# **Material Safety Data Sheet**

Version 4.5 Revision Date 04/04/2013 Print Date 05/01/2013

# 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 : (314) 776-6555

both supplier and manufacturer)

Preparation Information : Sigma-Aldrich Corporation

Product Safety - Americas Region

1-800-521-8956

# 2. HAZARDS IDENTIFICATION

# **Emergency Overview**

### **OSHA Hazards**

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

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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	

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Auto-ignition no data available

temperature

Lower explosion limit no data available
Upper explosion limit no data available
Vapour pressure no data available
Density 2.680 g/cm3

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
Evapouration rate no data available

# 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

### 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

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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)

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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.

### 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.

### 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

# 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**

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# **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

# **16. OTHER INFORMATION**

# **Further information**

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