

**GRIFFIN FERTILIZER COMPANY
SAFETY DATA SHEET**

DATE PREPARED: 06/21/18

CURRENT AS OF: 9/25/18

SECTION 1: PRODUCT / SUPPLIER IDENTIFICATION

PRODUCT CODE:

PRODUCT NAME: Amino MZF

PRODUCT USE: Fertilizer

MFR INFO: Griffin Fertilizer Company
3201 South Scenic Hwy.
Frostproof, FL 33843

FOR EMERGENCY: (800) 424-9300
FOR INFORMATION: (863) 635-2281

SECTION 2: HAZARDS IDENTIFICATION

HAZARD SYMBOLS / STATEMENTS:



DANGER CAUSES SEVERE SKIN BURNS AND SERIOUS EYE DAMAGE. HARMFUL IF SWALLOWED. CAUSES DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE. MAY INTENSIFY FIRE; OXIDIZER.

HAZARD CLASSIFICATIONS:

EYE DAMAGE

SKIN CORROSION

ACUTE TOXICITY, ORAL

OXIDIZING LIQUID

SPECIFIC TARGET ORGAN TOXICITY

- REPEATED EXPOSURE

CATEGORY

1

1A

4

3

3

INTERPRETATION

Causes serious eye damage

Causes severe skin burns

Harmful if swallowed

May intensify fire; oxidizer

Causes damage to central nervous system

PRECAUTIONARY STATEMENTS:

- *KEEP AWAY FROM HEAT*
- *TAKE ANY PRECAUTIONS TO AVOID MIXING WITH COMBUSTIBLES*
- *WEAR PROTECTIVE GLOVES AND CLOTHING*
- *REMOVE CONTAMINATED CLOTHING AND WASH BEFORE REUSE*
- *DO NOT BREATHE VAPORS/MISTS*
- *IF INHALED: MOVE TO FRESH AIR AND KEEP COMFORTABLE. SEEK MEDICAL ATTENTION IF UNWELL*
- *USE ONLY OUTDOORS OR IN WELL-VENTILATED AREA*
- *CALL POISON CONTROL OR SEEK MEDICAL ATTENTION IF YOU FEEL UNWELL*
- *WASH THOROUGHLY AFTER HANDLING*
- *DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT*
- *IF SWALLOWED: RINSE MOUTH AND IMMEDIATELY CALL POISON CONTROL.*

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- *IF IN EYES OR ON SKIN: RINSE AREA WITH PLENTY OF WATER, REMOVE CONTACT LENSES. CALL POISON CONTROL IF UNWELL.*
- *IF EYE OR SKIN IRRITATION CONTINUES: SEEK MEDICAL ATTENTION*

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

<u>CHEMICAL IDENTITY</u>	<u>SYNONYM</u>	<u>CAS NUMBER</u>	<u>CONCENTRATION (%)</u>
Manganese Nitrate		10377-66-9	35-45
Zinc Nitrate	Celloxan	7779-88-6	35-45
Iron Nitrate	Iron trinitrate	10421-48-4	00-10

SECTION 4: FIRST AID MEASURES

IF INHALED:	Move to fresh air and keep comfortable, call POISON CONTROL if unwell.
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 15-20 minutes and seek medical attention.
IF SWALLOWED:	Rinse mouth. DO NOT INDUCE VOMITING unless directed by a medical professional. IMMEDIATELY call POISON CONTROL.
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:	When heated to decomposition, this product will emit toxic oxides.
SPECIAL FIREFIGHTING PROCEDURES:	Wear full protective clothing and positive-pressure self-contained breathing apparatus (SCBA).

