

Safety Data Sheet

TRICARD FourMn

SDS Number: 381

Revision: MAY 10, 2017

Section 1: IDENTIFICATION

Product Name: TRICARD FourMn

Other Identification:

Chemical Family: Liquid Manganese Fertilizer solution

Recommended Use of Chemical: Agricultural Industry – Fertilizer use

Manufacturer: CUSTOM AG FORMULATORS, INC
3430 S. Willow Ave
Fresno, CA 93725
Information: (559) 435-1052

Emergency Contact: CUSTOM AG FORMULATORS, Inc. (800) 355-4457

Section 2: HAZARD(S) IDENTIFICATION

Hazard(s):

Oxidizing Liquids	CATEGORY 3
Serious eye damage/ eye irritation	CATEGORY 1
Causes skin corrosion/ irritation	CATEGORY 2
Specific Target Organ Toxicity- Single Exposure	CATEGORY 3
Hazardous to aquatic environment-Chronic hazard	CATEGORY 3

Signal Word: DANGER

Hazard Statement(s): May be harmful in contact with skin. May cause serious eye damage.
Causes severe skin burns.



Symbol(s):

Precautionary Statements

H272 – May intensify fire, oxidizer.

H302 – Harmful if swallowed.

H314 – Causes severe skin burns and eye damage.

H315 – Causes skin irritation.

H318 – Causes serious eye damage.

H331 – Toxic if inhaled.

H373 – May cause damage to organs through prolonged or repeated exposure if inhaled.

H412 – Harmful to aquatic life with long lasting effects

Section 3: COMPOSITION/INFORMATION on INGREDIENTS

Chemical Ingredients: (See Section 8 for exposure guidelines)

Chemical	Synonym Common Name	CAS No.	EINECS No.	% by Wt.
Manganese Nitrate		10377-66-9		Proprietary
Fulvic Acid		None		Proprietary

Section 4: FIRST AID MEASURES

Eyes: Immediately flush with large quantities of water for 15 minutes. Hold eyelids apart during irrigation to ensure thorough flushing of the entire area of the eye and lids. Obtain medical attention immediately.

Skin: Immediately flush with large quantities of water. Remove contaminated clothing under a safety shower. Continue rinsing. Obtain medical attention if irritation occurs.

Ingestion: If victim is conscious, give 2 to 4 glasses of water and induce vomiting by touching finger to back of throat. Obtain medical attention.

Inhalation: Remove victim from contaminated atmosphere. If breathing is labored, administer oxygen. If breathing has ceased, clear airway and start CPR. Obtain medical attention.

Section 5: FIRE FIGHTING MEASURES

Flammable Properties: (See Section 9 for additional flammable properties)

Extinguishing Media:

Suitable Extinguishing Media: Not flammable, use media suitable for combustibles involved in fire. This product is an oxidizing agent.

Unsuitable Extinguishing Media: None known

Protection of Firefighters:

Specific Hazards Arising from the Chemical:

Physical Hazards: Heating (flames) of closed or sealed containers may cause violent rupture of container due to thermal expansion of compressed gases. This product is an oxidizing agent.

Protective Equipment and Precautions for Firefighters:

Firefighters should wear self-contained breathing apparatus (SCBA) and full fire-fighting turnout gear. Keep containers/storage vessels in fire area cooled with water spray.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protective equipment specified in Section 8. Isolate the hazard area and deny entry to unnecessary, untrained and unprotected personnel.

Environmental Precautions: Keep out of "waters of the United States" because of potential aquatic toxicity.

Methods of Containment:

Small Release: Confine and absorb small releases with sand, earth or other inert absorbents.

Large Release: Shut off release if safe to do so. Dike spill area with earth, sand or other inert absorbents to prevent runoff into surface waterways storm drains or sewers.

Methods for Cleanup:

Small Release: Shovel up the absorbed material and place in drums for disposal as a chemical waste or recycle as a fertilizer as the original product was intended.

Large Release: Recover as much of the spilled product as possible using portable pump and hoses. Use recovered material as originally intended or dispose of as a chemical waste. Treat remaining material as a small release (above).

Other Information: Not applicable

Section 7: HANDLING and STORAGE

Handling: Avoid contact with eyes. Use only in a well-ventilated area. Wash thoroughly after handling. Avoid prolonged or repeated contact with the skin.

