



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
US OSHA Hazard Communication Standard (29 CFR 1910.1200)

Revision date 21-Aug-2024

Revision Number 1

## 1. Identification

### Product identifier

**Product Name** Manganese Chloride Crystal, ACS

### Other means of identification

**Product Code(s)** 3315

**Synonyms** Manganese (II) chloride tetrahydrate; Manganese dichloride tetrahydrate

### Recommended use of the chemical and restrictions on use

**Recommended use** Industrial use  
Laboratory use  
Industrial Manufacturing (all)

**Restrictions on use** No information available

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

#### Supplier Address

Columbus Chemical Industries, Inc.  
N4335 Temkin Rd.  
Columbus, WI 53925 USA  
Phone: (920) 623-2140  
Fax: (920) 623-2577  
www.columbuschemical.com

### Emergency telephone number

**24 Hour Emergency Phone Number** CHEMTREC: 1-800-424-9300 for US / 703-527-3887 outside US

**Emergency Telephone** 911

## 2. Hazard(s) identification

### Classification

Acute toxicity - Oral

Category 4

### Hazards not otherwise classified (HNOC)

Not applicable

### Label elements

**Warning**

### Hazard statements

H302 - Harmful if swallowed

**Precautionary Statements - Prevention**

P264 - Wash face, hands and any exposed skin thoroughly after handling

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

**Precautionary Statements - Response**

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

P330 - Rinse mouth

**Precautionary Statements - Disposal**

P501 - Dispose of contents/ container to an approved waste disposal plant

**Other information**

No information available.

**3. Composition/information on ingredients****Substance****Synonyms**

Manganese (II) chloride tetrahydrate; Manganese dichloride tetrahydrate.

| Chemical name                   | CAS No     | Weight-% | Formula                              | Molecular Weight |
|---------------------------------|------------|----------|--------------------------------------|------------------|
| Manganese Chloride Tetrahydrate | 13446-34-9 | >98      | MnCl <sub>2</sub> *4H <sub>2</sub> O | 197.91 g/mol     |

**4. First-aid measures****Description of first aid measures****General advice**

Show this safety data sheet to the doctor in attendance.

**Inhalation**

Remove to fresh air.

**Eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Skin contact**

Wash skin with soap and water.

**Ingestion**

Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician.

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

No information available.

**Indication of any immediate medical attention and special treatment needed****Note to physicians**

Treat symptomatically.

**5. Fire-fighting measures**

|   |  |
|---|--|
| <b>Suitable Extinguishing Media</b>                                   | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.                            |
| <b>Large Fire</b>   | CAUTION: Use of water spray when fighting fire may be inefficient.   |
| <b>Unsuitable extinguishing media</b>                                 | Do not scatter spilled material with high pressure water streams.  |
| <b>Specific hazards arising from the chemical</b>                     | No information available.  |
| <b>Explosion data</b>   |  |
| <b>Sensitivity to mechanical impact</b>                               | None.  |
| <b>Sensitivity to static discharge</b>                                | None.  |
| <b>Special protective equipment and precautions for fire-fighters</b> | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Ensure adequate ventilation.

### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so. Keep out of drains, sewers, ditches and waterways.

**Methods for cleaning up** Avoid generation of dust. Pick up and transfer to properly labeled containers.

## 7. Handling and storage

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

## 8. Exposure controls/personal protection

### Control parameters

**Exposure Limits** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### Appropriate engineering controls

**Engineering controls** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

|                                       |   |
|---------------------------------------|---|
| <b>Eye/face protection</b>            | Wear safety glasses with side shields (or goggles).   |
| <b>Skin and body protection</b>       | Wear protective nitrile rubber gloves. Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. |
| <b>Respiratory protection</b>         | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.    |
| <b>General hygiene considerations</b> | Handle in accordance with good industrial hygiene and safety practice.  |

**9. Physical and chemical properties****Information on basic physical and chemical properties**

|                       |                          |
|-----------------------|--------------------------|
| <b>Physical state</b> | Solid                    |
| <b>Appearance</b>     | Crystalline              |
| <b>Color</b>          | Pink                     |
| <b>Odor</b>           | Odorless                 |
| <b>Odor threshold</b> | No information available |

| <b>Property</b>                                | <b>Values</b>     | <b>Remarks • Method</b> |
|--|-------------------|-------------------------|
| <b>pH</b>                                      | 3.5 - 6.0         | ( 5 % solution)         |
| <b>pH (as aqueous solution)</b>                | No data available | None known              |
| <b>Melting point / freezing point</b>          | No data available | None known              |
| <b>Initial boiling point and boiling range</b> | No data available | None known              |
| <b>Flash point</b>                             | No data available | None known              |
| <b>Evaporation rate</b>                        | No data available | None known              |
| <b>Flammability</b>                            | No data available | None known              |
| <b>Flammability Limit in Air</b>               |                   | None known              |
| <b>Upper flammability or explosive limits</b>  | No data available |                         |
| <b>Lower flammability or explosive limits</b>  | No data available |                         |
| <b>Vapor pressure</b>                          | No data available | None known              |
| <b>Relative vapor density</b>                  | No data available | None known              |
| <b>Relative density</b>                        | No data available | None known              |
| <b>Water solubility</b>                        | Soluble in water  | None known              |
| <b>Solubility(ies)</b>                         | No data available | None known              |
| <b>Partition coefficient</b>                   | No data available | None known              |
| <b>Autoignition temperature</b>                | No data available | None known              |
| <b>Decomposition temperature</b>               |                   | None known              |
| <b>Kinematic viscosity</b>                     | No data available | None known              |
| <b>Dynamic viscosity</b>                       | No data available | None known              |

