



MATERIAL SAFETY DATA SHEET

Date stamp: 02-Oct-2012

MSDS Ref. No.: E90505

Revision Number: 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Micromax Granular
Description: General Fertilizer Product

Company
Everris NA Inc.
P.O. Box 3310
Dublin, OH 43016

24-HOUR EMERGENCY TELEPHONE NUMBERS:
CHEMTREC (U.S.): 1-800-424-9300
CHEMTREC (International): 1-703-527-3887
Non-Emergency Calls: 1-800-492-8255

Formula No.: S10583
Product Number(s): E90505

2. HAZARDS IDENTIFICATION

Labelling

Signal word: CAUTION

Precautionary Statements

May be harmful if swallowed or inhaled. Avoid breathing dust. May cause eye/skin irritation. Avoid contact with eyes, skin, and clothing. Wash with soap and water after handling.

Potential health effects

Eye contact: Irritating to eyes.

Skin contact: May cause skin irritation in susceptible persons.

Ingestion: Irritating to mouth, throat and stomach.

Inhalation: May irritate respiratory tract tissues.

Aggravated Medical Conditions: Asthma.

Principle routes of exposure: Skin, Eyes, Inhalation

Target organ effects: Irritation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS-No	Weight %
Iron sulphate, FeSO ₄ +1H ₂ O	7720-78-7	40-60
Dolomite	16389-88-1	5-10
Manganese sulphate, MnSO ₄	7785-87-7	5-10
Copper sulfate pentahydrate, CuSO ₄ +5H ₂ O	7758-99-8	1-5
Zinc Sulfate Anhydrous	7733-02-0	1-5
Sodium borate, Na ₂ B ₄ O ₇	1330-43-4	0.1-1
Sodium molybdate, Na ₂ MoO ₄ +2H ₂ O	7631-95-0	<0.1

4. FIRST AID MEASURES

Eye contact: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Ingestion: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Inhalation: Move to fresh air. Call a physician or Poison Control Centre immediately.

5. FIRE-FIGHTING MEASURES

Flammable properties: The product is not flammable.

Suitable extinguishing media: Carbon dioxide (CO₂). Dry chemical. Water spray mist or foam.

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5. FIRE-FIGHTING MEASURES

Explosion potential:	Dust clouds may be explosive.
Hazardous combustion products:	Toxic fumes may be produced.
Fire fighting procedures:	Apply water from a safe distance to avoid splattering of molten material.
Special protective equipment for firefighters:	In the event of fire, wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Avoid dust formation.
Environmental precautions:	Prevent product from entering drains.
Methods for containment:	Vacuum or sweep up material and place in a disposal container.
Methods for cleaning up:	Take up mechanically and collect in suitable container for disposal.

7. HANDLING AND STORAGE

Handling: Avoid container breakage

Storage: Keep containers tightly closed in a cool, well-ventilated place

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ingredients	ACGIH:	OSHA:
Sodium molybdate, Na ₂ MoO ₄ ·2H ₂ O	0.5 mg/m ³ TWA	5 mg/m ³ TWA
Dolomite	Not Listed	Not Listed
Iron sulphate, FeSO ₄ ·1H ₂ O	1 mg/m ³ TWA	Not Listed
Manganese sulphate, MnSO ₄	0.2 mg/m ³ TWA	Not Listed
Copper sulfate pentahydrate, CuSO ₄ ·5H ₂ O	Not Listed	Not Listed
Zinc Sulfate Anhydrous	Not Listed	Not Listed
Sodium borate, Na ₂ B ₄ O ₇	2 mg/m ³ TWA	Not Listed

Engineering controls

Use adequate ventilation to keep the airborne concentrations of this material below the recommended exposure standard.

Personal Protective Equipment**Eye/face protection**

Eye/face protection is not required, but is recommended in manufacturing situations where contact may occur. Safety glasses.

Skin and body protection:

Wear suitable protective clothing if contact is anticipated during manufacturing. Impervious gloves.

