Printing date 07/09/2024 Reviewed on 07/08/2024

1 Identification

· Product identifier

Trade name: Manganese(II) chloride tetrahydrate

· Article number: 221195

• CAS Number: 13446-34-9 • EC number: 231-869-6

· Application of the substance / the mixture Laboratory chemicals for research and development

Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

BeanTown Chemical 9 Sagamore Park Road Hudson, NH 03051 USA

Phone: (603) 402-2234 Fax: (603) 402-9713

Email: technical@beantownchem.com

www.beantownchem.com

- · Information department: Technical Support Department
- · Emergency telephone number:

During normal operating hours, please call (603) 402-2234 After hours, please call Chemtrec at (800) 424-9300

2 Hazard(s) identification

· Classification of the substance or mixture



GHS06 Skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.

- · Label elements
- · GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



GHS06

- · Signal word Danger
- · Hazard-determining components of labeling:

Manganese(II) chloride tetrahydrate

· Hazard statements

Toxic if swallowed.

· Precautionary statements

Wash thoroughly after handling.

If swallowed: Immediately call a poison center/doctor.

Specific treatment (see on this label).

Rinse mouth.

Store locked up.

(Contd. on page 2)

Printing date 07/09/2024 Reviewed on 07/08/2024

Trade name: Manganese(II) chloride tetrahydrate

(Contd. of page 1)

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable. · **vPvB:** Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description

13446-34-9 Manganese(II) chloride tetrahydrate

- · Identification number(s)
- · EC number: 231-869-6

4 First-aid measures

- · Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

In case of irregular breathing or respiratory arrest provide artificial respiration.

- · After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: Do not induce vomiting; immediately call for medical help.
- Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · **Protective equipment:** No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

(Contd. on page 3)

Printing date 07/09/2024 Reviewed on 07/08/2024

Trade name: Manganese(II) chloride tetrahydrate

(Contd. of page 2)

· Protective Action Criteria for Chemicals

 11 mg/m^3

· PAC-2:

· PAC-1:

 18 mg/m^3

· *PAC-3*:

290 mg/m³

7 Handling and storage

- · Handling:
- Precautions for safe handling No special precautions are necessary if used correctly.
- Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute

- · Control parameters
- · Components with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

- · Breathing equipment: Not required.
- Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 4)

Printing date 07/09/2024 Reviewed on 07/08/2024

Trade name: Manganese(II) chloride tetrahydrate

· Eye protection: Goggles recommended during refilling.

(Contd. of page 3)

Physical and chemical proper	rues		
Information on basic physical and	chemical properties		
General Information			
Appearance:	Crustallino		
Form: Color:	Crystalline Not determined. Characteristic		
Odor:			
Odor threshold:	Not determined.		
pH-value:	Not determined.	_	
Change in condition			
Melting point/Melting range:	58 °C (136.4 °F)		
Boiling point/Boiling range:	Undetermined		
Flash point:	Not applicable.		
Flammability (solid, gaseous):	Not applicable. Not determined. Not determined. Product does not present an explosion hazard.		
Decomposition temperature:			
Auto igniting:			
Danger of explosion:			
Explosion limits:			
Lower:	Not determined.		
Upper:	Not determined.		
Vapor pressure:	Not determined.		
Density at 20 °C (68 °F):	1.913 g/cm³ (15.96399 lbs/gal)		
Relative density	Not determined.		
Vapor density	Not determined.		
Evaporation rate	Not determined.		
Solubility in / Miscibility with			
Water:	Not miscible or difficult to mix.		
Partition coefficient (n-octanol/wat	er): Not determined.		
Viscosity:			
Dynamic:	Not determined.		
Kinematic:	Not determined.		
VOC content:	0.00 %		
	0.0 g/l / 0.00 lb/gal		
Solids content:	0.0 %		

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

(Contd. on page 5)

Printing date 07/09/2024 Reviewed on 07/08/2024

Trade name: Manganese(II) chloride tetrahydrate

(Contd. of page 4)

- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

Substance is not listed.

· NTP (National Toxicology Program)

Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

(Contd. on page 6)

Printing date 07/09/2024 Reviewed on 07/08/2024

Trade name: Manganese(II) chloride tetrahydrate

(Contd. of page 5)

· Uncleaned packagings:

· Recommendation: Disposal must be made according to official regulations.

UN-Number DOT, ADN, IMDG, IATA	not regulated
UN proper shipping name DOT, ADN, IMDG, IATA	not regulated
Transport hazard class(es)	
DOT, ADN, IMDG, IATA Class	not regulated
Packing group DOT, IMDG, IATA	not regulated
Environmental hazards: Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.
UN "Model Regulation":	not regulated

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · Sara

•	Section	355	(extremely	hazardous	substances):

Substance is not listed.

Section 313 (Specific toxic chemical listings):

Substance is listed.

· TSCA (Toxic Substances Control Act):

Substance is not listed.

· Hazardous Air Pollutants

Substance is not listed.

- · Proposition 65
- · Chemicals known to cause cancer:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

(Contd. on page 7)

Printing date 07/09/2024 Reviewed on 07/08/2024

Trade name: Manganese(II) chloride tetrahydrate

(Contd. of page 6)

· Chemicals known to cause developmental toxicity:

Substance is not listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

D

· TLV (Threshold Limit Value)

Substance is not listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

· RTECS

Substance is not listed.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· NFPA ratings (scale 0-4)

Health = 2

Fire = 0

Reactivity = 0

· HMIS ratings (scale 0-4)

Health = 2

Fire = 0

Reactivity = 0

- · Department issuing SDS: Technical Support Department
- · Contact: Technical Support Department
- · Date of preparation / last revision 07/09/2024 / -
- · Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

 $PEL: Permissible\ Exposure\ Limit$

REL: Recommended Exposure Limit

Acute Tox. 3: Acute toxicity – Category 3

...