



THE ANDERSONS  
SAFETY DATA SHEET

DATE PREPARED: 02/15/17

CURRENT AS OF: 1/13/22

SECTION 1: PRODUCT / SUPPLIER IDENTIFICATION

PRODUCT CODE: 10001230, 10000999

PRODUCT NAME: MANGANESE 5% SOLUTION

PRODUCT USE: Micronutrient

MFR INFO: The Andersons, Inc.  
PO Box 119  
Maumee, OH 43537

FOR EMERGENCY: (800) 757-8951

FOR INFORMATION: (419) 893-5050

SECTION 2: HAZARDS IDENTIFICATION

HAZARD SYMBOLS / STATEMENTS:



**DANGER**

**CAUSES SEVERE SKIN BURNS AND EYE DAMAGE  
MAY CAUSE RESPIRATORY IRRITATION**

HAZARD CLASSIFICATIONS:

*SKIN IRRITATION*

*EYE IRRITATION*

*TARGET ORGAN SYSTEMIC TOXICITY*

CATEGORY

1

1

3

INTERPRETATION

Corrosive / Severe Skin Irritation Possible

Irreversible Eye Irritation Possible

Transient Respiratory Irritation Possible

NOTE: 16% OF THE MIXTURE CONSISTS OF INGREDIENTS OF UNKNOWN TOXICITY

PRECAUTIONARY STATEMENTS:

- *CALL A POISON CENTER / PHYSICIAN IF UNWELL*
- *WEAR PROTECTIVE GLOVES / CLOTHING AND EYE / FACE PROTECTION*
- *IF ON SKIN, REMOVE IMMEDIATELY ALL CONTAMINATED CLOTHING*
- *IF ON SKIN, RINSE SKIN WITH WATER / SHOWER*
- *IF SKIN IRRITATION OCCURS, GET MEDICAL ADVICE*
- *IF IN EYES, RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES – REMOVE CONTACT LENSES*
- *IF EYE IRRITATION PERSISTS, GET MEDICAL ADVICE*
- *IF SWALLOWED, RINSE MOUTH – DO NOT INDUCE VOMITING*
- *IF INHALED, REMOVE TO FRESH AIR*
- *WASH HANDS AFTER HANDLING*
- *USE ONLY OUTDOORS OR IN WELL VENTILATED AREAS*
- *AVOID BREATHING MIST*
- *IF INHALED, REMOVE TO FRESH AIR AND KEEP AT REST IN A POSITION COMFORTABLE FOR BREATHING*
- *STORE CONTAINER TIGHTLY CLOSED, LOCKED UP*
- *DISPOSE OF CONTENTS / CONTAINER IN ACCORDANCE WITH NATIONAL / REGIONAL / LOCAL REGULATIONS*

**MANGANESE 5% SOLUTION****SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**

<u>CHEMICAL IDENTITY</u>	<u>SYNONYM</u>	<u>CAS NUMBER</u>	<u>CONCENTRATION (%)</u>
Micronutrient blend		Mixture	100.0

**SECTION 4: FIRST AID MEASURES**

IF INHALED:	Move victim to fresh air. Seek medical attention if irritation persists.
IF ON SKIN:	Wash affected areas with soap and water. Seek medical attention if irritation persists. Wash contaminated clothing before re-use.
IF IN THE EYES:	Immediately flush with water for at least 20 minutes. Seek medical attention if irritation persists.
IF SWALLOWED:	If victim is alert and not convulsing, give one glass of water to dilute material. Seek immediate medical attention.
SPECIAL TREATMENT:	None known
HEALTH HAZARDS:	See Section 11

**SECTION 5: FIREFIGHTING MEASURES**

EXTINGUISHING MEDIA:	Use media suitable for surrounding fire. No special media required.
SPECIFIC FIRE HAZARDS:	Decomposition products may be toxic.
SPECIAL FIREFIGHTING PROCEDURES:	Wear full protective clothing and positive-pressure self-contained breathing apparatus.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

SPILL / RELEASE PROCEDURES:	Collect spilled product and store to re-use. Contaminated product and/or environmental media should be recovered and disposed of properly.
ENVIRONMENTAL PRECAUTIONS:	Prevent spilled material from entering storm drains or water bodies.
PROTECTIVE EQUIPMENT:	See Section 8

**SECTION 7: HANDLING AND STORAGE**

Store in a cool, dry, well ventilated area.

**SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**EXPOSURE LIMITS:

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

**MANGANESE 5% SOLUTION**

<u>HAZARDOUS COMPONENT</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Micronutrient blend	5 mg/m <sup>3</sup> (ceiling) (manganese)	5 mg/m <sup>3</sup> (ceiling)

**PERSONAL PROTECTIVE EQUIPMENT / PROTECTION MEASURES / CONTROLS:**

RESPIRATORY PROTECTION:	NIOSH approved particulate / mist respirator, if required
EYE PROTECTION:	Safety glasses with sideshields, goggles, or faceshield
SKIN PROTECTION:	Long sleeves, protective (rubber) gloves recommended
VENTILATION:	Local exhaust ventilation recommended

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE AND ODOR:	Clear pink liquid with slight earthy odor
pH:	1.4 – 2.4
MELTING POINT:	Not applicable
BOILING POINT:	Not available
FLASH POINT:	Not flammable
EVAPORATION RATE:	Not available
FLAMMABLE LIMITS:	Not applicable
VAPOR PRESSURE:	Not available
VAPOR DENSITY:	Not available
SPECIFIC GRAVITY:	1.20
SOLUBILITY (IN WATER):	Soluble
PARTITION COEFFICIENT:	Not available
AUTOIGNITION TEMP:	Not applicable
DECOMPOSITION TEMP:	Not applicable
ODOR THRESHOLD:	Not available
VISCOSITY:	Not available

**SECTION 10: STABILITY AND REACTIVITY**

STABILITY:	Product is stable.
CONDITIONS TO AVOID:	Excessive heat
INCOMPATIBILITY:	Strong acids, alkalis
HAZARDOUS DECOMPOSITION PRODUCTS:	CO <sub>x</sub> , SO <sub>x</sub> , metal oxides

**SECTION 11: TOXICOLOGICAL INFORMATION**

HEALTH EFFECTS:	May cause severe eye irritation. May also cause irritation of the skin, respiratory tract, mucous membranes, and gastrointestinal tract. Inhalation may result in coughing and difficult breathing. Ingestion may result in nausea. Significant overexposure could potentially result in kidney and liver effects.
CARCINOGENICITY:	None of the ingredients are known / listed carcinogens.

**MANGANESE 5% SOLUTION****INGREDIENT TOXICITY RANGES:**

ORAL: &gt; 6,730 mg/kg (citric acid)

DERMAL: Not listed

INHALATION: Not listed

**SECTION 12: ECOLOGICAL INFORMATION**

This product is not known to be ecotoxic, persistent, or have the potential to bioaccumulate.

**SECTION 13: DISPOSAL CONSIDERATIONS**

Dispose of in accordance with all national, regional / state, and local regulations. Reuse recovered product where possible.

**SECTION 14: TRANSPORT INFORMATION**

This product must be placarded as a corrosive due to its low pH.

SHIPPING NAME: UN3265, Corrosive liquid, acidic, organic, n.o.s., (contains citric acid), 8, PG III

**SECTION 15: REGULATORY INFORMATION**

SARA SECTION 311 / 312 HAZARD CATEGORY: ACUTE HAZARD

**SECTION 16: OTHER INFORMATION**

NFPA RATINGS:	HEALTH	3
	FLAMMABILITY	0
	INSTABILITY	0

HMIS RATINGS:	HEALTH	3
	FLAMMABILITY	0
	PHYSICAL HAZARD	0

PREPARED BY: TS

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