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Version: 1.01

1. IDENTIFICATION

Product Identifier: Product Name: Product Number(s): Formula No.:

Micromax® Granular G90505 S10583

Recommended Use of the Chemical and Restrictions on Use: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

2. HAZARD(S) IDENTIFICATION

OSHA Regulatory Status:

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Skin Corrosion or Irritation	Category 2
Serious Eye Damage or Eye Irritation	Category 1
Specific Target Organ Toxicity (Repeated Exposure)	Category 2

Label Elements:

Emergency Overview

Danger			
Hazard Statements: Harmful if swallowed Causes skin irritation Causes serious eye damage May cause damage to organs through prolonged or i	repeated exposure		
Appearance: granulate	Physical State: Solid	Odor:	Fertilizer

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Wear protective gloves/protective clothing/eye protection/face protection Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

Get medical advice/attention if you feel unwell IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician IF ON SKIN: Wash with plenty of soap and water If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash before reuse IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC):

Other Information:

Very toxic to aquatic life with long lasting effects

Very toxic to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS-No	Weight %	Trade Secret
Iron sulphate; FeSO4+1H2O	7720-78-7	40-60	*
Manganese sulphate; MnSO4+1H2O	7785-87-7	5-10	*
Copper sulfate pentahydrate; CuSO4+5H2O	7758-99-8	1-5	*
Zinc Sulfate anh; ZnSO4	7733-02-0	1-5	*
Sodium borate; Na2B4O7	1330-43-4	0.1-1	*

* The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST-AID MEASURES

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.
Inhalation:	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferabley by mouth-to-mouth, if possible. Call a poison control center or doctor for further 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 be a poison control center or doctor. Do not give anything by mouth to an unconscious person.
Indication of Any Immediate Medic	al Attention and Special Treatment Needed:

Notes to Physician:	Treat symptomatically.	
	5. FIRE-FIGHTING MEASURES	
Suitable extinguishing media:	Carbon dioxide (CO2). Dry chemical. Water spray mist or foam.	
Specific hazards:	Dust clouds may be explosive.	
Hazardous Combustion Products:	Toxic fumes may be produced.	
Explosion Data:		
Sensitivity to Mechanical Impact: no data available. Sensitivity to Static Discharge: no data available.		
Special Protective Equipment for Firefighters:	In the event of fire, wear self-contained breathing apparatus.	
	6. ACCIDENTAL RELEASE MEASURES	
Personal Precautions, Protective Equipment and Emergency Procedures:		
Personal Precautions:	Avoid dust formation. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not inhale dust/mist.	
Environmental Precautions:	Prevent product from entering drains.	
Methods and Material for Containment and Cleanup:		
Methods for containment: Methods for Cleanup:	Vacuum or sweep up material and place in a disposal container. Take up mechanically and collect in suitable container for disposal.	

7. HANDLING AND STORAGE

Precautions for Safe Handling:

Handling: Avoid container breakage. Avoid inhalation or contact with skin, eyes, or clothing. Keep out of reach of children and pets. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling. Do not contaminate water while cleaning equipment. this product is toxic to fish. Keep out of lakes, streams or ponds. Use proper protective equipment to minimize exposure.

Conditions for Safe Storage, Including any Incompatibilities:

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters:

Exposure Guidelines:

Ingredients	CAS-No	ACGIH:	OSHA:	IDLH:
Iron sulphate; FeSO4+1H2O	7720-78-7	1 mg/m³ TWA	Not Listed	Not Listed
Manganese sulphate; MnSO4+1H2O	7785-87-7	0.1 mg/m³ TWA	Not Listed	500 mg/m³ IDLH Mn

Copper sulfate pentahydrate; CuSO4+5H2O	7758-99-8	1 mg/m³ TWA	Not Listed	100 mg/m³ IDLH Cu
Zinc Sulfate anh; ZnSO4	7733-02-0	Not Listed	Not Listed	Not Listed
Sodium borate; Na2B4O7	1330-43-4	2 mg/m³ TWA	Not Listed	Not Listed

Appropriate Engineering Controls:

Engineering Measures to Reduce	Use adequate ventilation to keep the airborne concentrations of this material below the
Exposure:	recommended exposure standard.

Individual Protection Measures, Such as Personal Protective Equipment:

Eye/Face Protection:	Safety glasses with side shields or goggles. Wear face-shield and protective suit for abnormal processing problems.
Skin and Body Protection:	Wear suitable protective clothing. impervious gloves. Impervious clothing.
Respiratory Protection:	When airborne exposure guidelines and/or comfort levels may be exceeded, use an approved air-purifying respirator.
General hygiene considerations:	Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties:

Physical State:	Solid		
Color:	Tan	Appearance:	granulate
Odor:	Fertilizer	Odor	No information available
		Threshold:	

Property
pH:
Melting Point/Freezing Point:
Boiling Point/Range:
Flash Point:
Evaporation Rate:
Flammability (solid, gas):
Flammability Limits in Air:
Upper Flammability Limit:
Lower Flammability Limit:
Vapor Pressure:
Vapor Density:
Specific Gravity:
Solubility:
Solubility in other Solvents:
Partition Coefficient:
Autoignition Temperature:
Decomposition Temperature:
Kinematic Viscosity:
Dynamic Viscosity:
Explosive Properties:
Oxidizing Properties:

Other Information:

Softening Point: Molecular Weight: VOC Content (%): Density: Bulk density:

Values No information available No information available

No information available No information available No information available No information available No information available slightly soluble No information available No information available

No information available No information available No information available No information available No information available Remarks: • Method

10. STABILITY AND REACTIVITY

Reactivity:	Stable under normal conditions
Chemically Stable:	yes.
Conditions to Avoid:	Dust may form explosive mixture in air.
Materials to avoid	Chlorinated compounds. Strong oxidizing agents.
Hazardous Decomposition Products:	Combustion produces caustic fumes.