**Other information**

|                             |                          |
|-----------------------------|--------------------------|
| <b>Explosive properties</b> | No information available |
| <b>Oxidizing properties</b> | No information available |
| <b>Softening point</b>      | No information available |
| <b>Molecular weight</b>     | 197.91 g/mol             |
| <b>VOC content</b>          | No information available |
| <b>Liquid Density</b>       | No information available |
| <b>Bulk density</b>         | No information available |

**10. Stability and reactivity**

|                   |                           |
|-------------------|---------------------------|
| <b>Reactivity</b> | No information available. |
|-------------------|---------------------------|

|   |   |
|---|---|
| <b>Chemical stability</b>                 | Stable under normal conditions.             |
| <b>Possibility of hazardous reactions</b> | None under normal processing.               |
| <b>Conditions to avoid</b>                | Very hygroscopic; protect from moisture.    |
| <b>Incompatible materials</b>             | Strong acids. Strong reducing agents. Zinc. |
| <b>Hazardous decomposition products</b>   | Hydrogen chloride gas. Manganese.           |

## 11. Toxicological information

### Information on likely routes of exposure

#### Product Information

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | Specific test data for the substance or mixture is not available.  |
| <b>Eye contact</b>  | Specific test data for the substance or mixture is not available.  |
| <b>Skin contact</b> | Specific test data for the substance or mixture is not available.  |
| <b>Ingestion</b>    | Specific test data for the substance or mixture is not available. Harmful if swallowed. (based on components). |

### Symptoms related to the physical, chemical and toxicological characteristics

|                 |                           |
|-----------------|---------------------------|
| <b>Symptoms</b> | No information available. |
|-----------------|---------------------------|

### Acute toxicity

#### Numerical measures of toxicity

#### Component Information

| Chemical name                   | Oral LD50            | Dermal LD50 | Inhalation LC50 |
|---------------------------------|----------------------|-------------|-----------------|
| Manganese Chloride Tetrahydrate | = 1484 mg/kg ( Rat ) | -           | -               |

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

|  |                           |
|--|---------------------------|
| <b>Skin corrosion/irritation</b>         | No information available. |
| <b>Serious eye damage/eye irritation</b> | No information available. |
| <b>Respiratory or skin sensitization</b> | No information available. |
| <b>Germ cell mutagenicity</b>            | No information available. |
| <b>Carcinogenicity</b>                   | No information available. |
| <b>Reproductive toxicity</b>             | No information available. |
| <b>STOT - single exposure</b>            | No information available. |
| <b>STOT - repeated exposure</b>          | No information available. |

|                              |                           |
|------------------------------|---------------------------|
| <b>Aspiration hazard</b>     | No information available. |
| <b>Other adverse effects</b> | No information available. |
| <b>Interactive effects</b>   | No information available. |

## 12. Ecological information

|                                      |   |
|--------------------------------------|---|
| <b>Ecotoxicity</b>                   | The environmental impact of this product has not been fully investigated. |
| <b>Persistence and degradability</b> | No information available.   |
| <b>Bioaccumulation</b>               | There is no data for this product.  |
| <b>Other adverse effects</b>         | No information available.   |

## 13. Disposal considerations

### Disposal methods

|  |   |
|--|---|
| <b>Waste from residues/unused products</b> | Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. |
| <b>Contaminated packaging</b>              | Do not reuse empty containers. Dispose of contents/containers in accordance with local regulations.             |

## 14. Transport information

|                             |               |
|-----------------------------|---------------|
| <b><u>DOT</u></b>           | Not regulated |
| <b>DOT Marine Pollutant</b> | No            |
| <b><u>TDG</u></b>           | Not regulated |
| <b><u>ICAO (air)</u></b>    | Not regulated |
| <b><u>IATA</u></b>          | Not regulated |
| <b><u>IMDG</u></b>          | Not regulated |

## 15. Regulatory information

### International Inventories

|                      |   |
|----------------------|---|
| <b>TSCA</b>          | Complies.   |
| <b>DSL/NDSL</b>      | Contact supplier for inventory compliance status. |
| <b>EINECS/ELINCS</b> | Contact supplier for inventory compliance status. |
| <b>ENCS</b>          | Contact supplier for inventory compliance status. |
| <b>IECSC</b>         | Contact supplier for inventory compliance status. |
| <b>KECL</b>          | Contact supplier for inventory compliance status. |
| <b>PICCS</b>         | Contact supplier for inventory compliance status. |
| <b>AIIC</b>          | Contact supplier for inventory compliance status. |
| <b>NZIoC</b>         | Contact supplier for inventory compliance status. |

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances  
**NZIoC** - New Zealand Inventory of Chemicals

### US Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

#### SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

#### CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

#### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

### US State Regulations

#### California Proposition 65

This product does not contain any Proposition 65 chemicals.

#### U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

### U.S. EPA Label Information

**EPA Pesticide Registration Number** Not applicable

## 16. Other information

|             |                         |                       |                           |                              |
|-------------|-------------------------|-----------------------|---------------------------|------------------------------|
| <b>NFPA</b> | <b>Health hazards</b> 1 | <b>Flammability</b> 0 | <b>Instability</b> 0      | <b>Special hazards</b> -     |
| <b>HMIS</b> | <b>Health hazards</b> 1 | <b>Flammability</b> 0 | <b>Physical hazards</b> 0 | <b>Personal protection</b> X |

#### Key or legend to abbreviations and acronyms used in the safety data sheet

##### **Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

|         |                             |      |                                  |
|---------|-----------------------------|------|----------------------------------|
| TWA     | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value         | *    | Skin designation                 |

#### **Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AEGL(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)  
National Institute of Technology and Evaluation (NITE)  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Revision date** 21-Aug-2024  
**Revision Note** No information available.

**Disclaimer**

**The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.**

**End of Safety Data Sheet**