

Material Safety Data Sheet

SECTION 1: Company Identification and Product Information

PRODUCT NAME OR IDENTITY:	M-Green Yeast and Fungi Broth				
MANUFACTURER'S NAME:	Microclar Argentina S.A.	EMERGENCY PHONE N°:	(54) 11 4731-0015		
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DATE PREPARED OR REVISED:	October 2011				

SECTION 2: Composition / Information on Hazardous Ingredients

HAZARDOUS COMPONENTS	CAS-N°	%	EG-N°	HAZARD SYMBOL
Magnesium Sulfate	7787-88-9	2.8%	231-298-2	Xi (Irritant)
Potassium Phosphate	7758-11-4	2.7%	231-834-5	Xi (Irritant)

SECTION 3: Health Hazard Identification

ROUTE(S) ENTRY:	Inhalation <input checked="" type="checkbox"/>	Skin <input checked="" type="checkbox"/>	Ingestion <input checked="" type="checkbox"/>
HEALTH HAZARDS: <i>(acute and chronic)</i>	IRRITANT. Irritating to eyes, respiratory system, and skin. May be harmful if absorbed through the skin or ingested.		
CARCINOGENICITY:	IARC Monographs <input type="checkbox"/>	OSHA Regulated <input type="checkbox"/>	

SIGNS AND SYMPTOMS OF EXPOSURE:

May cause irritation if absorbed through the skin. Material may be irritating to mucous membranes and upper respiratory tract; sore throat or coughing may occur. Maybe harmful if swallowed or inhaled. Skin and eye irritation can cause redness and pain.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

The toxicity of phosphates is their ability to sequester calcium. Chronic exposure of phosphates may sequester calcium and cause calcium phosphate deposits in the kidneys and induce systemic phosphorous poisoning. Persons with pre-existing skin disorders or eye problems, impaired liver, kidney, or respiratory function may be more susceptible to this material. Gastrointestinal disturbances can occur if ingested, since Magnesium salts are slowly absorbed; abdominal pain, vomiting, lethargy, central nervous system effects, and diarrhea may occur.

SECTION 4: First Aid Measures

INGESTION:	If swallowed, rinse mouth with water provided person is conscious and seek medical attention.
INHALATION:	Supply fresh air and oxygen. If breathing is difficult, seek medical attention. In case of unconsciousness, place patient on side position for transportation.
EYE CONTACT:	Rinse opened eye for at least 15 minutes with plenty of water. Ensure adequate flushing by separating the eyelids with fingers. Seek medical attention.
SKIN CONTACT:	Wash thoroughly with soap and water. Remove contaminated clothing. Seek medical attention. Wash clothing before reuse.

SECTION 5: Fire and Explosion Hazard Data

FLASH POINT (*Method Used*): N/A

FLAMMABLE LIMITS: N/A

EXTINGUISHING MEDIA:

Suitable extinguishing agents, CO₂, extinguishing powder, or water spray. Water may be effective for cooling, but may not effect extinguishment.

SPECIAL FIRE FIGHTING PROCEDURES:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Emits toxic fumes under fire conditions. Firefighters should wear protective equipment and self-contained breathing apparatus. Fight larger fires with water or alcohol resistant foam.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

During heating or in case of fire, poisonous gases are produced. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source, is a potential dust explosion hazard.

SECTION 6: Accidental Release Measures

PERSONAL PRECAUTIONS:

Shut off all sources of ignition. Wear respirator, chemical safety goggles, rubber boots, and rubber gloves. Absorb material, ventilate area, and wash spill site after material has been cleaned up. Prevent direct contact with skin, eyes, or clothing. Place contaminated material in a chemical waste container.

ENVIRONMENTAL PRECAUTIONS:

Prevent dispersion of material. Do not allow to enter drains or water courses. Water runoff can cause environmental damage.

CLEAN-UP METHODS:

Contact safety officer and ventilate spill area. Absorb spill with inert material, including dry-lime, sand, or soda ash. Place into a chemical waste container using non-sparking tools. Wash spill site.

SECTION 7: HANDLING AND STORAGE

HANDLING:

Protect against physical damage. Ensure good ventilation / exhaustion. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Do not use if skin is cut or scratched.

STORAGE:

Keep container tightly closed. Keep away from incompatible material. Storage area should be cool, dry and well ventilated. Containers of this material may be hazardous when empty since they retain product residues.

OTHER PRECAUTIONS:

Remove contaminated clothing immediately. Ensure good ventilation. Prevent formation of dust.

SECTION 8: Exposure Controls / Personal Protection

OES: N/A

ACGIH TLV: N/A

ENGINEERING MEASURES:

Respiratory protection is not required. Where protection from nuisance levels of dust is desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Proper ventilation, safety shower, and eye bath required.

SECTION 8: Exposure Controls / Personal Protection

RESPIRATORY PROTECTION:

With sufficient ventilation, breathing apparatus is not necessary. In the event of possible spill / exposure, use dust mask to EN 149 FFP2S.

VENTILATION: Local Exhaust: 50 – 100 CFM

SPECIAL: Safety shower and eye wash.

PROTECTION GLOVES:

Compatible chemical-resistant gloves

EYE PROTECTION:

Safety glasses or chemical goggles to EN 166, 167, and 168.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

Uniform, lab coat, or disposable lab wear.

WORK / HYGIENIC PRACTICES:

Follow the usual precautionary measure for handling chemicals / powder. Keep away from food and beverages. Immediately remove all soiled and contaminated clothing. Avoid contact with eyes, skin, and clothing.

SECTION 9: Physical and Chemical Properties

BOILING POINT:	N/A	SPECIFIC GRAVITY:	(H ₂ O=1): 1.070 g/cm ³ (Magnesium Sulfate) 2.3 g/cm ³ (Potassium Phosphate)
VAPOR PRESSURE:	(mm Hg.): <0.1 mmHg at 20°C (Magnesium Sulfate)	MELTING POINT:	1124°C (Magnesium Sulfate), >465°C (Potassium Phosphate)
VAPOR DENSITY: (AIR=1)	N/A	SOLUBILITY IN WATER:	Very soluble in water (Magnesium Sulfate) 150g/100g cold water (Potassium Phosphate)
APPEARANCE AND ODOR:	Transparent crystals / white powder, odorless (Magnesium Sulfate) White granules, odorless (Potassium Phosphate).		

SECTION 10: STABILITY AND REACTIVITY

STABILITY:

Stable

Unstable Conditions to Avoid: Protect from light and moisture. Hygroscopic.

INCOMPATIBILITY (Materials to Avoid):

Incompatible with Ethyl alcohols, arsenates, phosphates, tartrates, lead, barium, strontium, and calcium.
Thermal decomposition may produce toxic fumes of phosphorus oxides and/or phosphine

HAZARDOUS DECOMPOSITION OR BYPRODUCTS:

Oxides of sulfur and magnesium.

HAZARDOUS POLYMERIZATION:

May occur Conditions to Avoid: Heat, flame, ignition sources, dust and incompatible materials.

Will no occur

SECTION 11: TOXICOLOGICAL INFORMATION

LD50: ITP-MSE: 1,029 mg/kg. