

79047 - MnCl₂

Revision Date 14-Sep-2022 Revision Number 2

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

Product identifier

Product Name MnCl₂

Other means of identification

Catalog Number 79047

Document Number 10000005401

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Laboratory reagent

Details of the supplier of the safety data sheet

Manufacturer/Supplier

STEMCELL Technologies Canada Inc. Suite 500 - 1618 Station Street Vancouver, British Columbia V6A 1B6 Canada

Emergency telephone number

Emergency Telephone 1-800-667-0322

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| Serious eye damage/eye irritation | Category 2A |
|--|-------------|
| Specific target organ toxicity (repeated exposure) | Category 1 |

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

| Danger | | |
|--------|--|--|
| | | |



79047 - MnCl₂

Revision Date 14-Sep-2022 Revision Number 2

Hazard statements

Causes serious eye irritation

Causes damage to organs through prolonged or repeated exposure



Appearance No information available

Physical state Liquid

Odor No data available

Precautionary Statements - Prevention

Wear eye protection/ face protection

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

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Precautionary statements - Response

Get medical advice/attention if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Information

Not applicable

Unknown acute toxicity

1E-05 % of the mixture consists of ingredient(s) of unknown toxicity

- 1E-05 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 1E-05 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 1E-05 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- 1E-05 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
- 1E-05 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

Mixture



79047 - MnCl₂

Revision Date 14-Sep-2022 Revision Number 2

| Chemical name | CAS No. | Weight-% |
|-------------------|-----------|----------|
| dichloromanganese | 7773-01-5 | < 2.0% |

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

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 immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and

persists.

Skin contact Wash skin with soap and water.

IngestionClean mouth with water and drink afterwards plenty of water. Never give anything by mouth

to an unconscious person. Do NOT induce vomiting. Call a physician.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Symptoms Burning sensation.

Indication of any immediate medical attention and special treatment needed

Note to physiciansTreat symptomatically.

5. FIRE-FIGHTING MEASURES

surrounding environment.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the

chemical

No information available.

Explosion data

Sensitivity to Mechanical Impact None.



79047 - MnCl₂ Revision Number 2

Sensitivity to Static Discharge None.

Special protective equipment for fire-fighters

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. Evacuate personnel to safe areas. Avoid contact with skin,

eyes or clothing. Use personal protective equipment as required.

Other Information Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety

practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using

this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store in accordance with information listed on the Product Information Sheet (PIS).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters



79047 - MnCl₂ Revision Number 2

Exposure Limits

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|-------------------|---|--|--------------------------------|
| dichloromanganese | TWA: 0.02 mg/m ³ Mn respirable | (vacated) Ceiling: 5 mg/m ³ | IDLH: 500 mg/m ³ Mn |
| 7773-01-5 | particulate matter | Ceiling: 5 mg/m ³ Mn | TWA: 1 mg/m³ Mn |
| | TWA: 0.1 mg/m ³ Mn inhalable | | STEL: 3 mg/m ³ Mn |
| | particulate matter | | _ |

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection If splashes are likely to occur, wear safety glasses with side-shields.

Hand protection Wear suitable gloves.

Skin and body protectionWear suitable protective clothing.

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do

not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid

Appearance No information available

Color colorless

Odor No data available
Odor threshold No data available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH

Melting point / freezing point 0 °C / 32 °F

Boiling point / boiling rangeNo data availableNone knownFlash pointNo data availableNone knownEvaporation rateNo data availableNone knownFlammability (solid, gas)No data availableNone known



79047 - MnCl₂ Revision Number

Flammability Limit in Air None known

Upper flammability limit: No data available Lower flammability limit: No data available

Vapor pressureNo data availableNone knownVapor densityNo data availableNone knownRelative densityNo data availableNone known

Water solubility Fully miscible Solubility in other solvents No data available None known No data available **Partition coefficient** None known No data available None known **Autoignition temperature Decomposition temperature** No data available None known Kinematic viscosity No data available None known No data available Dynamic viscosity None known

Explosive properties No data available

Oxidizing properties No information available

Other Information

Softening point
Molecular weight
Molecular formula
VOC Content (%)
Liquid Density
No information available

10. STABILITY AND REACTIVITY

Reactivity No information available.

Chemical stability Stable under recommended transport or storage conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid None known based on information supplied.

Incompatible materialsNone known based on information supplied.

Hazardous decomposition products None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. May cause irritation of

respiratory tract.

Revision Date 14-Sep-2022 Revision Number 2



79047 - MnCl₂ Revision Number 2

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye irritation.

(based on components). May cause redness, itching, and pain.

Skin contact Specific test data for the substance or mixture is not available. May cause irritation.

Prolonged contact may cause redness and irritation.

Ingestion Specific test data for the substance or mixture is not available. Ingestion may cause

gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms May cause redness and tearing of the eyes.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 44,148.60 mg/kg

Unknown acute toxicity 1E-05 % of the mixture consists of ingredient(s) of unknown toxicity

1E-05 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

1E-05 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

1E-05 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

1E-05 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

1E-05 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Product Information

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--------------------------------|-------------------|-------------|-----------------|
| dichloromanganese 7773-01-5 | = 250 mg/kg (Rat) | - | - |

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

Skin corrosion/irritation May cause skin irritation.

Product Information

Serious eye damage/eye irritation Classification based on data available for ingredients. Irritating to eyes.

Product Information

Respiratory or skin sensitization No information available.

Product Information

Germ cell mutagenicity No information available.

Product Information



79047 - MnCl₂ Revision Number 2

Carcinogenicity No information available.

Reproductive toxicityNo information available.

Product Information

STOT - single exposure No information available.

Product Information

STOT - repeated exposureCauses damage to organs through prolonged or repeated exposure.

Product Information

Target organ effects kidney, Respiratory system, Central nervous system, blood.

Aspiration hazard No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity The environmental impact of this product has not been fully investigated.

Product Information

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Do not reuse empty containers.

California Hazardous Waste Status This product contains one or more substances that are listed with the State of California as a hazardous waste.

a Hazardous waste.

| Chemical name | California Hazardous Waste Status | |
|-------------------|-----------------------------------|--|
| dichloromanganese | Toxic | |
| 7773-01-5 | | |



79047 - MnCl2

Revision Date 14-Sep-2022 Revision Number 2

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

MEX Not regulated

ICAO (air) Not regulated

<u>IATA</u> Not regulated

<u>IMDG</u> Not regulated

RID Not regulated

ADR Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies **DSL/NDSL** Complies **EINECS/ELINCS** Complies **ENCS** Does not comply **IECSC** Complies KECL Complies Complies **PICCS AICS** Complies

Legend:

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

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



79047 - MnCl₂

Revision Date 14-Sep-2022 Revision Number 2

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

| Acute health hazard | Yes |
|-----------------------------------|-----|
| Chronic Health Hazard | Yes |
| Fire hazard | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

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

US State Regulations

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|--------------------------------|------------|---------------|--------------|
| Water 7732-18-5 | - | - | X |
| dichloromanganese 7773-01-5 | X | - | X |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Prepared By, Quality Control. STEMCELL Technologies Canada Inc.



79047 - MnCl₂ Revision Number 2

Revision Date 14-Sep-2022

Revision NoteNo 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. STEMCELL Technologies Inc. shall not be held liable for any damage resulting from handling or from contact with the product.

End of Safety Data Sheet