



Safety Data Sheet

Report Date 02-Sep-21

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1. Identification

Product Name : ELE-MAX BMZ
Synonyms : None
Product Use : Nutritional Liquid Concentrate
Manufacturer/Supplier : Helena Agri-Enterprises, LLC
Address : 225 Schilling Blvd. Collierville, TN 38017
General Information : 901-761-0050
Transportation Emergency Number : CHEMTREC:800-424-9300

2. Hazard Identification



Signal Word : Warning
Skin Irritation : Causes skin irritation
Eye Irritation : Causes serious eye irritation
Acute Toxicity Oral : No Oral LD50 data available
Acute Toxicity Dermal : No Dermal LD50 data available

Hazard Categories : Eye/Skin Irritation-2A/2; Skin Sensitization-1; STOT,RE-2; Reproductive Toxicity-2

Hazard Statement : Causes serious eye irritation
Causes skin irritation
May cause an allergic skin reaction
May cause damage to through prolonged or repeated exposure
Suspected of damaging fertility or the unborn child

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Boric acid, zinc salt	1332-07-6	>= 25 <= 35
1,2-Ethanediol	107-21-1	>= 5 <= 7
Zinc oxide	1314-13-2	>=5 <= 7
Potassium hydroxide	1310-58-3	>= 0.3 <= 1
3(2H)-Isothiazolone, 2-methyl-	2682-20-4	>= 0.01 <= 0.025
Balance, nonhazardous	Proprietary	>=64.699 <= 49.975



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GUARANTEED ANALYSIS:	
Total Nitrogen (N):	1.00%
1.0% Urea Nitrogen	
Boron (B):	3.90%
Manganese (Mn):	6.50%
Zinc (Zn):	13.00%

4. First Aid Measures

Eye	: Rinse with plenty of running water. Check for and remove any contact lenses. Get medical attention.
Skin	: Wash with soap and water. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	: Avoid inhalation of vapor, spray or mist. If inhaled, remove to fresh air. Get medical attention following exposure or if feeling unwell.
Ingestion	: Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Get medical attention if you feel unwell.
Indication of Immediate Medical Attention and Special Treatment Needed	: Treat symptomatically. Contact poison control center or doctor immediately if large quantities have been ingested or inhaled.

5. Fire Fighting Measures

Extinguishing Media	: Use an extinguishing media suitable for the surrounding fire.
Specific Hazards Arising from the Chemical	: In a fire or if heated, a pressure increase will occur and the container may burst.
Special Fire Fight Proc	: Wear self-contained breathing apparatus and full protective clothing. Promptly isolate the scene.

6. Accidental Release Measures

Personal Precautions	: Keep unprotected and unnecessary personnel out of spill area.
Protective Equipment	: Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Respiratory protection not normally needed. Eyewash and emergency shower should be available in work area.
Emergency Procedures	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Methods and Materials for Containment and Cleanup	: For small spills, stop leak if without risk. Move containers from spill area. Dilute with water and mop up. Alternatively, absorb with an inert dry material and place in an appropriate container for disposal. For large spills, contain and collect spillage with non-combustible, absorbent material, e.g., sand, earth, vermiculite or diatomaceous earth. Place into suitable containers for disposal in accordance with local regulations.



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7. Handling and Storage

Precautions for Safe Handling : Keep product locked up and out of reach of children. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or smoking tobacco. Remove and wash contaminated clothing before reuse. Do not take internally. Avoid contact with or inhalation of spray application mist if present. Do not apply this product in a manner as to directly expose workers or other persons. If product is mixed with pesticides and/or spray adjuvants, follow all precautionary statements on the accompanying products labeling. Not for human or animal consumption.

Conditions for Safe Storage : Keep in a cool, dry chemical storage area, out of reach of children and livestock. Protect from frost. Keep container tightly closed, do not allow water to be introduced to the contents of this container. Store at temperatures above 32 Degrees F. Do not contaminate water sources by cleaning of equipment or disposal of spray waste. Dispose of empty containers by triple rinsing with detergent solution or puncture and discard of empty containers in a landfill in accordance with current local, state and federal regulations.

8. Exposure Controls / Personal Protection

TLV/PEL : Boric acid, zinc salt: TLV=2mg/m³ (inhalable fraction). 1,2-Ethenediol: TLV=25 ppm (vapor fraction). Zinc oxide: TLV=2 mg/m³ (respirable fraction), PEL=5 mg/m³ (fume), 5 mg/m³ (respirable fraction). Potassium hydroxide: PEL and TLV=2 mg/m³.

