingestion, Highly toxic

H330	Fatal if inhaled.
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.
H372	





Auto-ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapour pressure	no data available
Density	2.680 g/cm <sup>3</sup>
Water solubility	ca.29.4 g/l at 20 °C (68 °F)
Partition coefficient: n-octanol/water	log Pow: 5
Relative vapour density	no data available
Odour	no data available
Odour Threshold	no data available
Evaporation rate	no data available

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## 10. STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

no data available

### Conditions to avoid

no data available

### Materials to avoid

Organic materials, Do not store near acids., Powdered metals, Hydrazine

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Potassium oxides, Chromium oxides  
Other decomposition products - no data available

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## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

#### Oral LD50

LD50 Oral - rat - male - 168 mg/kg

LD50 Oral - rat - female - 90.5 mg/kg

#### Inhalation LC50

LC50 Inhalation - rat - female - 4 h - 0.088 mg/l

#### Dermal LD50

LD50 Dermal - rabbit - 14 mg/kg

May alter genetic material.  
In vivo tests showed mutagenic effects

**Carcinogenicity**

This is or contains a component that has been reported to be carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification.

Possible human carcinogen

IARC: 1 - Group 1: Carcinogenic to humans (Potassium dichromate)

NTP: Known to be human carcinogen (Potassium dichromate)

Toxicity to algae EC50 - Pseudokirchneriella subcapitata - 0.31 mg/l - 72 h

### **Persistence and degradability**

#### **Bioaccumulative potential**

Bioaccumulation Oncorhynchus mykiss (rainbow trout) - 180 d  
Bioconcentration factor (BCF): 17.4

#### **Mobility in soil**

no data available

#### **PBT and vPvB assessment**

no data available

#### **Other adverse effects**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Very toxic to aquatic life.

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## **13. DISPOSAL CONSIDERATIONS**

#### **Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

#### **Contaminated packaging**

Dispose of as unused product.

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## **14. TRANSPORT INFORMATION**

#### **DOT (US)**

UN number: 3086 Class: 6.1 (5.1) Packing group: I  
Proper shipping name: Toxic solids, oxidizing, n.o.s. (Potassium dichromate)  
Reportable Quantity (RQ): 10 lbs  
Marine pollutant: No  
Poison Inhalation Hazard: No

#### **IMDG**

UN number: 3086 Class: 6.1 (5.1) Packing group: I EMS-No: F-A, S-Q  
Proper shipping name: TOXIC SOLID, OXIDIZING, N.O.S. (Potassium dichromate)  
Marine pollutant: Marine pollutant

#### **IATA**

UN number: 3086 Class: 6.1 (5.1) Packing group: I  
Proper shipping name: Toxic solid, oxidizing, n.o.s. (Potassium dichromate)  
IATA Passenger: Not permitted for transport

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## **15. REGULATORY INFORMATION**

#### **OSHA Hazards**

Oxidizer, Carcinogen, Target Organ Effect, Highly toxic by inhalation, Toxic by ingestion, Highly toxic by skin absorption, Respiratory sensitiser, Corrosive, Teratogen, Mutagen

#### **SARA 302 Components**

### Massachusetts Right To Know Components

Potassium dichromate

CAS-No.  
7778-50-9

Revision Date  
1993-04-24

### Pennsylvania Right To Know Components

Potassium dichromate

CAS-No.  
7778-50-9

Revision Date  
1993-04-24

### New Jersey Right To Know Components

Potassium dichromate

CAS-No.  
7778-50-9

Revision Date  
1993-04-24

### California Prop. 65 Components

WARNING! This product contains a chemical known to the State of California to cause cancer.

Potassium dichromate

CAS-No.  
7778-50-9

Revision Date  
1987-02-27

### California Prop. 65 Components

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

Potassium dichromate

CAS-No.  
7778-50-9

Revision Date  
1987-02-27

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## 16. OTHER INFORMATION

### Further information

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