



**Qualikems**

# Qualikems Lifesciences Pvt. Ltd.

(Formerly known as Qualikems fine chem Pvt Ltd)

Works : Plot No. 68-69,G.I.D.C Industrial Estate,Nandesari,Vadodara-391340 (Gujarat)

Telefax : 91-265-2841531,2841532,2841534,2841535.

Email: salesindia@qualikems.com ,www.qualikems.com

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### Product identifiers

Product name : **Manganese**

CAS-No. : **7439-96-5**

### Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Industrial & for professional use only.

### Details of the supplier of the safety data sheet

Company : Qualikems Lifesciences Pvt Ltd

Works : Plot No. 68.69,G.I.D.C  
Industrial Estate, Nandesari,  
Vadodara-391340 (Gujarat)

### Emergency telephone number

Emergency Phone # : +91-265-2841531 (9:00am - 6:30 pm) [Office hours]

## SECTION 2: Hazards identification

### Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

### Label elements

Not a hazardous substance or mixture.

### 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.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Formula : Mn  
Molecular weight : 54.94 g/mol  
CAS-No. : 7439-96-5  
EC-No. : 231-105-1

No components need to be disclosed according to the applicable regulations.

## **SECTION 4: First aid measures**

### **Description of first aid measures**

#### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### **If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### **In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

#### **In case of eye contact**

Flush eyes with water as a precaution.

#### **If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### **Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

#### **Indication of any immediate medical attention and special treatment needed**

No data available

## **SECTION 5: Firefighting measures**

### **Extinguishing media**

#### **Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### **Special hazards arising from the substance or mixture**

Manganese/manganese oxides

#### **Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

#### **Further information**

No data available

## **SECTION 6: Accidental release measures**

### **Personal precautions, protective equipment and emergency procedures**

Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

For personal protection see section 8.

### **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### **Methods and materials for containment and cleaning up**

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

### **Reference to other sections**

For disposal see section 13.

## **SECTION 7: Handling and storage**

### **Precautions for safe handling**

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

**Conditions for safe storage, including any incompatibilities**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Moisture sensitive. Handle and store under inert gas.

Storage class (TRGS 510): Non Combustible Solids

**Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

**SECTION 8: Exposure controls/personal protection****Control parameters****Exposure controls****Appropriate engineering controls**

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

**Personal protective equipment****Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**

Handle with gloves. Gloves must be inspected prior to use. 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.

**Body Protection**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**

Respiratory protection is not required. Where protection from nuisance le (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**SECTION 9: Physical and chemical properties****Information on basic physical and chemical properties**

- |  |  |
|--|--|
| a) Appearance                              | Form: solid in various form<br>Colour: grey, brown, silver |
| b) Odour                                   | odourless  |
| c) Odour Threshold                         | No data available  |
| d) pH                                      | No data available  |
| e) Melting point/freezing point            | Melting point/range: 1,244 °C - lit.                       |
| f) Initial boiling point and boiling range | 1,962 °C - lit.  |
| g) Flash point                             | Not applicable   |
| h) Evaporation rate                        | No data available  |

- |   |  |
|---|--|
| i) Flammability (solid,gas)                     | No data available                      |
| j) Upper/lower flammability or explosive limits | No data available                      |
| k) Vapour pressure                              | No data available                      |
| l) Vapour density                               | No data available                      |
| m) Relative density                             | 7.3 g/mL at 25 °C                      |
| n) Water solubility                             | 0.0007 g/l at 20 °C - slightly soluble |
| o) Partition coefficient: n-octanol/water       | No data available                      |
| p) Auto-ignition temperature                    | No data available                      |
| q) Decomposition temperature                    | No data available                      |
| r) Viscosity                                    | No data available                      |
| s) Explosive properties                         | No data available                      |
| t) Oxidizing properties                         | No data available                      |

**Other safety information**

No data available

**SECTION 10: Stability and reactivity**

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

No data available

**Conditions to avoid**

Avoid moisture.

**Incompatible materials**

acids, Halogens, Bases, Phosphorus, Sulphur oxides, Hydrogen peroxide, Oxidizing agents, Nitric acid, Sodium Hydroxide, Carbon dioxide (CO<sub>2</sub>), Nitryl Flouride, Steam

**Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Manganese/manganese oxides

Other decomposition products - No data available

In the event of fire: see section 5

**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

**Acute toxicity**

LD50 Oral - Rat - female - > 2,000 mg/kg(Manganese)

(OECD Test Guideline 420)

LC50 Inhalation - Rat - male and female - 4 h - > 5.14 mg/l(Manganese)

(OECD Test Guideline 403)

**Skin corrosion/irritation**

Skin - Rabbit(Manganese)

Result: No skin irritation

(OECD Test Guideline 404)

**Serious eye damage/eye irritation**

Eyes - Rabbit(Manganese)  
 Result: No eye irritation - 72 h  
 (OECD Test Guideline 405)

**Respiratory or skin sensitisation**

- Mouse(Manganese)  
 Result: Does not cause skin sensitisation.  
 (OECD Test Guideline 429)

**Germ cell mutagenicity**

No data available(Manganese)

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Reproductive toxicity**

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.(Manganese)

**Specific target organ toxicity - single exposure**

No data available(Manganese)

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available(Manganese)

**Additional Information**

RTECS: Not available

Men exposed to manganese dusts showed a decrease in fertility. Chronic man system. Early symptoms include languor, sleepiness and weakness in the le disturbances such as uncontrollable laughter and a spastic gait with tend cases. High incidence of pneumonia has been found in workers exposed to t, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(Manganese)

**SECTION 12: Ecological information****Toxicity**

Toxicity to fish	semi-static test NOEC - Oncorhynchus mykiss (rainbow trout) - 3.6 mg/l - 96 h(Manganese) (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	Immobilization NOEC - Daphnia magna (Water flea) - 1.6 mg/l - 48 h(Manganese) (OECD Test Guideline 202)
Toxicity to algae	Growth inhibition EC50 - Desmodesmus subspicatus (Scenedesmus subspicatus) - 4.5 mg/l - 72 h(Manganese) (OECD Test Guideline 201)
Toxicity to bacteria	Respiration inhibition EC50 - Sludge Treatment - 1,000 mg/l - 3 h(Manganese) (OECD Test Guideline 209)

**Persistence and degradability**

No data available

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available(Manganese)

**Results of PBT and vPvB assessment**

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.

**Other adverse effects**

Toxic to aquatic life.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Product**

Dissolve or mix the material with a combustible solvent and burn in a chem scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

**SECTION 14: Transport information****UN number**

ADR/RID: -

IMDG: -

IATA: -

**UN proper shipping name**

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

**Transport hazard class(es)**

ADR/RID: -

IMDG: -

IATA: -

**Packaging group**

ADR/RID: -

IMDG: -

IATA: -

**Environmental hazards**

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

**Special precautions for user**

No data available

**SECTION 15: Regulatory information****Safety, health and environmental regulations/legislation specific for the substance or mixture**

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

**Chemical safety assessment**

For this product a chemical safety assessment was not carried out

**SECTION 16: Other information****Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Qualikems Lifesciences Pvt. Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.qualikems.com](http://www.qualikems.com) for additional terms and conditions of sale.