Respiratory protection:

If airborne levels are high or product does not remain intact, use a combination of engineering controls (e.g. ventilation) and personal protection, e.g., NIOSH/MSHA approved respirator for dusts, mists, and fumes

General hygiene considerations:

Wash hands before breaks and immediately after handling the product

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid	Color:	Tan
Flash point:	Not applicable	Appearance:	Granulate
Density:	78 lbs./cu.ft.	Solubility:	Slightly soluble

10. STABILITY AND REACTIVITY

Chemically Stable:	Stable under normal conditions.
Conditions to avoid	Dust may form explosive mixture in air.
Materials to avoid:	Strong oxidising agents.
Hazardous decomposition products:	Combustion produces caustic fumes.
Possibility of hazardous reactions:	Poses little or no immediate hazard.

11. TOXICOLOGICAL INFORMATION**Acute toxicity**

LD50/oral: No information available
Eye effects: Eye irritation possible
Skin effects: May cause skin irritation and/or dermatitis
Sensitization: May cause sensitization of susceptible persons

Chronic toxicity

Carcinogenic effects: The table below indicates whether each agency has listed any ingredient as a carcinogen .

Ingredients	NTP:	IARC:	OSHA:
Sodium molybdate, Na ₂ MoO ₄ +2H ₂ O	Not listed	Not listed	Not listed
Dolomite	Not listed	Not listed	Not listed
Iron sulphate, FeSO ₄ +1H ₂ O	Not listed	Not listed	Not listed
Manganese sulphate, MnSO ₄	Not listed	Not listed	Not listed
Copper sulfate pentahydrate, CuSO ₄ +5H ₂ O	Not listed	Not listed	Not listed
Zinc Sulfate Anhydrous	Not listed	Not listed	Not listed
Sodium borate, Na ₂ B ₄ O ₇	Not listed	Not listed	Not listed

Ingestion: Harmful if swallowed.
Inhalation: May cause irritation of respiratory tract.
Target organ effects: Irritation.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects: No data is available on the product itself. May be toxic to aquatic organisms.
Persistence and degradability: Degrades slowly.
Bioaccumulative potential: No information available.
Mobility: Water contaminating.
Aquatic toxicity: Toxic to fish.
Additional ecological information: This product contains more than 0.001% Molybdenum (Mo). Do not contaminate water by cleaning of equipment or disposal of wastes.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods: Dispose of in accordance with local regulations and national regulations.
Contaminated packaging: Do not re-use empty containers. If empty, place in trash or offer for recycling if available.

14. TRANSPORT INFORMATION

The description shown may not apply to all situations. Consult 49 CFR, or appropriate dangerous goods regulations for additional description requirements (e.g. technical name) and mode-specific or quantity-specific shipping requirements.

DOT (Land) Not DOT regulated
DOT (AIR) Not DOT regulated
DOT (Vessel) UN3077, Environmentally Hazardous Substance, solid, n.o.s., (copper sulfate), 9, PGIII, Marine Pollutant

15. REGULATORY INFORMATION

Ingredients	CAS-No	CERCLA/SARA 313	CERCLA/SARA 302
Sodium molybdate, Na ₂ MoO ₄ +2H ₂ O	7631-95-0	Not Listed	Not Listed
Dolomite	16389-88-1	Not Listed	Not Listed
Iron sulphate, FeSO ₄ +1H ₂ O	7720-78-7	1000 lb final RQ 454 kg final RQ	Not Listed
Manganese sulphate, MnSO ₄	7785-87-7	Not Listed	Not Listed
Copper sulfate pentahydrate, CuSO ₄ +5H ₂ O	7758-99-8	10 lb final RQ 4.54 kg final RQ	Not Listed
Zinc Sulfate Anhydrous	7733-02-0	1000 lb final RQ 454 kg final RQ	Not Listed
Sodium borate, Na ₂ B ₄ O ₇	1330-43-4	Not Listed	Not Listed

General Information Contact local authorities for disposal of large quantities of product.

16. OTHER INFORMATION**NFPA:** **Health:** 2 **Flammability:** 0 **Reactivity:** 1**HMS:** **Health:** 2 **Flammability:** 0 **Reactivity:** 1**Hazard Rating:** 0=Least; 1-Slight; 2=Moderate; 3=High; 4=Severe

General comment: This document contains health, safety, and environmental information useful to emergency response agencies, health care providers, manufacturers, and workers/employees. It does not replace the precautionary language, use directions, or the storage and disposal information found on the product label.

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