



400 South Central Ave / PO Box 190
Humboldt TN 38343

Safety Data Sheet

Core Ready Man Liquid Manganese with Boron

SECTION 1: Identification

1.1 Product identifier

Product name Core Ready Man Liquid Manganese with Boron

1.2 Recommended use of the chemical and restrictions on use

Liquid Fertilizer

1.3 Supplier's details

Name Core Agri, Inc.
Address 400 South Central Ave / PO Box 190
Humboldt TN 38343

Telephone 731-784-0605

1.4 Emergency phone number(s)

Chemtrec 800-262-8200 Customer Number CCN840118

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200)

2.2 GHS label elements, including precautionary statements

Pictogram



Precautionary statement(s)

P264
P270
P330

Wash ... thoroughly after handling.
Do not eat, drink or smoke when using this product.
Rinse mouth.

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SECTION 3: Composition/information on ingredients

3.1 Mixtures

Hazardous components

1. Manganese (II) Sulfate

| | |
|---------------|---------------|
| Concentration | Not specified |
| EC no. | 232-089-9 |
| CAS no. | 7785-87-7 |
| Index no. | 025-003-00-4 |

- Specific target organ toxicity (repeated exposure), Cat. 2
- Hazardous to the aquatic environment, long-term (chronic), Cat. 2

| | |
|------|--|
| H373 | May cause damage to organs [organs] through prolonged or repeated exposure [route] |
| H411 | Toxic to aquatic life with long lasting effects |

2. Manganese citrate

| | |
|---------------|---------------|
| Concentration | Not specified |
| CAS no. | 10024-66-5 |

3. Sodium borate anhydrous

| | |
|---------------|---------------|
| Concentration | Not specified |
| CAS no. | 1330-43-4 |

- Eye damage/irritation, Cat. 2A
- Toxic to reproduction, Cat. 1B
- Hazardous to the aquatic environment, short-term (acute), Cat. 3

| | |
|------|--|
| H319 | Causes serious eye irritation |
| H360 | May damage fertility or the unborn child [effect, route] |
| H402 | Harmful to aquatic life |

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

| | |
|-------------------------|--|
| If inhaled | Remove to fresh air. If breathing becomes difficult, contact a medical physician. Give artificial respiration if victim is not breathing and obtain immediate medical attention. |
| In case of skin contact | Wash thoroughly with soap and water. Remove contaminated clothing and wash before reuse. Seek medical attention if skin becomes irritated. |
| In case of eye contact | Flush immediately with water for at least 15 minutes, lifting the upper and lower eyelids occasionally. Call a physician if eye irritation persists. |
| If swallowed | Call physician or Poison Control Center immediately for most current information. Dilute with large amounts of water. Do not induce vomiting |

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unless directed to do so by a medical professional. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. If vomiting occurs, keep head lower than hips to prevent introduction of fluid into the lungs.

4.2 Most important symptoms/effects, acute and delayed

Eyes: May cause inflammation, redness, and possible damage with prolonged exposure.

Skin: Prolonged or repeated exposure may cause skin ulcerations and /or burns.

Inhalation: It may cause headaches, nausea, or weakness in case of prolonged exposure. Oxygen can be administered if breathing becomes difficult.

Ingestion: May result in nausea, vomiting, diarrhea, digestive disorders, or chemical burns.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Water spray, Foam, Carbon Dioxide, Dry-Chemical.

5.2 Specific hazards arising from the chemical

Avoid high temperatures that may cause thermal decomposition or explosion, especially in confined or poorly ventilated spaces.

5.3 Special protective actions for fire-fighters

Wear positive pressure, self-contained breathing apparatus (SCBA) and goggles. Avoid exposure to smoke or fumes. Contain any liquid runoff.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment, and emergency procedures

For small or incidental spills, the minimum personal protective equipment should be rubber gloves, rubber apron, and chemical goggles. Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. Gas masks with ammonia canister or SCBA gear may be required. For large spills, contain by diking with soil or other non-combustible absorbent material. Dilution with water will reduce the release of ammonia vapors. Keep material out of sewers, storm drains, and surface waters. Comply with all applicable government regulations on spill reporting, handling, and waste disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Keep away from incompatible materials. Do not breathe mists. Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Wash with soap and water after handling.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool (above 40 °F), dry, well-ventilated area away from incompatible materials. This product should be stored in tanks constructed of stainless steel, fiberglass, polypropylene, or polyethylene. Valves should be inspected on a regular basis and replaced as needed to prevent leakage. Transfer equipment (valves, pumps, etc.) should be constructed of stainless steel or chemical-resistant plastic.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Manganese (II) Sulfate (CAS: 7785-87-7 EC: 232-089-9)
2. Manganese citrate (CAS: 10024-66-5)
3. Sodium borate anhydrous (CAS: 1330-43-4)

8.2 Appropriate engineering controls

Use with adequate ventilation to keep airborne levels below recommended exposure limits.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Chemical dust/splash goggles or full-face shield to prevent eye contact. As a general rule, contact lenses should not be worn when working with chemicals because they contribute to the severity of an eye injury.

Skin protection

Rubber gloves with gauntlets.

Body protection

Use body protection appropriate for task. Chemical-resistant coveralls and rubber aprons are generally acceptable.

Respiratory protection

If work conditions generate vapors or mist, wear a NIOSH approved respirator appropriate for those emission levels. Appropriate respirator may be a full facepiece respirator, an SCBA in the pressure demand mode, or a supplied-air respirator.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

| | |
|---|---------------------------|
| Appearance/form (physical state, color, etc.) | dark reddish-brown liquid |
| Odor | none |
| Odor threshold | NA |
| pH | 9.5 to 10 |
| Melting point/freezing point | 32F |
| Initial boiling point and boiling range | 212F |
| Flash point | NA |
| Evaporation rate | NA |
| Flammability (solid, gas) | NA |
| Upper/lower flammability limits | NA |
| Vapor pressure | NA |
| Vapor density | NA |
| Relative density | 9.8lbs/gal |
| Solubility(ies) | NA |
| Partition coefficient: n-octanol/water | NA |
| Auto-ignition temperature | NA |
| Decomposition temperature | NA |
| Viscosity | NA |
| Explosive properties | NA |
| Oxidizing properties | NA |

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SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under normal conditions and pressure

10.2 Possibility of hazardous reactions

Strong acids and bases

10.3 Conditions to avoid

high heat

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

May cause severe gastrointestinal irritation, vomiting, stomach cramps, and diarrhea. May interfere with circulation and oxygen carrying capacity of blood with prolonged exposure.

Skin corrosion/irritation

Moderate irritant, especially with prolonged exposure. May cause skin ulceration and/or burns.

Serious eye damage/irritation

Moderate irritant. May cause redness, burning, inflammation, and/or damage.

Respiratory or skin sensitization

May cause irritation to mucous membranes, coughing, or breathing difficulties. If exposed to decomposition gases remove from area immediately.

SECTION 12: Ecological information

Toxicity

May be harmful to fish, livestock, and wildlife. Dissolved mineral salts may cause irritation of the digestive tract. Non-persistent. Non-cumulative when applied using normal agricultural practices.

SECTION 13: Disposal considerations

Disposal of the product

Do not contaminate lakes, streams, ponds, estuaries, oceans, or other waters by discharge of waste effluents or equipment rinse. Dispose of waste effluents according to federal, state, and local regulations. Chemical additions or other alterations of this product may invalidate any disposal information in this SDS.

SECTION 14: Transport information

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

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SECTION 15: Regulatory information

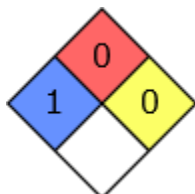
15.1 Safety, health, and environmental regulations specific for the product in question

Pennsylvania Right to Know Components

Chemical name: Boron sodium oxide

CAS number: 1330-43-4

NFPA Rating



SECTION 16: Other information

The information and recommendations herein are taken from data contained in independent, industry recognized references including NIOSH, OSHA, ANSI, and NFPA. This information is, as of date listed above, true and accurate to the best of Core Agri, Inc. knowledge. It is intended for use by persons possessing technical knowledge and at their own discretion and risk. Since actual use is beyond our control, no guarantee, express or implied, and no liability is assumed by Core Agri, Inc. in conjunction with the use of this information. Actual conditions of use and handling may require consideration of information other than, or in addition to, that which is provided herein.