

Camlab Limited – Material Safety Data Sheet

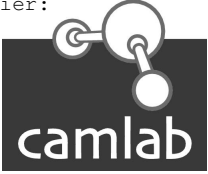
1. Identification

Product Code CC/0548-CO

Product Name **POTASSIUM PERMANGANATE pure**

Molecular Formula **KMnO₄ =158.03**

CAS Number **7722-64-7**

Supplier: **CAMLAB LIMITED**
**Norman Way Industrial Estate
Over
Cambridge
England
CB4 5WE**

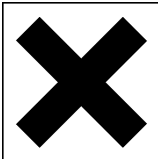
Phone **01954 233110**
Fax **01954 233101**

Emergency Telephone **08:00-17:00 01954 233110**
24hr 112
(Have this document to hand)

2. Composition

Component	CAS No	EEC No	Conc w/w	Classification & Risk Phrases	Exp (See 8.1)
Potassium permanganate	7722-64-7	231-760-3	> 99.0%	O Xn N : R8,R22,R50/53	N/A

3. Hazards Identification



Contact with combustible material may cause fire. Harmful if swallowed. Very Toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment.

4. First Aid Measures

Eyes Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. If discomfort persists OBTAIN MEDICAL ATTENTION.

Skin Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. If discomfort persists OBTAIN MEDICAL ATTENTION.

Inhalation Remove from exposure.

Ingestion If conscious give plenty of water to drink. OBTAIN MEDICAL ATTENTION URGENTLY.

5. Fire Fighting Measures

Hazards Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus. May evolve toxic fumes if involved in a fire.

Extinguishing Media Water spray, foam, dry powder or carbon dioxide.

Unsuitable Media Nothing specified.

6. Accidental Release Measures

Personal Protection Use approved personal protective equipment. Do not allow general use of area until it is safe to do so.

6. Accidental Release Measures (continued)

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.
Major Spillage	Shovel/sweep up into container for removal Wash to drain with copious amounts of water.
Minor Spillage	Wash to drain 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. Keep well separated from acids, metals, explosives, organic peroxides and ignitable materials. Do not store on wooden surfaces.

8.1 Workplace Exposure Limits

No prescribed exposure limits available

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	Dark purple crystals with metallic sheen.
Odour	Odourless.
pH	Not available
Boiling point	Not available
Melting point	240.0 °C
Flash point	Not available
Upper Flammable Limit	Not available
Lower Flammable Limit	Not available
Auto Ignition	Not available
Explosive properties	Not explosive as a single substance.
Oxidising Properties	A strong oxidising agent.
Vapour Pressure	Not available
Relative Density	2.7030 °C
Water Solubility	7%

10. Stability & Reactivity

Chemical Stability	Stable under normal conditions but starts to decompose at 240C liberating oxygen.
Conditions to Avoid	Do not allow to impregnate wood or other organic materials.
Materials to Avoid	Reacts explosively with many substances including hydrochloric, sulphuric and acetic acids, formaldehyde, solid reducing sugars, finely divided metals and organic nitrates. Ignition may occur on contact with dimethyl sulphoxide, glycerol, organic nitro compounds, oxygenated organic compounds especially when mixed with nitric acid. Contact with wood may cause a fire if moist or subject to friction. Violent exotherms have also occurred with hydrofluoric acid and hydrogen peroxide.
Hazardous Decomposition Products	Decompose with release of flammable oxygen gas. May produce hazardous fumes if involved in a fire.

11. Toxicological Information

Eyes	Dilute solutions are mildly irritating to the eye. Concentrated solutions and crystals are be extremely irritating to eyes and can cause chemical eye burns.
Skin	Solutions may cause skin irritation whilst the solid may cause chemical burns.
LD50 Skin	Not available
Ingest	Ingestion may cause Ingestion of low to moderate amounts can result in burning in the throat and gastro-intestinal effects such as ulceration, nausea, vomiting, diarrhoea and constipation.
LD50 Ingest	Not available
Inhalation	High concentrations of vapour may produce irritation of the eyes, nose, throat and respiratory tract.
Carcinogenicity	No information is available.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	Gynaecological disturbances have been reported in women and sexual disfunction in test animals.

12. Ecological

Very Toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment.

13. Disposal Considerations

Disposal Methods	Do not dispose of as domestic waste. Mix with a reducing agent eg. sodium metabisulphite or thiosulphate or a ferrous salt. Dilute with water. A sulphite/ferrous salt requires the addition of 2M sulphuric acid to promote rapid reduction. Neutralise slurry with soda ash and wash to drain with lots of water.
Contaminated Packaging	Wash out containers with water.

14. Transport Information

Proper Shipping Name	Potassium Permanganate
UN Number	1490
UN Classification	5.1 Oxidising agent
Subsidiary Risk	None
Flash Point	Not available
Packing Group	II
Transport Category	2
Marine pollutant	No
ADR Hazard ID	50



15. Regulatory Information

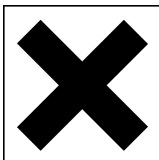
Labelling	Oxidising, Harmful, Dangerous for the Environment.
Classification	

Label Symbols

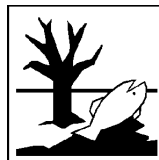
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Risk & safety Phrases	Contact with combustible material may cause fire. Harmful if swallowed. Very Toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment. Keep out of reach of children. This material and/or its container must be disposed of as hazardous waste. Avoid release to the environment, refer to special instructions/safety data sheet.
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EEC Number	231-760-3
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16. Other Information

Document Information This document has been prepared in accordance with directive 88/379/EEC.

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment.

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Data reviewed and PDF file generated: 17/03/10.

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