

MATERIAL SAFETY DATA SHEET



Product Name: 6% Manganese Chelate EDTA
Revision Date: March 14, 2014

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: 6% Manganese EDTA
Synonyms: 6% Manganese Chelate fertilizer
Product Codes: NA

Manufacturer: Kugler Company
Address: 209 West 3rd Street, PO Box 1748, McCook, NE 69001
Emergency Phone: 308.345.2280
Chemtrec Phone: 800.424.9300 available 24 hours a day
Fax Phone: 308.345.7756

Chemical Name: Manganese Dipotassium Ethylenediaminetetraacetate (Mn K₂ EDTA)
Chemical Family: Fertilizer
Chemical Formula: Proprietary information
Product Use: Plant Nutrients
Prepared By: Kugler Company

Section 2: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	% VOL	CAS No.	SARA 313 Reportable
Manganese Dipotassium		68015-77-0	NA
Ethylenediaminetetraacetate (Mn K ₂ EDTA)			

OSHA PEL-TWA: NA
OSHA PEL STEL : NA
OSHA PEL CEILING: NA
ACGIH TLV-TWA: NA
ACGIH TLV STEL: NA
ACGIH TLV CEILING: NA

Section 3: HAZARDS IDENTIFICATION

Emergency Overview:

Routes of Entry: Inhalation, ingestion, injection and absorption

Potential Health Effects

Eyes: May cause irritation
Skin: May cause irritation
Ingestion: May cause irritation

Inhalation: May cause irritation of the gastrointestinal tract, cramps, vomiting, convulsions or diarrhea.

Acute Health Hazards: NA

Chronic Health Hazards: Chronic ingestion may cause damage to heart, liver and blood-forming tissues. Ingestion of large quantities may cause headache, mental impairment, dizziness and may be fatal.

Medical Conditions Generally Aggravated by Exposure: Existing skin and lung disorders may be aggravated

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Carcinogenicity

OSHA: NA ACGIH: NA NTP: NA IARC: NA OTHER: NA

Section 4: FIRST AID MEASURES

Eyes: Flush eye immediately and thoroughly with water for at least 15 minutes. If irritation persists, seek medical attention.

Skin: Flush skin immediately and thoroughly with water. If irritation persists, seek medical attention (should only affect if allergic).

Ingestion: If conscious, immediately give large quantities of water and induce vomiting. Get medical attention immediately or call your local Poison Control Center

Inhalation: Remove from areas of mist exposure. If irritation persists, seek medical attention.

Notes to Physicians or First Aid Providers:

Section 4 Notes:

Section 5: FIRE FIGHTING MEASURES

Flammable Limits in Air, Upper: NA
(% by volume) Lower: NA

Flash Point: NA

Method Used: NA

Autoignition Temperature: NA

NFPA Hazard Classification

Health: 1 Flammability: 0 Reactivity: 0 Other: None

HMIS Hazard Classification

Health: 1 Flammability: 0 Reactivity: 0 Other: None

Extinguishing Media: Use extinguishing media appropriate for surrounding materials.

Special Fire Fighting Procedures: Because fire may produce hazardous decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure demand or positive pressure mode.

Unusual Fire and Explosion Hazards: NA

Hazardous Decomposition Products: Can release ammonia, nitrous oxide fumes, cyanides, oxides of carbon and phosphorous oxide fumes.

Section 6: ACCIDENTAL RELEASE MEASURES

SPILL/LEAK PROCEDURES:

Small Spills: Absorb with sand or other inert material and dispose of in accordance with applicable regulations.

Large Spills:

Containment: For large spills, dike far ahead of liquid spill for later disposal, Do not release into sewers or waterways.

Cleanup: Contained materials may be salvaged for use.

Regulatory Requirements: Follow applicable 051-IA regulations for cleanup personnel and EPA requirements for disposal.

Disposal: Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, State, and local regulations if material is not salvageable for use.

Disposal Regulatory Requirements: Follow applicable Federal, state, and local regulations.

Container Cleaning and Disposal: Triple rinse and use rinseate in product tank. Dispose of container per applicable

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regulations.

