

# Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 02.09.2018

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## Manganese Chloride, Reagent Grade

### SECTION 1: Identification

#### Product identifier

**Product name:** Manganese Chloride, Reagent Grade

**Product code:** S25418

#### Recommended use of the product and restriction on use

**Relevant identified uses:** Not determined or not applicable.

**Uses advised against:** Not determined or not applicable.

**Reasons why uses advised against:** Not determined or not applicable.

#### Manufacturer or supplier details

**Manufacturer:**

**Supplier:**

AquaPhoenix Scientific  
860 Gitts Run Road  
Hanover  
PA 17331  
(717) 632-1291

Fisher Science Education  
6771 Silver Crest Road  
Nazareth  
PA 18064  
800 955-1177

#### Emergency telephone number:

**United States**

Emergency Telephone No.: 800-255-3924

### SECTION 2: Hazard(s) identification

#### GHS classification:

Acute toxicity (oral), category 4

Chronic aquatic hazard, category 3

Acute aquatic hazard, category 3

Specific target organ toxicity - repeated exposure, category 2

#### Label elements

##### Hazard pictograms:



**Signal word:** Warning

#### Hazard statements:

H302 Harmful if swallowed

H373 May cause damage to organs through prolonged or repeated exposure

H412 Harmful to aquatic life with long lasting effects

H402 Harmful to aquatic life

#### Precautionary statements:

P264 Wash skin thoroughly after handling

P270 Do not eat, drink or smoke when using this product

P273 Avoid release to the environment

P260 Do not breathe dust/fume/gas/mist/vapors/spray

P301+P330+P312 IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel

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unwell.

P314 Get medical advice/attention if you feel unwell

P405 Store locked up

P501 Dispose of contents and container as instructed in Section 13

**Hazards not otherwise classified:** None

### SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 13446-34-9	Manganese dichloride tetrahydrate	100

**Additional Information:** None

### SECTION 4: First aid measures

#### Description of first aid measures

##### General notes:

Not determined or not applicable.

##### After inhalation:

Loosen clothing as necessary and position individual in a comfortable position

Maintain an unobstructed airway

##### After skin contact:

Rinse affected area with soap and water

If symptoms develop or persist, seek medical attention

##### After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes

If symptoms develop or persist, seek medical attention

##### After swallowing:

Rinse mouth thoroughly

Seek medical attention if irritation, discomfort, or vomiting persists

Call a POISON CONTROL CENTER or seek medical attention if you feel unwell

Do not induce vomiting

Rinse mouth and then drink plenty of water

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

##### Acute symptoms and effects:

Not determined or not applicable.

##### Delayed symptoms and effects:

Not determined or not applicable.

#### Immediate medical attention and special treatment

##### Specific treatment:

Not determined or not applicable.

##### Notes for the doctor:

Not determined or not applicable.

### SECTION 5: Firefighting measures

#### Extinguishing media

##### Suitable extinguishing media:

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Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

### Unsuitable extinguishing media:

Not determined or not applicable.

### Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

### Special protective equipment for firefighters:

Wear protective eye wear, gloves and clothing

Refer to Section 8

### Special precautions:

Avoid inhaling gases, fumes, dust, mist, vapor and aerosols

Avoid contact with skin, eyes and clothing

## SECTION 6: Accidental release measures

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

Ensure adequate ventilation

Ensure air handling systems are operational

Wear protective eye wear, gloves and clothing

### Environmental precautions:

Should not be released into the environment

Prevent from reaching drains, sewer or waterway

### Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing

### Reference to other sections:

Not determined or not applicable.

## SECTION 7: Handling and storage

### Precautions for safe handling:

Do not eat, drink, smoke or use personal products when handling chemical substances.

Avoid breathing mist or vapor.

### Conditions for safe storage, including any incompatibilities:

Store in a cool, well-ventilated area.

## SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

### Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
United States (OSHA)	Manganese dichloride tetrahydrate	13446-34-9	PEL: 5 mg/m <sup>3</sup>
	Manganese dichloride tetrahydrate	13446-34-9	PEL TWA (Total Dust) 15 mg/m <sup>3</sup> (50 mppcf*)
ACGIH	Manganese dichloride tetrahydrate	13446-34-9	TLV TWA (inhalable particles) 10 mg/m <sup>3</sup> .
	Manganese dichloride tetrahydrate	13446-34-9	TLV: 0.2 mg/m <sup>3</sup> ,

### Biological limit values:

No biological exposure limits noted for the ingredient(s).

### Information on monitoring procedures:

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Not determined or not applicable.

### Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

### Personal protection equipment

#### Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

#### Skin and body protection:

Select glove material impermeable and resistant to the substance.

#### Respiratory protection:

When necessary, use NIOSH-approved breathing equipment.

### General hygienic measures:

Wash hands before breaks and at the end of work.

Avoid contact with skin, eyes and clothing.

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

Appearance	Light red crystalline powder
Odor	Odorless
Odor threshold	Not applicable
pH	4.0 - 6 at 99 g/l at 25°C
Melting point/freezing point	58°C
Initial boiling point/range	1190°C
Flash point (closed cup)	Not applicable
Evaporation rate	No information
Flammability (solid, gas)	No information
Upper flammability/explosive limit	Non Explosive
Lower flammability/explosive limit	Non Explosive
Vapor pressure	Not determined or not available.
Vapor density	Not determined or not available.
Density	Not determined or not available.
Relative density	1.913 g/cm <sup>3</sup>
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	No information
Auto/Self-ignition temperature	Not applicable
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

### Other information

## SECTION 10: Stability and reactivity

### Reactivity:

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Does not react under normal conditions of use and storage.

**Chemical stability:**

Stable under normal conditions of use and storage.

**Possibility of hazardous reactions:**

None under normal conditions of use and storage.

**Conditions to avoid:**

None known.

**Incompatible materials:**

None known.

**Hazardous decomposition products:**

None known.

### SECTION 11: Toxicological information

**Acute toxicity**

**Assessment:** Harmful if swallowed

**Product data:** No data available.

**Substance data:** No data available.

**Skin corrosion/irritation**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

**Serious eye damage/irritation**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

**Respiratory or skin sensitization**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

**Carcinogenicity**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

**International Agency for Research on Cancer (IARC):** None of the ingredients are listed.

**National Toxicology Program (NTP):** None of the ingredients are listed.

**Germ cell mutagenicity**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

**Reproductive toxicity**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

**Specific target organ toxicity (single exposure)**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

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**Substance data:** No data available.

### Specific target organ toxicity (repeated exposure)

**Assessment:** May cause damage to organs through prolonged or repeated exposure

**Product data:** No data available.

**Substance data:** No data available.

### Aspiration toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

**Information on likely routes of exposure:** No data available.

**Symptoms related to the physical, chemical and toxicological characteristics:** No data available.

**Other information:** No data available.

## SECTION 12: Ecological information

### Acute (short-term) toxicity

**Assessment:** Harmful to aquatic life

**Product data:** No data available.

**Substance data:** No data available.

### Chronic (long-term) toxicity

**Product data:** No data available.

**Substance data:** No data available.

### Persistence and degradability

**Product data:** No data available.

**Substance data:** No data available.

### Bioaccumulative potential

**Product data:** No data available.

**Substance data:** No data available.

### Mobility in soil

**Product data:** No data available.

**Substance data:** No data available.

**Other adverse effects:** No data available.

## SECTION 13: Disposal considerations

### Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11)

## SECTION 14: Transport information

### United States Transportation of dangerous goods (49 CFR DOT)

<b>UN number</b>	Not regulated
<b>UN proper shipping name</b>	Not regulated
<b>UN transport hazard class(es)</b>	None
<b>Packing group</b>	None
<b>Environmental hazards</b>	None
<b>Special precautions for user</b>	None

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### International Maritime Dangerous Goods (IMDG)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

### International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

## SECTION 15: Regulatory information

### United States regulations

#### Inventory listing (TSCA):

13446-34-9	Manganese dichloride tetrahydrate	Not Listed
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**Significant New Use Rule (TSCA Section 5):** Not determined.

**Export notification under TSCA Section 12(b):** Not determined.

#### SARA Section 311/312 hazards:

Acute	Chronic	Fire	Pressure	Reactive
No	No	No	No	No

**SARA Section 302 extremely hazardous substances:** Not determined.

#### SARA Section 313 toxic chemicals:

13446-34-9	Manganese dichloride tetrahydrate	Not Listed
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**CERCLA:** Not determined.

**RCRA:** Not determined.

**Section 112(r) of the Clean Air Act (CAA):** Not determined.

#### Massachusetts Right to Know:

13446-34-9	Manganese dichloride tetrahydrate	Listed
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#### New Jersey Right to Know:

13446-34-9	Manganese dichloride tetrahydrate	Listed
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#### New York Right to Know:

13446-34-9	Manganese dichloride tetrahydrate	Listed
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#### Pennsylvania Right to Know:

13446-34-9	Manganese dichloride tetrahydrate	Listed
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**California Proposition 65:** None of the ingredients are listed.

## SECTION 16: Other information

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**Abbreviations and Acronyms:** None

**Disclaimer:**

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

**NFPA:** 1-0-0

**HMIS:** 1-0-0

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**End of Safety Data Sheet**