SECTION 6: ACCIDENTAL RELEASE MEASURES

SPILL / RELEASE PROCEDURES:	Contain material and place in containers for use as intended, or discard according to Federal, State and Local regulations.
ENVIRONMENTAL PRECAUTIONS:	Prevent spilled material from entering storm drains or water bodies. If material enters a waterway, notify the appropriate authorities.
PROTECTIVE EQUIPMENT:	Wear PPE according to Section 8

SECTION 7: HANDLING AND STORAGE

Wash hands after handling material. Do not eat, drink or smoke while handling the material. Avoid breathing vapors/mists. Not intended for human consumption. Store in a cool, dry, well-ventilated area away from incompatible materials. Keep containers tightly closed when not in use. Store above 32°F.

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.

<u>HAZARDOUS COMPONENT</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Manganese Compounds	5mg/m ³	0.2mg/m ³
Manganese Nitrate	500 mg/m ³ (NIOSH IDLH)	0.2mg/m ³

PERSONAL PROTECTIVE EQUIPMENT / PROTECTION MEASURES / CONTROLS:

RESPIRATORY PROTECTION:	NIOSH approved respirator, if required
EYE PROTECTION:	Safety glasses with sideshields, goggles, or faceshield
SKIN PROTECTION:	Appropriate for the task. Impervious and compatible with material,
VENTILATION:	Use with adequate ventilation

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR:	Solution
pH:	Not available
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:	~1.508
SOLUBILITY (IN WATER):	Soluble
PARTITION COEFFICIENT:	Not available
AUTOIGNITION TEMP:	Not available
DECOMPOSITION TEMP:	Not available
ODOR THRESHOLD:	Not available
VISCOSITY:	Not available

SECTION 10: STABILITY AND REACTIVITY

STABILITY:	Product is stable.
CONDITIONS TO AVOID:	Freezing temperatures. Zinc nitrate explodes when sprinkled on hot carbon.
INCOMPATIBILITY:	Combustible materials, carbon, copper, metal sulfides, organic matter, phosphorous, sulfur.
HAZARDOUS DECOMPOSITION PRODUCTS:	Toxic oxides. Product may decompose explosively when heated or involved in a fire.

SECTION 11: TOXICOLOGICAL INFORMATION

HEALTH EFFECTS:	Causes severe skin burns and serious eye damage. Harmful if swallowed. Causes damage to the central nervous system through prolonged or repeated exposures. May intensify fires.
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CARCINOGENICITY: None of the ingredients are known / listed carcinogens.

INGREDIENT TOXICITY RANGES:

ORAL: > 1,400 mg/kg (zinc nitrate) – 3,250 mg/kg (iron nitrate)

SECTION 12: ECOLOGICAL INFORMATION

Very toxic to aquatic life with long lasting effects. Long-term degradation products may arise. Products of degradation are not expected to be hazardous.

SECTION 13: DISPOSAL CONSIDERATIONS

Use product for intended purpose where possible. Dispose of in accordance with all national, regional / state, and local regulations.

SECTION 14: TRANSPORT INFORMATION

UN NUMBER:	UN1514
PROPER SHIPPING NAME:	Zinc Nitrate Solution
TRANSPORT HAZARD CLASS:	5.1 Oxidizer
PACKING GROUP:	II

SECTION 15: REGULATORY INFORMATION

SARA 311/312:	REACTIVE, ACUTE, CHRONIC
SARA 313:	Manganese Compounds (~40%) Manganese Nitrate (~40%) Zinc Compounds (~41%) Iron Nitrate (nonahydrate)
REPORTABLE QUANTITY:	Manganese Compounds (No RQ) Zinc Compounds (No RQ) Zinc Nitrate (1,000 lbs.) Iron Nitrate (1,000 lbs.)
RIGHT-TO-KNOW:	Manganese Compounds (CA, MA, MN, NJ, PA) Manganese Nitrate (NJ, PA) Zinc Compounds (CA, IL, MA, NJ, PA)

SECTION 16: OTHER INFORMATION

NFPA RATINGS:	HEALTH	3
	FLAMMABILITY	0
	INSTABILITY	1
HMIS RATINGS:	HEALTH	3
	FLAMMABILITY	0
	INSTABILITY	1
SDS NO:	XYZ	
PREPARED BY:	DBA EHS Consulting	

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