Section 7: HANDLING AND STORAGE

Store in suitable containers made of mild steel, plastic fiberglass or stainless steel. Avoid containers, piping, or fittings made of aluminum, copper-containing alloys or galvanized metal. General safety and industrial hygienic practices should always be followed.

Other Precautions: NA

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs.

ADMINISTRATIVE CONTROLS:

Respiratory Protection: Respiratory protection may be needed if airborne mists are created. Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. *Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Protective Clothing Equipment: Wear chemically protective gloves to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133).

Safety Stations: Make emergency eyewash stations, emergency showers, and washing facilities available in work area.

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your personal protective equipment.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear slight pink liquid
Odor:	No apparent odor
Physical State:	Liquid
pH as Supplied:	7.5 – 8.1
pH (other):	
Boiling Point:	>212F
Melting Point:	NA
Freezing Point:	Below 32F
Vapor Pressure (mmHg):	NA
Vapor Density (AIR=1):	NA
Specific Gravity (H2O=1)	1.319
Density, lbs/gal:	11.0
Evaporation Rate:	NA
Solubility in Water:	Complete

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Percent Solids by Weight: NA%
Percent Volatile: NA
Volatile Organic Compounds (VOC): None
With water (lbs/gal):
Without water (lbs/gal):
Molecular Weight: NA
Viscosity: NA

Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal storage and handling conditions
Conditions to Avoid (Stability): Avoid excessive heat
Incompatibility (material to avoid): Oxidizers, hypochlorites, strong bases and strong acids
Hazardous Decomposition or By-Products: Ammonia
Hazardous Polymerization: NA
Conditions to Avoid (Polymerization): NA

Section 11: TOXICOLOGICAL INFORMATION

Toxicological Information: NA

Section 12: ECOLOGICAL INFORMATION

Ecological Information: Do not allow into drinking water.

Section 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Disposal of N-P-K fertilizer may be subject to federal, state and local regulations. Users of this product should review their operations in terms of applicable federal, state and local laws and regulations, then consult with appropriate regulatory agent before discharging or disposing.

RCRA Hazard Class: NA

Section 14: TRANSPORT INFORMATION

US Department of Transportation

Proper Shipping Name: 6% Manganese Chelate
Hazard Class: NA
ID Number: NA
Packing Group: NA
Label Statement:

Health: 1 Flammability: 0 Reactivity: 0 Specific: 0

Water Transportation

Proper Shipping Name: 6% Copper Chelate
Hazard Class: NA

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ID Number: NA

Packing Group: NA

Label Statement:

Health: 1 Flammability: 0 Reactivity: 0 Specific: 0

Air Transportation

Proper Shipping Name: 6% Copper Chelate

Hazard Class: NA

ID Number: NA

Packing Group: NA

Label Statement:

Health: 1 Flammability: 0 Reactivity: 0 Specific: 0

Section 15: REGULATORY INFORMATION

U.S. Federal Regulations

TSCA (toxic substance control act): YES

CERCLA (comprehensive response compensation and liability act): No

Sara Title III (superfund amendments and reauthorization act): NA

311/312 Hazard Categories: NA

313 Reportable Ingredients: Urea, Potassium, Hydroxide, Aqua Ammonia, Phosphoric Acid

State Regulations:

International Regulations:

Section 15 Notes:

Section 16: OTHER INFORMATION

Handling Precautions: Use in accordance with labeling instructions. Keep away from children, pets, domestic animals, and wildlife.

Storage Requirements: Store in properly labeled containers. Keep from freezing.

Labeling (Precautionary Statements): Warning! Eye and Skin Irritant

This product is not regulated by DOT or falls under the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and CFR part 372.

Disclaimer:

The data in this Material Safety Data Sheet relates to the specific material designated and does not relate to its use in combination with any other material or process. The data contained is believed to be correct. However, since conditions of use are outside our control, it should not be taken as warranty or representation for which KUGLER OIL COMPANY assumes legal responsibility. This information is provided solely for your consideration, investigation and verification.