

Camlab Limited – Material Safety Data Sheet


1. Identification

Product Code CC/1224-CH

Product Name **MANGANESE DIOXIDE POWDER**

Molecular Formula **MnO₂ =86.94**

CAS Number 1313-13-9

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

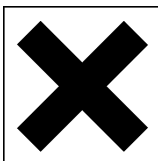
Phone 01954 233110
Fax 01954 233101

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)
Manganese and compounds (as Mn)	1313-13-9	215-202-6	80.0%	Xn : R20/22	WEL

3. Hazards Identification



Harmful by inhalation and if swallowed.

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 Thoroughly wash off skin with soap and water. Remove contaminated clothing immediately and wash before re-use.

Inhalation Remove from exposure.

Ingestion Wash out the patients mouth thoroughly with water. In severe cases or if exposure has been great, OBTAIN MEDICAL ATTENTION.

5. Fire Fighting Measures

Hazards Not combustible but assists burning. 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 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. Do not allow other people to enter area.

6. Accidental Release Measures (continued)

Environmental	Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.
Major 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.
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.

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.

8.1 Workplace Exposure Limits

Workplace Exposure Limits	Long Term (8hr TWA):	-	ppm	0.5000	mg m-3
	Short Term (15min Period):	-	ppm	-	mg m-3

8.2 Personal Protection

Respiratory	If process creates significant amounts of dust use L.E.V. or wear suitable dust mask.
Hands	Wear gloves.
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 brown powder.
Odour	No specific odour.
pH	Not available
Boiling point	Not available
Melting point	535.0 °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 available
Relative Density	4.8000 °C
Water Solubility	Insoluble in water.

10. Stability & Reactivity

Chemical Stability	Stable under normal conditions
Conditions to Avoid	No specific conditions.
Materials to Avoid	Reacts with hydrochloric acid liberating toxic chlorine gas. A strong oxidiser, avoid heating or friction with organic matter or other easily oxidisable substances eg. sulphur, sulphide, phosphide or hypophosphites.
Hazardous Decomposition Products	May produce hazardous fumes if involved in a fire.

11. Toxicological Information

Eyes	Presents no significant health hazard to the eyes.
Skin	Presents no significant hazard by skin contact.
LD50 Skin	Not available
Ingest	Ingestion will cause similar effects to dust inhalation.
LD50 Ingest	Not available
Inhalation	Prolonged exposure to dust or fume concentrations above the occupational exposure limits may lead to pronounced dizziness, nausea, loss of appetite and co-ordination. Absorbed manganese accumulates in the blood until a threshold value is exceeded after which further absorption leads to deposition in body organs. Chronic poisoning is difficult to diagnose but symptoms are weight and appetite loss, headaches, dizziness, somnolence indifference and apathy.
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.

12. Ecological

No specific environmental hazard.

13. Disposal Considerations

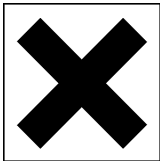
Disposal Methods	Dispose of to a licensed land fill site.
Contaminated Packaging	Use a licensed waste disposer.

14. Transport Information

Proper Shipping Name	Oxidizing Solid, N.O.S.(Manganese Dioxide Powder)
UN Number	1479
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	Harmful.
Classification	
Label Symbols	Xn 
Risk & safety Phrases	Harmful by inhalation and if swallowed. Keep out of reach of children. Avoid contact with eyes.
EEC Number	215-202-6

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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