

Safety Data Sheet



1: Identification

1.1: Product Identifier

Product Name: MnI2

Product Number(s): 1MNI2-0003F

CAS Number: 7790-33-2

SDS Document Number: 000171

1.2: Recommended Uses and Restrictions

Recommended Uses

Manufacture of substances

Restrictions

Not for food or drug use.

1.3: Supplier Contact Information

APL Engineered Materials, Inc.

2401 N. Willow Rd.

Urbana, IL 61802

Phone: 217-367-1340

Fax: 217-367-9084

1.4: Emergency Phone Number

International: +01-813-248-0585

United States: 800-255-3924

2: Hazards Identification

2.1: Classifications

Acute Toxicity, Oral - Category 4

Toxic to Reproduction - Category 1B

2.2: GHS Label Elements

Pictograms



Signal Word: Danger

Hazard Statements

H302: Harmful if swallowed.

H360: May damage fertility or the unborn child.

Precautionary Statements

P201: Obtain special instructions before use.

- P202: Do not handle until all safety precautions have been read and understood.
- P264: Wash hands thoroughly after handling.
- P270: Do not eat, drink or smoke when using this product.
- P281: Use personal protective equipment as required.
- P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- P308 + P313: IF EXPOSED or concerned: Get medical advice/attention.
- P330: Rinse mouth.
- P405: Store locked up.
- P501: Dispose of contents/container to licensed disposal facility.

2.3: Hazards Not Otherwise Classified or Not Covered by GHS

None.

2.4: Amount(s) of substances with unknown toxicity

None

3: Composition/Information on Ingredients

3.1: .Ingredient	.Weight%	.Formula	.CAS Number	.Mol Wt	.EC Number
MnI2	100	MnI2	7790-33-2	308.75	232-201-6

3.2: Other Hazardous components

none

3.3: Trade Secret Disclaimer

none

3.4: Synonyms

- Manganese (II) Iodide
- Manganese diiodide

4: First Aid Measures

4.1: First Aid

General

- Consult with physician and provide this Safety Data Sheet
- Remove person from area of exposure and remove any contaminated clothing

In contact with eyes

- Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.
- Seek medical attention if irritation develops or persists

In contact with skin

- Wash thoroughly with soap and plenty of water. Remove all contaminated clothing for proper laundering. Seek medical attention if irritation develops or persists.

If swallowed

- If conscious and alert, rinse mouth and drink 2-4 cupfuls of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get medical aid.

If inhaled

- Remove from exposure to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid.
- If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

4.2: Most important symptoms and effects; acute and delayed

Harmful if swallowed.
May damage fertility.
May damage the unborn child.

- 4.3: Indication of any immediate medical attention and special treatment needed
If swallowed: Immediately call a POISON CENTER or doctor/ physician.

5: Fire Fighting Measures

- 5.1: Fire extinguishing media
carbon dioxide
dry chemical
water or alcohol-resistant foam
- 5.2: Specific hazards arising from the substance or mixture
manganese oxides
hydroiodic acid and hydroiodic acid fumes
- 5.3: Special protective equipment and precautions for firefighters.
Wear self contained breathing apparatus for fire fighting if necessary

6: Accidental Release Measures

- 6.1: Personal precautions, protective equipment, and emergency procedures.
For personal protection see section 8.
Ensure adequate ventilation.
Use personal protective equipment.
Avoid dust formation.
Evacuate personnel to safe areas.
Avoid breathing dust.
- 6.2: Methods and materials for containment and cleaning up.
Keep in suitable, closed containers for disposal.
Sweep up and shovel.
- 6.3: Environmental precautions
Do not let product enter drains.
- 6.4: Disposal
Dispose of in accordance with local regulations.
See section 13.

7: Handling and Storage

- 7.1: Precautions for safe handling
Avoid contact with skin and eyes.
See precautionary statements in section 2.2.
Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.

7.2: Conditions for safe storage

- Keep container tightly closed.
- Store away from moisture.
- Store under inert gas.
- Store in a dry and well-ventilated place.

7.3: Incompatibilities

- strong acids
- combustible materials
- strong oxidizing agents
- reducing agents
- organic materials
- moisture sensitive

8: Exposure Controls/Personal Protection

8.1: Control parameters

- OSHA permissible exposure limit (PEL)
 - 5 mg/m³ (as Mn)
- ACGIH threshold limit value (TLV)
 - 0.2 mg/m³ (as Mn)
- NIOSH recommended exposure limit (REL)
 - 1 mg/m³ (as Mn)

8.2: Engineering controls

- Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower
- Use adequate ventilation to keep airborne concentrations low

8.3: Personal protective equipment

Eyes

- Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166

Skin

- Wear appropriate, chemical-resistant protective gloves to prevent skin exposure.

Clothing

- Wear appropriate protective clothing to prevent skin exposure

Respirator

- Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149.
- Always use a NIOSH or European Standard EN 149 approved respirator when necessary

9: Physical and Chemical Properties

9.a: Appearance

- State: Solid
- Form: powder or spheres
- Color: pink

- 9.b: Odor: odorless
9.c: Odor threshold: no data available
9.d: pH: no data available
9.e: Melting point / freezing point: 701 °C (1,294 °F)
9.f: Initial boiling point and range: 1,033 °C (1,891 °F)
9.g: Flashpoint: no data available
9.h: Evaporation rate: no data available
9.i: Flammability (solid, gas): no data available
9.j: Upper/lower flammability or explosive limits: no data available
9.k: Vapor pressure: no data available
9.l: Vapor density: no data available
9.m: Relative density: 5.01 g/cm³ at t 25 °C (77 °F)
9.n: Water Solubility: soluble
9.o: Partition coefficient: n-octanol/water: no data available
9.p: Auto-ignition temperature: no data available
9.q: Decomposition temperature: no data available
9.r: Viscosity: no data available

10: Stability and Reactivity

10.1: Reactivity

no data available

10.2: Chemical stability

Stable under recommended storage conditions.

