SIGMA-ALDRICH

Material Safety Data Sheet

Version 4.0 Revision Date 03/13/2010 Print Date 09/10/2010

1. PRODUCT AND COMPANY IDENTIFICATION			
Product name	E Potassium chromate		
Product Number Brand	: 216615 : Sigma-Aldrich		
Company	: Sigma-Aldrich 3050 Spruce Street SAINT LOUIS MO 63103 USA		
Telephone Fax Emergency Phone #	: +18003255832 : +18003255052 : (314) 776-6555		

2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards

Target Organ Effect, Toxic by ingestion, Skin sensitiser, Irritant, Carcinogen

Target Organs

Lungs, Kidney, Liver, Blood, Skin, Eyes

GHS Label elements, including precautionary statements

Pictogram



Signal word	Danger
Hazard statement(s)	
H301	Toxic if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H340	May cause genetic defects.
H350	May cause cancer.
H371	May cause damage to organs.
H400	Very toxic to aquatic life.
Precautionary statement(s)
P201	Obtain special instructions before use.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
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.
HMIS Classification	
Health hazard:	2
Chronic Health Hazard:	*
Flammability:	0
Physical hazards:	0

NFPA Rating Health hazard: Fire: Reactivity Hazard:	2 0 0
Potential Health Effects	
Inhalation Skin Eyes Ingestion	May be harmful if inhaled. Causes respiratory tract irritation. May be harmful if absorbed through skin. Causes skin irritation. Causes eye irritation. Toxic if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula	:	CrK ₂ O ₄
Molecular Weight	:	194.19 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
Potassium chromate			
7789-00-6	232-140-5	024-006-00-8	-

4. FIRST AID MEASURES

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves.

Eye protection

Face shield and safety glasses

Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	solid
Colour	yellow
Safety data	
рН	8.5 - 10.0 at 50 g/l at 20 °C (68 °F)
Melting point	971 °C (1,780 °F) - lit.
Boiling point	no data available
Flash point	not applicable
Ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Density	2.730 g/cm3
Water solubility	no data available

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Conditions to avoid

no data available

Materials to avoid

Organic materials, Powdered metals, Strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Potassium oxides, Chromium oxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity LD50 Oral - mouse - 180 mg/kg

Skin corrosion/irritation no data available

Serious eye damage/eye irritation no data available

Respiratory or skin sensitization May cause allergic skin reaction.

Germ cell mutagenicity

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: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure (GHS) May cause damage to organs.

Specific target organ toxicity - repeated exposure (GHS) no data available

Aspiration hazard

no data available

Potential health effects

Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.
Ingestion	Toxic if swallowed.
Skin	May be harmful if absorbed through skin. Causes skin irritation.
Eyes	Causes eye irritation.

Additional Information

RTECS: GB2940000

12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to fish	LC50 - Pimephales promelas (fathead minnow) - 40 mg/l - 96.0 h
Toxicity to daphnia and other aquatic invertebrates.	EC50 - Daphnia magna (Water flea) - 15 mg/l - 48 h

Toxicity to algae EC50 - Nitzschia sp. - 0.26 mg/l - 72 h

Persistence and degradability no data available

Bioaccumulative potential no data available

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 organisms, may cause long-term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

Product

Observe all federal, state, and local environmental regulations. 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: 3288 Class: 6.1 Packing group: III Proper shipping name: Toxic solid, inorganic, n.o.s. (Potassium chromate) Reportable Quantity (RQ): 10 lbs Marine pollutant: No Poison Inhalation Hazard: No

IMDG

UN-Number: 3288 Class: 6.1 Packing group: III EMS-No: F-A, S-A Proper shipping name: TOXIC SOLID, INORGANIC, N.O.S. (Potassium chromate) Marine pollutant: No

IATA

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

15. REGULATORY INFORMATION

OSHA Hazards

Target Organ Effect, Toxic by ingestion, Skin sensitiser, Irritant, Carcinogen

DSL Status

All components of this product are on the Canadian DSL list.

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

Potassium chromate	7789-00-6	1993-04-24
Pennsylvania Right To Know Components	CAS-No.	Revision Date
Potassium chromate	7789-00-6	1993-04-24
New Jersey Right To Know Components		
Potassium chromate	CAS-No. 7789-00-6	Revision Date 1993-04-24

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Further information

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