

SAFETY DATA SHEET
MANGANESE (IV) OXIDE 75%

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Compilation date: 25/02/2019

Revision No: 1

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: MANGANESE (IV) OXIDE 75%

CAS number: 1313-13-9

EINECS number: 215-202-6

Product code: GPC9303

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of substance / mixture: PC21: Laboratory chemicals.

1.3. Details of the supplier of the safety data sheet

Company name: Atom Scientific Ltd

2b East Tame Business Park

Hyde

Manchester

SK14 4GX

Tel: 0161 366 5123

Fax: 01704 337167

Email: technical@atomscientific.com

1.4. Emergency telephone number

Emergency tel: 07833453806

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Acute Tox. 4: H302; STOT RE 2: H373; Acute Tox. 4: H332

Classification under CHIP: Xn: R20/22

Most important adverse effects: Harmful if swallowed. Harmful if inhaled. May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements

Label elements under CLP:

Hazard statements: H302: Harmful if swallowed.

H332: Harmful if inhaled.

H373: May cause damage to organs through prolonged or repeated exposure.

Signal words: Warning

Hazard pictograms: GHS08: Health hazard

GHS07: Exclamation mark



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Precautionary statements: P260: Do not breathe dust/fumes/gas/mist/vapours/spray.
P264: Wash skin thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312: Call a POISON CENTER or doctor if you feel unwell.
P314: Get medical advice/attention if you feel unwell.
P501: Dispose of contents/container to an approved waste disposal plant.

2.3. Other hazards

Other hazards: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.1. Substances

Chemical identity: MANGANESE (IV) OXIDE 75%

CAS number: 1313-13-9

EINECS number: 215-202-6

Contains: Formula : MnO₂

Molecular weight : 86.94 g/mol

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Wash immediately with plenty of soap and water. Consult a doctor.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Wash out mouth with water. Do not induce vomiting. Consult a doctor.

Inhalation: Move to fresh air in case of accidental inhalation of vapours. If unconscious, check for breathing and apply artificial respiration if necessary. Consult a doctor.

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

Skin contact: No data available.

Eye contact: No data available.

Ingestion: Harmful if swallowed.

Inhalation: No data available.

Delayed / immediate effects: No data available.

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

Immediate / special treatment: No data available.

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Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Water spray. Alcohol resistant foam. Dry chemical powder. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: Not applicable.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation.
Avoid breathing vapours, mist or gas.
For personal protection see section 8.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

Reference to other sections: Refer to section 13 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area. Keep container tightly closed.

Suitable packaging: Not applicable.

7.3. Specific end use(s)

Specific end use(s): No special requirement.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

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8.1. DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Respiratory protection: For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection: Protective gloves. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection: Safety glasses with side-shields. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Environmental: Do not let product enter drains.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Powder

Colour: Black

Odour: Odourless

Melting point/range°C: 535

Flash point°C: does not flash

Relative density: 5.21 g/cm³ at 21 °C

9.2. Other information

Other information: Not applicable.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: No data available.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: No data available.

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10.4. Conditions to avoid

Conditions to avoid: No data available.

10.5. Incompatible materials

Materials to avoid: No data available.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes of manganese/ manganese oxides.

Section 11: Toxicological information

11.1. Information on toxicological effects

Relevant hazards for substance:

| Hazard | Route | Basis |
|-----------------------------|---------|--------------------|
| Acute toxicity (ac. tox. 4) | INH ING | Based on test data |
| STOT-repeated exposure | - | Based on test data |

Symptoms / routes of exposure

Skin contact: No data available.

Eye contact: No data available.

Ingestion: Harmful if swallowed.

Inhalation: No data available.

Delayed / immediate effects: No data available.

Other information: Not applicable.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values: No data available.

12.2. Persistence and degradability

Persistence and degradability: No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: No data available.

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Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste.

Handle uncleaned containers like the product itself.

Recovery operations: Not applicable.

Disposal of packaging: Dispose of as unused product.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Specific regulations: This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and 3: H302: Harmful if swallowed.

H332: Harmful if inhaled.

H373: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

R20/22: Harmful by inhalation and if swallowed.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.