10.3: Possibility of hazardous reactions

no data available

10.4: Conditions to avoid

exposure to light (may affect product quality)

exposure to water

10.5: Incompatible materials

See section 7.3.

10.6: Hazardous decomposition products

Other decomposition products - no data available

In the event of fire: see section 5.2

11: Toxicological Information

11.1: Toxicity data

Acute toxicity - Oral

no data available

Acute toxicity - Dermal

no data available

Acute toxicity - Inhalation
No data available.

Skin corrosion/irritation
no data available

Eye damage/irritation
No data available.

Respiratory irritation
No data available.

Germ cell mutagenicity
no data available

Reproductive toxicity
Suspected reproductive toxicant.

Specific organ toxicity - single exposure
No data available.

Specific organ toxicity - repeated exposure
No data available.

Aspiration hazard
No data available.

Additional information
No data available.

ACGIH carcinogenicity
The ACGIH has not identified any component of this product present at levels greater than or equal to 0.1% as a probable, possible or confirmed human carcinogen.

IARC carcinogenicity
The IARC has not identified any component of this product present at levels greater than or equal to 0.1% as a probable, possible or confirmed human carcinogen.

NTP carcinogenicity
The NTP has not identified any component of this product present at levels greater than or equal to 0.1% as a probable, possible or confirmed human carcinogen.

OSHA carcinogenicity
OSHA has not identified any component of this product present at levels greater than or equal to 0.1% as a probable, possible or confirmed human carcinogen.

11.2: Routes of exposure

See section 2.2

skin

eyes

oral

11.3: Symptoms of exposure

See section 4.2

11.4: Delayed and immediate effects of exposure

Prolonged exposure to iodides may produce iodism in sensitive individuals. Symptoms of exposure include skin rash, running nose, headache and irritation of the mucous membrane. For severe cases the

skin may show pimples, boils, hives, blisters and black and blue spots. Iodides are readily diffused across the placenta. Neonatal deaths from respiratory distress secondary to goiter have been reported. Iodides have been known to cause drug-induced fevers, which are usually of short duration.

To the best of our knowledge the toxicological properties have not been thoroughly investigated.

Chronic manganese poisoning primarily involves the central nervous system. Early symptoms include languor, sleepiness and weakness in the legs. A stolid mask-like appearance of the face, emotional disturbances such as uncontrollable laughter and a spastic gait with tendency to fall in walking are findings in more advanced cases. High incidence of pneumonia has been found in workers exposed to the dust or fume of some manganese compounds.

12: Ecological Information

12.1: Ecotoxicity

Toxicity to fish

No data available

Toxicity to daphnia and other aquatic invertebrates

No data available

Toxicity to algae/bacteria

No data available

12.2: Persistence and degradability

no data available

12.3: Bioaccumulative potential

no data available

12.4: Mobility in soil

no data available

12.5: Other effects

no data available

13: Disposal Considerations

13.1: Waste treatment methods

No data available

13.2: Safe handling

See section 7.1 .

13.3: Product disposal

Contact a licensed professional waste disposal service to dispose of this material.

13.4: Packaging disposal

Dispose of as unused product.

14: Transport Information

14.1: DOT(US)

UN Number: Not a dangerous good

Proper Shipping Name:

Packing Group:
Shipping Class(es): 0
Marine Pollutant: No

14.2: IMDG

UN Number: Not a dangerous good
Proper Shipping Name:
Packing Group:
Shipping Class(es): 0
Marine Pollutant: No

14.3: IATA

UN Number: Not a dangerous good
Proper Shipping Name:
Packing Group:
Shipping Class(es): 0

14.4: Special Shipping Precautions

None

15: Regulatory Information

15.1: TSCA inventory

This material is listed on the TSCA inventory.

15.2: SARA 302 components

This material is not subject to the reporting requirements of SARA Title III, Section 302.

15.3: SARA 313 components

This material is subject to the reporting requirements of SARA Title III, Section 313.

15.4: SARA 313/312 hazards

Target organ effect.

15.5: Other information

Massachusetts Right To Know Components - This product contains materials listed on the Massachusetts Right to Know list

Pennsylvania Right To Know Components -This product does not contain materials listed on the Pennsylvania Right to Know list

New Jersey Right To Know Components -This product contains materials listed on the New Jersey Right to Know list

California Prop. 65 Components - This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16: Additional Information

16.1: NFPA

Health: 1
Fire: 0
Reactivity: 0
Special:

16.2: HMIS

Health: 1

Chronic: *

Flammability: 0

Physical Hazard: 0

16.3: Disclaimers

For industrial use only. Not for drug, household or other uses

The information herein is believed to be accurate and reliable as of the date compiled. However, APL Engineered Materials, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information on this data sheet or any use of the product based upon this information.

16.4: References

Information contained on this SDS sheet was obtained from some or all of the following sources: American Conference of Governmental Industrial Hygienists (ACGIH), TLVs and BEIs; National Institute for Occupational Safety and Health (NIOSH), Pocket Guide to Chemical Hazards; European Chemicals Agency, <http://echa.europa.eu/>; The National Institute of Health, U.S National Library of Medicine, TOXNET, Toxicology Data Network; and the Registry of Toxic Effects of Chemical Substances (RTECS) database.

16.5: Version

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