

Camlab Limited – Material Safety Data Sheet


1. Identification

Product Code CC/0532-CH

Product Name **POTASSIUM CHROMATE pure**

Molecular Formula **K_2CrO_4 =194.19**

CAS Number **7789-00-6**

Supplier: **CAMLAB LIMITED**

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2. Composition

Component	CAS No	EEC No	Conc w/w	Classification & Risk Phrases	Exp (See 8.1)
Chromium (VI) compounds (as Cr)	7789-09-5	232-143-1	> 99.7%	T N : R49,R46,R1,R8,R21,R25,R26, R37/38,R41,R43,R50/53	WEL

3. Hazards Identification



May cause cancer by inhalation. May cause heritable genetic damage. Irritating to eyes, respiratory system and skin. May cause sensitisation by skin contact. Very Toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment. Carcinogen category: 2

4. First Aid Measures

Eyes Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. Unless contact has been slight OBTAIN MEDICAL ATTENTION

Skin Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. Unless contact has been slight OBTAIN MEDICAL ATTENTION

Inhalation Remove from exposure. Irrigate mouth and nasal passage with water. OBTAIN MEDICAL ATTENTION.

Ingestion If conscious give several glasses of water to drink and 5-10g of ascorbic acid dissolved in water. Do not induce vomiting. If unconscious place in the recovery position. OBTAIN MEDICAL ATTENTION URGENTLY.

5. Fire Fighting Measures

Hazards Not combustible but assists burning. Contact with combustible material may cause a fire. Fire-fighters should wear protective clothing and breathing apparatus.

Extinguishing Media Consider what other flammable materials are present and act accordingly.

Unsuitable Media Nothing specified.

6. Accidental Release Measures

Personal Protection	Avoid breathing dust-wear respiratory protective equipment. Evacuate area immediately. Do not allow general use of area until it is safe to do so.
Environmental	Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs. Keep combustible material away from spillage.
Major Spillage	Shovel/sweep up into container for removal Small areas of contamination should be treated with ferrous sulphate solution to reduce the chromium to the safer (trivalent) form and the pH adjusted to 8.5 prior to disposal. Wash area down with copious amounts of water.
Minor Spillage	Vacuum up into container for removal. Carefully remove material from vacuum cleaner and transfer to sealable container for disposal. Carry out this operation under fume extraction. Small areas of contamination should be treated with ferrous sulphate solution to reduce the chromium to the safer (trivalent) form and the pH adjusted to 8.5 prior to disposal. Wash area down with copious amounts of water.

7. Storage & Handling

Handling Precautions	Avoid contact with skin and eyes. Do not breath dust. Do not allow to contaminate clothing. Ensure Local Exhaust Ventilation maintains dust concentrations below the recommended limits.
Storage Conditions	Store in a suitable area for oxidising agents. Do not store on wooden surfaces. Keep well separated from combustible materials.

8.1 Workplace Exposure Limits

Component	CAS No	Workplace Exposure Limits				Maximum Exposure Limits			
		Long Term		Short Term		Long Term		Short Term	
		ppm	mg m ⁻³	ppm	mg m ⁻³	ppm	mg m ⁻³	ppm	mg m ⁻³
Chromium (VI) compounds (as Cr)	7789-09-5	-	0.0500	-	-	-	0.0500	-	-

8.2 Personal Protection

Respiratory	Use L.E.V. or natural ventilation to maintain dust concentrations below exposure limits. If not, use a well maintained chemical cartridge respirator, or use self contained breathing apparatus.
Hands	Use nitrile gloves or PVC gauntlets.
Eyes	Use chemical splash proof glasses or goggles.
Skin	Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.

9. Physical & Chemical Properties

Appearance	Lemon yellow crystals.
Odour	Odourless.
pH	9 (5% solution)
Boiling point	Not available
Melting point	975.0 °C
Flash point	Not available
Upper Flammable Limit	Not available
Lower Flammable Limit	Not available
Auto Ignition	Not available
Explosive properties	No.
Oxidising Properties	A strong oxidising agent.
Vapour Pressure	Not applicable
Relative Density	2.7300 °C
Water Solubility	39%

10. Stability & Reactivity

Chemical Stability	Stable under normal conditions but starts to decompose at 500C liberating oxygen.
Conditions to Avoid	No specific conditions.
Materials to Avoid	Many organic compounds. Combustible materials. Acids. Alkalis.
Hazardous Decomposition Products	Liberates oxygen on decomposition which will assist in a fire.

11. Toxicological Information

Eyes	The solid and solutions will irritate the eyes and can cause conjunctivitis.
Skin	The solid and solutions will highly irritating and corrosive to the skin, local inflammation can occur from 5% solutions. Contact with broken skin may lead to ulcers especially on the hands and forearms. Can be absorbed through the skin and cause systemic poisoning and subsequent kidney damage.
LD50 Skin	Not available
Ingest	Ingestion will cause severe internal irritation and damage, nausea, vomiting, abdominal pains and diarrhoea. Fatal dose in man appears to be 3-5g.
LD50 Ingest	Oral mouse 1600mg/Kg
Inhalation	Inhalation of dust will produce severe irritation of the eyes, nose, throat and respiratory tract. Causes inflammation of the larynx, bronchitis, and ulceration of the nasal septum.
Carcinogenicity	It is suspected as a long term carcinogen in man but evidence is inconclusive.
Mutagenicity	A mutagen.
Reproductive Effects	No information is available.

12. Ecological

Data for chromium ions in general [calculated as sodium chromate] : Toxic to fish >52 mg/l
LC50 : Algae toxic >5mg/l : Daphnia toxic > 0.32 mg/l. Very Toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment.

13. Disposal Considerations

Disposal Methods	Never dispose of into water courses or sewerage systems. Treat with ferrous sulphate solution to reduce the chromium to the safer (trivalent) form. The pH should be adjusted to 8.5, with sodium hydroxide or sodium carbonate, prior to disposal.
Contaminated Packaging	Use a licensed waste disposer.

14. Transport Information

Proper Shipping Name	Toxic Solid, Inorganic, N.O.S. (Potassium Chromate)
UN Number	3288
UN Classification	6.1 Toxic
Subsidiary Risk	None
Flash Point	Not available
Packing Group	III
Transport Category	2
Marine pollutant	No
ADR Hazard ID	60

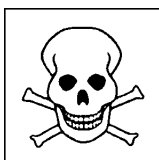


15. Regulatory Information

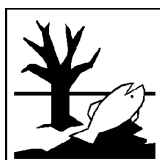
Labelling	Toxic, Dangerous for the Environment.
Classification	

Label Symbols

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15. Regulatory Information (continued)0,S61,R9002

Risk & safety Phrases	May cause cancer by inhalation. May cause heritable genetic damage. Irritating to eyes, respiratory system and skin. May cause sensitisation by skin contact. Very Toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment. Avoid exposure - obtain special instruction before use. In case of accident or if you feel unwell, seek medical advice immediately (show the label). This material and/or its container must be disposed of as hazardous waste. Avoid release to the environment, refer to special instructions/safety data sheet. Carcinogen category: 2
EEC Number	232-140-5

16. Other Information

Document Information	<p>This document has been prepared in accordance with directive 88/379/EEC.</p> <p>The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment.</p> <p>Revision Date: 27/11/06. Data reviewed and PDF file generated: 17/03/10. Copyright 2010 Camlab Limited.</p>
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