Potassium chromate
MSDS# 19320

Section 1 - Chemical Product and Company Identification
MSDS Name: Potassium chromate
Synonyms: Chromic acid, dipotassium salt; Chromate of potassium; Neutral potassium chromate.
Company Identification: Fisher Scientific UK
Bishop Meadow Road, Loughborough
Leics. LE11 5RG
For information in Europe, call: (01509) 231166
Emergency Number, Europe: 01509 231166

Section 2 - Composition, Information on Ingredients

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CAS#: 7789-00-6
Chemical Name: Chromic acid dipotassium salt
%: >99.5
EINECS#: 232-140-5
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Hazard Symbols: T O N
Risk Phrases: 46 49 22 36/37/38 43 50/53 B

Section 3 - Hazards Identification

EMERGENCY OVERVIEW
Harmful if swallowed. Irritating to eyes, respiratory system and skin. May cause sensitization by skin contact. May cause heritable genetic damage. Contact with combustible material may cause fire. May cause cancer by inhalation. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Potential Health Effects
Eye:
Contact with eyes may cause severe irritation, and possible eye burns. Exposure to particulates or solution may cause conjunctivitis, ulceration, and corneal abnormalities.

Skin:
May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. Contact with skin causes irritation and possible burns, especially if the skin is wet or moist. May cause dermatitis.

Ingestion:
May cause severe and permanent damage to the digestive tract. May cause liver and kidney damage. May cause severe digestive tract irritation with abdominal pain, nausea, vomiting and diarrhea.

Inhalation:
May cause asthmatic attacks due to allergic sensitization of the respiratory tract. May cause ulceration and perforation of the nasal septum if inhaled in excessive quantities. May cause severe irritation of the upper respiratory tract with pain, burns, and
inflammation. Causes chemical burns to the respiratory tract. May cause chemical bronchitis with coughing and difficulty in breathing.

**Chronic:**

Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion. Prolonged or repeated exposure may lead to asthma and perforation of the nasal septum. Repeated inhalation may cause chronic bronchitis. May cause liver and kidney damage. May cause cancer in humans.

**Section 4 - First Aid Measures**

**Eyes:**

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

**Skin:**

Get medical aid immediately. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**Ingestion:**

Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

**Inhalation:**

Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**Notes to Physician:**

**Section 5 - Fire Fighting Measures**

**General Information:**

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Strong oxidizer. Contact with other material may cause fire. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Containers may explode in the heat of a fire. Runoff from fire control or dilution water may cause pollution.

**Extinguishing Media:**

Do NOT use dry chemicals, CO2, Halon or foams. Use water only in flooding quantities as fog.

**Section 6 - Accidental Release Measures**

**General Information:**

Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:**

Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation. Keep combustibles (wood, paper, oil, etc.) away from spilled material.

**Section 7 - Handling and Storage**

**Handling:**

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Avoid contact with clothing.
and other combustible materials. Do not ingest or inhale. Use with adequate ventilation. Discard contaminated shoes.

Storage:
Do not store near combustible materials. Keep container closed when not in use. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep containers tightly closed. Avoid storage on wood floors.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits
CAS# 7789-00-6:
United Kingdom, WEL - TWA: (chromium (vi) compounds): 0.05 mg/m3 TWA (as Cr)
United Kingdom, WEL - STEL: (chromium (vi) compounds): 0.15 mg/m3 STEL (as Cr)
United States OSHA: 0.1 mg/m3 Ceiling (Chromates).
Belgium - TWA: (chromium (vi) compounds - water soluble): 0.05 mg/m3 VLE (as Cr)
France - VME: (chromium (vi) compounds): 0.05 mg/m3 VME (as Cr)
Germany: (chromium (vi) compounds): 0.05 mg/m3 VME (as Cr)
Japan: (chromium (vi) compounds): 0.05 mg/m3 OEL (as Cr); 0.01 mg/m3 OEL (certain compounds, as Cr)
Malaysia: (chromium (vi) compounds - water soluble): 0.05 mg/m3 TWA (as Cr)
Netherlands: (chromium (vi) compounds - water soluble): 0.05 mg/m3 STEL
Netherlands: (chromium (vi) compounds - water soluble): 0.025 mg/m3 MAC
Spain: 0.05 mg/m3 VLA-ED (as Cr)

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Solid
Color: yellow
Odor: odorless
pH: 8.6-9.8 (5% soln)
Vapor Pressure: 0
Viscosity: Not applicable.
Boiling Point: Not available
Freezing/Melting Point: 975 deg C (1,787.00 F)
Autoignition Temperature: None reported.
Flash Point: Not available
Explosion Limits: Lower: None reported.
Explosion Limits: Upper: None reported.
Decomposition Temperature: Not available
Solubility in water: Soluble
Specific Gravity/Density: 2.7320
Molecular Formula: K2CrO4
Molecular Weight: 194.20

Section 10 - Stability and Reactivity
Chemical Stability:
Stable under normal temperatures and pressures.
Conditions to Avoid:
Dust generation.
Incompatibilities with Other Materials
Not available
Hazardous Decomposition Products
Oxides of potassium, toxic chromium oxide fumes.
Hazardous Polymerization
Will not occur.

Section 11 - Toxicological Information
RTECS#:
CAS# 7789-00-6: GB2940000
LD50/LC50:
CAS# 7789-00-6: Oral, mouse: LD50 = 180 mg/kg;
Carcinogenicity:
Chromic acid dipotassium salt -
California: carcinogen, initial date 2/27/87 (Chromium (VI) compounds).
NTP: Known carcinogen (Chromium (VI) compounds).
IARC: Group 1 carcinogen (Chromium (VI) compounds).
Other:
See actual entry in RTECS for complete information.

Section 12 - Ecological Information
Ecotoxicity:
Not available

Section 13 - Disposal Considerations
Products considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location.
Contact a specialist disposal company or the local authority or advice. Empty containers must be decontaminated before returning for recycling.

Section 14 - Transport Information
IATA
Shipping Name: OXIDIZING SOLID, TOXIC, N.O.S.*
Hazard Class: 5.1
UN Number: 3087
Packing Group: III
IMO
Shipping Name: OXIDIZING SOLID, TOXIC, N.O.S.
Hazard Class: 5.1
UN Number: 3087
Packing Group: III
Shipping Name: OXIDIZING SOLID, TOXIC, N.O.S.
Hazard Class: 5.1
UN Number: 3087
Packing Group: III
USA RQ: CAS# 7789-00-6: 10 lb final RQ; 4.54 kg final RQ

European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: T O N
Risk Phrases:
R 46 May cause heritable genetic damage.
R 49 May cause cancer by inhalation.
R 22 Harmful if swallowed.
R 36/37/38 Irritating to eyes, respiratory system and skin.
R 43 May cause sensitization by skin contact.
R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 8 Contact with combustible material may cause fire.

Safety Phrases:
S 53 Avoid exposure - obtain special instructions before use.
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S 60 This material and its container must be disposed of as hazardous waste.
S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

WGK (Water Danger/Protection)
CAS# 7789-00-6: 2
Canada
CAS# 7789-00-6 is listed on Canada's DSL List
US Federal
TSCA
CAS# 7789-00-6 is listed on the TSCA Inventory.

MSDS Creation Date:
2/24/1999
Revision #7 Date
5/20/2005

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