Possibility of Hazardous Reactions: Poses little or no immediate hazard.

11.	TOXICOL	.OGICAL I	NFORMATION
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Information on the Likely Routes of Exposure (inhalation, ingestion, skin and eye contact):

Eye effects:	Causes serious eye damage
Skin effects:	Causes skin irritation
Ingestion:	Harmful if swallowed.
Inhalation:	May cause irritation of respiratory tract.

Component Information:

Ingredients	LD50 Oral	LD50 Dermal	LC50 Inhalation
Iron sulphate; FeSO4+1H2O 7720-78-7	= 500 mg/kg (Rat)	-	-
Manganese sulphate; MnSO4+1H2O 7785-87-7	= 782 mg/kg (Rat)	-	-
Copper sulfate pentahydrate; CuSO4+5H2O 7758-99-8	= 960 mg/kg (Rat)	-	-
Zinc Sulfate anh; ZnSO4 7733-02-0	= 500 mg/kg (Rat)	-	-
Sodium borate; Na2B4O7 1330-43-4	= 2660 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	-

Information on Toxicological Effects:

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure:

Sensitization: Mutagenic effects Carcinogenicity:	May cause sensitization of susceptible persons No information available. The table below indicates whether each agency has listed any ingredient as a carcinogen.				
Ingredients	ACGIH - Carcinogens	IARC:	NTP Report on Carcinogens List -	OSHA	
Sodium borate; Na2B4O7 1330-43-4	A4	-	-	-	
Reproductive Toxicity		No information available.			
STOT - Single Exposure		No information available.			
STOT - Repeated Exposu		May cause damage to organs through prolonged or repeated exposure.			
Aspiration Hazard	No information	No information available.			

Numerical Measures of Toxicity - Product Information:

The following values are calculated ATEmix (oral): ATEmix (dermal): LD50/oral:	ated based on chapter 3.1 of the GHS document: . 750 mg/kg 60976 mg/kg No information available				
	12. ECOLOGICAL INFORMATION				
Marine Pollutant:	This product contains a chemical which is listed as a severe marine pollutant according to DOT.				
Ecotoxicity:					
Unknown Aquatic Toxicity:	29.79% of the mixture consists of components(s) of unknown hazards to the aquatic environment				
Ecotoxicity effects:	Very toxic to aquatic life with long lasting effects.				
Persistence and degradability:	Degrades slowly.				
Mobility:	Water contaminating.				
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 Treatment Methods:	
Disposal of Wastes:	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging:	Do not reuse container.

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)	For domestic shipments marine pollutant container mark and shipping paper entry only apply to bulk and vessel transport
DOT (Vessel)	UN3077, Environmentally Hazardous Substance, solid, n.o.s., (copper sulfate), 9, PGIII, Marine Pollutant
IATA (Air) IMO/IMDG (Vessel)	UN3077, Environmentally Hazardous Substance, solid, n.o.s., (copper sulfate), 9, PGIII UN3077, Environmentally Hazardous Substance, solid, n.o.s., (copper sulfate), 9, PGIII, Marine Pollutant

15. REGULATORY INFORMATION

Federal Regulations:

SARA 313:

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure haz	ard No
Reactive Hazard	No

CWA (Clean Water Act):

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Ingredients	CWA - Reportable Quantities	CWA - Toxic Pollutants	Clean Water Act - Priority Pollutants	Clean Water Act - Hazardous Substances
Iron sulphate; FeSO4+1H2O 7720-78-7	-	-	-	Present
Zinc Sulfate anh; ZnSO4 7733-02-0	-	-	-	Present

CERCLA:

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Ingredients	CERCLA/SARA 313	CERCLA/SARA RQ	Reportable Quantity (RQ)
Iron sulphate; FeSO4+1H2O 7720-78-7	1000 lb final RQ 454 kg final RQ	-	
Copper sulfate pentahydrate; CuSO4+5H2O 7758-99-8	10 lb final RQ 4.54 kg final RQ	-	
Zinc Sulfate anh; ZnSO4 7733-02-0	1000 lb final RQ 454 kg final RQ	-	

State Regulations (RTK):

California Proposition 65: U.S. State Right-to-Know Regulations:

U.S. EPA Label information:

EPA Pesticide Registration Number: not applicable

	16. OTHER INFORMATION				
NFPA:	Health: 3	Flammability: 0	Reactivity: 1		
HMIS:	Health: 3	Flammability: 0	Reactivity: 1		
Revisior Revisior Reason Disclaim	n Note: for revision:	30-Sep-2014 None			

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End of Safety Data Sheet