Storage: Store in well-ventilated areas. Do not store combustibles in the area of storage vessels. Keep away from any sources of heat or flame. Store totes and smaller containers out of direct sunlight at moderate temperatures. (See Section 10.5 for materials of construction.)

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

Chemical	OSHA PELs		ACGIH TLVs	
	TWA	STEL/C	TLV	STEL
Not applicable				

Engineering Controls: Use adequate exhaust ventilation to prevent inhalation of product vapors. Keep eye wash/safety shower in areas where product is commonly handled.

Personal Protective Equipment (PPE):

Eye/Face Protection:	Chemical goggles and a full face shield.
Skin Protection:	Neoprene rubber gloves and apron should be worn to prevent repeated or prolonged contact with the liquid. Wash contaminated clothing prior to reuse.
Respiratory Protection:	If conditions exist where mist may be generated, a NIOSH/MSHA approved mist respirator should be worn.
Hygiene Considerations:	There are no known hazards associated with this product when use as recommended, however common good industrial hygiene practices should be followed, such as washing thoroughly after handling and before eating or drinking.

Section 9: PHYSICAL and CHEMICAL PROPERTIES

Appearance:	Light pink to amber liquid
Odor:	slight Sweet Odor
Odor Threshold:	Not determined
pH:	2-4
Melting Point/Freezing Point:	Salt Out Temperature <32°F (<-0°C) (<i>Typical</i>)
Boiling Point:	~222°F (106°C)
Flash Point:	Not applicable
Evaporation Rate:	Not applicable
Flammability:	Not applicable
Upper/Lower Flammability Limits:	Not applicable
Vapor Pressure:	Not determined
Vapor Density:	Not determined
Relative Density:	1.20 (10.01 lbs/gal) (<i>Typical</i>)
Solubility (in water):	Complete
Partition Coefficient:	Not applicable
Auto-ignition Temperature:	Not applicable
Decomposition Temperature:	Data not available.
Viscosity:	Data not available.

Section 10: STABILITY and REACTIVITY

Reactivity:	Avoid interaction with heat (flames), acids.
Chemical Stability:	This is a stable product under normal (ambient) temperature and pressure conditions.
Possibility of Hazardous Reactions:	None known
Conditions to Avoid:	Exposure to Extreme temperatures, strong acids, liquid phosphates
Incompatible Materials:	Strong oxidizers.. This product is not compatible with lead or mercury or their alloys. These materials of construction should not be used in handling systems or storage containers for this product.
Hazardous Decomposition Products:	None Known.

Section 11: TOXICOLOGICAL INFORMATION

Oral:	Not determined
Dermal:	Slightly irritating
Inhalation:	Not determined
Eyes:	Causes serious eye irritation/damage.

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not available.

Chronic effects Prolonged inhalation may be harmful.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity:	Not determined.
Persistence & Degradability:	Not determined
Bioaccumulative Potential:	This product is not bioaccumulative.
Mobility in Soil:	Not determined
Other Adverse Effects:	Not determined

Section 13: DISPOSAL CONSIDERATIONS

Consult federal, state and local regulations for disposal requirements.

Section 14: TRANSPORT INFORMATION**Basic Shipping Description:**

Proper Shipping Name:	Corrosive Liquid, Oxidizing, n.o.s
Hazard Classes:	8
Identification Number:	UN/NA#: UN3093
Packing Group:	II
Required Labels:	Corrosive, oxidizer

Section 15: REGULATORY INFORMATION**U.S. Federal Regulations:**

OSHA:	This product meets the criteria of the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200).
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State regulations:

CA Proposition 65:	Warning: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.
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Section 16: OTHER INFORMATION

NFPA health hazard

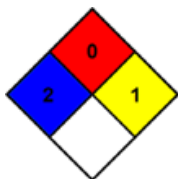
2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard

0 - Materials that will not burn.

NFPA reactivity

1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.



REVISIONS: 5/10/2017

PREVIOUS REVISION: 4/1/2015

FURTHER INFORMATION:

The above information is based on data of which the manufacturer is aware and is believed to be correct as of the date hereon. Since the information contained herein may be applied under conditions beyond the manufacturer's control and which may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, the manufacturer does not assume any responsibility for the results of its use. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.