

CTM POTTERS SUPPLIES

SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product information:

Product Name : Manganese Dioxide
Chemical Name : Manganese Dioxide with associated mineral
Synonyms : None
Company : CTM Potters Supplies
Unit 10A, Millpark Industrial Estate
White Cross Road
Woodbury Salterton
Nr. Exeter
EX5 1EL
Telephone : 01395-233-077
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2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS Number	EC Number	% of composition
Manganese dioxide	1313-13-9	2152026	70-80

The rest is associated, naturally occurring minerals, composed of iron, alumina and silica.

Manganese dioxide is classified in the CHIP regulations: harmful by inhalation and if swallowed when present at >25%.

3. HAZARD IDENTIFICATION

Inhalation: Excessive exposure causes chronic manganese poisoning, with damage to the central nervous system. Removal from exposure arrests the disease and some improvements may follow. Early symptoms include loss of appetite, headaches, dizziness, indifference and apathy. Later symptoms include disturbances in gait and speech, rigid facial expressions (mask like) and tremors of the limbs.

Ingestion: May cause gastrointestinal upsets, nausea and vomiting. Symptoms of chronic exposure are as for the inhalation route, but the stomach absorbs manganese dioxide very slowly, so the effects are much smaller.

Eyes: May cause physical irritation and inflammation.

Skin: The material is not a primary irritant, but as with any abrasive powder it may give rise to minor irritation. The material can dehydrate skin and mucous membranes.

4. FIRST AID MEASURES

General Recommendations:

Inhalation: Remove patient to fresh air, loosen tight clothing and seek medical attention.

Ingestion: Do not induce vomiting. Seek medical advice.

Eyes: Wash immediately with copious amounts of water.

Skin: Wash affected areas with water.

5. FIRE-FIGHTING MEASURES

Extinguishing media: Those suitable for surrounding fire conditions.

Special exposure hazards:	In the event of fire, the product may emit harmful or toxic fumes. As an oxidant it will also assist ignition and combustion.
Protective personal equipment:	Self contained breathing apparatus and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Leaks & Spills:	Use suitable vacuum equipment where reasonably practicable. Otherwise, damp down and scoop into a receptacle. Do not wash into water courses, sewers or drains.
Personal protective equipment:	Respiratory protective equipment.

7. HANDLING AND STORAGE

Handling:	Do not eat, drink, or smoke in areas where the material is used. Wash thoroughly after handling the material.
Storage:	Store in dry area. Do not use mild steel containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls:	Adequate ventilation should be provided so that Occupational Exposure Limits are not exceeded. Local Exhaust Ventilation is normally recommended.
Personal protective equipment:	Where LEV is not practicable and exposure is likely to be excessive, approved respiratory protection to CEN standards prEN 140, 141, 143 or 149 should be worn. Protective gloves and overalls are recommended for prolonged contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	
Form:	powder
Colour:	red brown
Odour:	odourless
Flash point (°C):	N/A
Flammability:	N/A
Explosive properties:	Non-explosive
Oxidising properties:	Mildly oxidising
Specific gravity:	3 - 5
pH value:	7 (insoluble in water)
Melting point (°C):	Not available

10. STABILITY AND REACTIVITY

Chemical stability:	The material is stable
Conditions/materials to avoid:	An easily oxidised material
Hazardous decomposition products:	None known
Hazardous polymerization products:	None

11. TOXICOLOGICAL INFORMATION

Acute toxicology:	LD50 Oral: <2000mg/kg and >200mg/kg LD50 Dermal: Not known LD50 Inhalation: Not known
Health effects:	Prolonged or repeated exposure above Occupational Exposure Standards may cause fibrosis of the lungs and damage to the central nervous system, resulting in headaches, dizziness, apathy, weight loss and loss of appetite. (refer to section 3)

12. ECOLOGICAL INFORMATION

Ecotoxicity:	Not known.
Persistence:	The product is chemically stable and will persist in the environment.

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with current waste disposal regulations (for UK – Control of Pollution (Special Waste) Regulations 1980). Landfill is the most appropriate method.

14. TRANSPORT INFORMATION

UN/SI No.		Not classified
UN Class		Not classified
Packing Group		Not classified
Road	UK	Not classified
	ADR	Not classified
Sea	IMO	Not classified
Air		Not classified
	ICAO	

15. REGULATORY INFORMATION

EC Supply Labelling:	Harmful		
R-Phrases:	R20/22	harmful by inhalation and if swallowed.	
S-Phrases:	S20/21	when using do not eat, drink or smoke.	
	S22/23	do not breathe dust or spray.	
	S25	avoid contact with the eyes.	
UK Occupational exposures limits*:	Mg/m ³	8 hr TWA	% in product.
Manganese compounds (as M)	5		48-54

*Refer to HSE Guidance note EH40

In accordance with HSE Approved Code of Practice for CHIP, the recipient is reminded of their obligations under both the Health and Safety at Work Act (HSWA) and the Control of Substances Hazardous to Health Regulations (COSHH), and that the information in any safety data sheet does not constitute the user's assessment of workplace risk.

16. OTHER INFORMATION**References:**

COSHH ACOP	HSC approved Code of Practice for the Control of Substances Hazardous to Health Regulations 1994
CHIP 96	Chemicals (Hazard Information and Packaging for Supply) Regulations 1996
CHIP SDS ACOPS	HSC Approved Code of Practice for Safety Data Sheets in accordance with regulation 6 of the CHIP regulations.
HSE EH40	HSE Guidance note EH40 on Occupational Exposure Limits to be used in conjunction with the COSH regulations.

Further information:

Data sheet producing department: CTM Potters Supplies
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Disclaimer:

The information contained in this safety data sheet has been prepared using the best available information, however in view of technical developments, this may alter. The material must only be used for its stated purpose and the information contained within this data sheet is offered solely for use in the evaluation of this product in respect of safety, health and environmental hazards. Due to the many factors outside our control when using this product, we cannot accept liability for any injury, accident, loss or damage caused through its use.