

Revision: 1.1

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Section 1. Identification

1.1 Product Identifier 0532

Product Name	POTASSIUM CHROMATE pure
CAS Number	7789-00-6
REACH Registration No	A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.
Molecular Formula	K_2CrO_4 =194.19

1.2 Relevent identified uses of the substance or mixture & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Vickers Laboratories Ltd



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Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Skin corrosion/irritation, category 2	H315: Causes skin irritation.
Serious eye damage/irritation, category 2	H319: Causes serious eye irritation.
Skin sensitization, category 1	H317: May cause an allergic skin reaction.
Germ cell mutagenicity, category 1B	H340: May cause genetic defects.
Carcinogenicity, category 1B	H350: May cause cancer.
Spec target organ tox - single, category 3	H335: May cause respiratory irritation.
Hazard to aquatic environment, category 1	H400: Very toxic to aquatic life.
Hazard to aquatic environment, category 1	H410: Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Signal word Danger

Hazard Pictograms



Hazard Statements May cause cancer. May cause genetic defects. Causes serious eye irritation. May cause respiratory irritation. Causes skin irritation. May cause an allergic skin reaction. Very toxic to aquatic life with long lasting effects.

Precautionary Statements Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves / protective clothing / eye protection / face protection. Wash thoroughly after handling. Avoid breathing dust / fume / gas / mist / vapours / spray. If skin irritation or a rash occurs: Get medical advice/attention.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Potassium chromate	7789-00-6	232-140-5		>99.7%	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Muta. 1B, Carc. 1B, STOT SE 3 (I), Aquatic Acute 1, Aquatic Chronic 1

Section 4. First Aid

4.1 Description of 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.
Personal protection for first aiders	Wear protective gloves / eye protection.

4.2 Most important symptoms and effects, both acute & delayed.

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed.

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media	Consider what other flammable materials are present and act accordingly.
Unsuitable Media	Nothing specified.

5.2 Special hazards arising from the substance or mixture

Hazards	Not combustible but assists burning. Contact with combustible material may cause a fire.
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5.3 Advice for firefighters

Advice for firefighters	Fire-fighters should wear protective clothing and breathing apparatus.
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Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

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.
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6.2 Environmental precautions

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.

6.3 Methods and material for containment and cleaning up

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.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

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.

7.2 Conditions for safe storage, including any incompatibilities

Store in a suitable area for oxidising agents. Do not store on wooden surfaces. Keep well separated from combustible materials.

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits		
			Long Term (8hr TWA)	Short Term 15min period	
Potassium chromate	7789-00-6	>99.7%	-	0.05 ppm	-

Exposure data source(s) IOELV: Indicative Occupational Exposure Limit Value.

8.2 Exposure controls

Respiratory Protection 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.

Hand Protection Use nitrile gloves or PVC gauntlets.

Eye Protection Use tightly fitting chemical splash proof glasses or goggles.

Skin Protection Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.

Special Hazards No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	Lemon yellow crystals.
Odour	Odourless.
pH	9 @ 20°C 5%
Boiling Point	Not available
Melting Point	975°C
Flash Point	Not applicable
Upper Flammable Limit	Not applicable
Lower Flammable Limit	Not applicable

Auto Ignition	Not applicable
Explosive Properties	No.
Oxidising Properties	A strong oxidising agent.
Vapour Pressure	Not applicable
Relative Density	2.7300
Water Solubility	39%

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1 Reactivity	No data available.
10.2 Chemical Stability	Stable under normal conditions but starts to decompose at 500C liberating oxygen.
10.3 Possibility of hazardous reactions	No data available.
10.4 Conditions to Avoid	No specific conditions.
10.5 Incompatible Materials	Many organic compounds. Combustible materials. Acids. Alkalis.
10.6 Hazardous Decomposition Products	Liberates oxygen on decomposition which will assist in a fire.

Section 11. Toxicological Information

11.1 Information on toxicological effects

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
Ingestion	Ingestion will cause severe internal irritation and damage, nausea, vomiting, abdominal pains and diarrhoea.
LD50 Oral	180mg/kg Mouse
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.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	It is suspected as a long term carcinogen in man but evidence is inconclusive.
Mutagenicity	A mutagen.
Reproductive Effects	No information is available.

Section 12. Ecological

12.1 Toxicity	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.
LC50 Algal	Not available
LC50 Crustacea	Not available
LC50 Fish	Not available
12.2 Persistence and degradability	No data available.
12.3 Bioaccumulative potential	No data available.
12.4 Mobility in soil	No data available.
12.5 Results of PBT & vPvB assessment	Assessment not required.
12.6 Other adverse effects	None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

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.

Section 14. Transport Information

14.1 UN Number	3288
14.2 Proper Shipping Name	Toxic solid, inorganic, N.O.S. (Potassium Chromate)
14.3 Transport classes	
UN classification	6.1
Subsidiary hazard(s)	None
Transport category	2
ADR Hazard ID	60
Tunnel Restriction Code	E
14.4 Packing Group	III
14.5 Environment hazards	See section 12.
14.6 Special precautions for user	No special precautions required.
14.7 Transport in bulk	Not transported in bulk.



Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for substance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Skin corrosion/irritation, category 2; Serious eye damage/irritation, category 2; Skin sensitization, category 1; Germ cell mutagenicity, category 1B; Carcinogenicity, category 1B; Spec target organ tox - single, category 3; Hazard to aquatic environment, category 1; Hazard to aquatic environment, category 1

Signal word Danger

Hazard Pictograms



Hazard Statements H350, H340, H319, H335, H315, H317, H410
May cause cancer. May cause genetic defects. Causes serious eye irritation. May cause respiratory irritation. Causes skin irritation. May cause an allergic skin reaction. Very toxic to aquatic life with long lasting effects.

Hazard Statements (Packs of 500ml/g or less) H350, H340, H319, H335, H317, H410
May cause cancer. May cause genetic defects. Causes serious eye irritation. May cause respiratory irritation. May cause an allergic skin reaction. Very toxic to aquatic life with long lasting effects.

Precautionary Statements P201, P202, P280, P264, P261, P333+P313
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves / protective clothing / eye protection / face protection. Wash thoroughly after handling. Avoid breathing dust / fume / gas / mist / vapours / spray. If skin irritation or a rash occurs: Get medical advice/attention.

Precautionary Statements (Packs of 500ml/g or less) P201, P202
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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