Appropriate Engineering Controls : Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below TLV or PEL.

Personal Protective Equipment : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Respiratory protection not normally needed. Eyewash and emergency shower should be available in work area.

9. Physical and Chemical Properties

Odor/Appearance : Beige liquid (suspension); odorless.

Flash Point, °F : Not flammable

Boiling Point, °F : Not determined

Melting Point(Freezing point), °C : Not determined

Vapor Pressure, mm Hg @ 20 °C : Not determined

Vapor Density : Not determined

Solubility in Water : Not determined

Molecular Formula : Not applicable, formulated mixture.

Density, g/mL @ 25 °C : 1.537 (12 lb 13 oz per gal)

Evaporation Rate(Butyl Acetate = 1) : Not determined

Octanol/Water Partition Coefficient : Not determined

pH : 9 to 10

Flammable Limits (approximate volume % in air) : Not determined



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Auto-ignition Temperature : Not determined

Decomposition temperature : Not applicable

10. Stability and Reactivity

Reactivity : No reactivity data available.

Chemical Stability : Stable

Hazardous Decomposition Products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Hazardous Polymerization : Will not occur

Conditions to Avoid : Avoid contamination by any source including metals, dust and organic materials.

Incompatible Materials : Urea reacts with calcium hypochlorite or sodium hypochlorite to form explosive nitrogen tetrachloride.

11. Toxicological Information

Acute Toxicity (Oral LD50) : No LD50 given for mixture. Not classified as hazardous under 29 CFR 1910.1200 (2012).

Acute Toxicity (Dermal LD50) : No LD50 given for mixture. Not classified as hazardous under 29 CFR 1910.1200 (2012).

Acute Toxicity Inhalation LC50 : No LC50 given for mixture. Not classified as hazardous under 29 CFR 1910.1200 (2012).

Likely Routes of Exposure : Skin, eyes

Skin Irritation : Causes skin irritation.

Eye Irritation : Causes serious eye irritation.

Skin Sensitization : May cause an allergic skin reaction.

Carcinogenic : Not listed.

Chronic Effects : Specific Target Organ Toxicity, Repeated Exposure: May cause damage to organs through prolonged or repeated exposure. Reproductive Toxicity: Suspected of damaging fertility or the unborn child.

Other Hazards : CA PROPOSITION 65 WARNINGS: No listed ingredients appear on the CA Proposition 65 Warnings listing.

12. Ecological Information

Ecotoxicity : Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Persistence and Degradability : No known significant effects or critical hazards.

Bioaccumulative Potential : No known significant effects or critical hazards.

Mobility in Soil : Not available

Other Adverse Effects : No known significant effects or critical hazards.



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13. Disposal Considerations

Waste Disposal Method : This material must be disposed of according to Federal, State or Local procedures under the Resource Conservation and Recovery Act.

14. Transport Information

UN Proper Shipping Name : Not regulated by DOT in single package <7,805 gallons. If shipped by air (IATA) or water (IMDG), ship as a marine pollutant.

Transport Hazard Class : None by ground

UN Identification Number : None by ground

Packaging Group : None by ground

Environmental Hazards : Potassium Hydroxide, Reportable Quantity (RQ) = 1,000 lbs/>7,805 gallons. Not listed as a Marine Pollutant on Appendix B to 49 CFR 172.101. Classified as a marine pollutant if shipped by air (IATA) or water (IMDG).

Transport in Bulk : If shipped by ground (DOT) in single package >7,805 gallons, ship as: RQ, UN3082, Environmentally Hazardous Substance, Liquid, n.o.s., (Potassium Hydroxide), 9, PG III "ERG # 171"

Special Precautions for Transportation : If shipped by air (IATA) or water (IMDG), ship as: UN3082, Environmentally Hazardous Substance, Liquid, n.o.s. (Zinc Oxide), 9, PG III, Marine Pollutant

Freight Classification : Fertilizing Compound, (Manufactured Fertilizer), Liquid, NOIBN (NMFC Item 68140, Sub 6, Class 70)

15. Regulatory Information

National Fire Protection Association Rating

Health:

2

Fire: 1

Reactivity: 0

Rating Level: (4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

S.A.R.A Title III Hazard Classification (Yes/No)

Immediate(Acute) Health: Y

Delayed (Chronic) Health: Y

Sudden Release of N

Pressure:

Fire: N

Reactive: N

16. Other Information

Data of Preparation/Revision : 02-September-2021