
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

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 milk or water, then induce vomiting. 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.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Dry powder or CO₂

5.2 Special protective actions for fire-fighters

Safety Data Sheet

Core Ready Man DF

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 or SCBA gear may be required. For large spills, contain by diking with soil or other non-combustible absorbent material. 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

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 dry, well-ventilated area.
Do not stack pallets more than 2 high.

SECTION 8: Exposure controls/personal protection

8.1 Appropriate engineering controls

Use with adequate ventilation.

8.2 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, a self-contained breathing apparatus 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.)	white powder
Odor	NA
Odor threshold	NA
pH	NA
Melting point/freezing point	NA
Initial boiling point and boiling range	NA
Flash point	NA
Evaporation rate	NA
Flammability (solid, gas)	NA
Upper/lower flammability limits	NA
Vapor pressure	NA
Vapor density	NA
Relative density	NA
Solubility(ies)	NA
Partition coefficient: n-octanol/water	NA
Auto-ignition temperature	NA
Decomposition temperature	NA
Viscosity	NA
Explosive properties	NA
Oxidizing properties	NA

SECTION 10: Stability and reactivity

10.1 Reactivity

stable under normal conditions and pressure

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

May cause stomach cramps and/or nausea.

Skin corrosion/irritation

Mild irritant, especially with prolonged exposure. May cause skin ulceration.

Serious eye damage/irritation

Mild irritant. May cause redness and/or burning.

Respiratory or skin sensitization

Moderate irritation of nose and throat. May cause dry coughing, wheezing, or chest tightness.

SECTION 12: Ecological information

Toxicity

Manganese is stable in the environment. Its transport in the environment depends upon the exact compound, the pH, the soil type, and the salinity. All work practices should be aimed at eliminating environmental contamination.

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

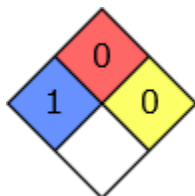
Not dangerous goods

IATA

Not dangerous goods

SECTION 15: Regulatory information

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.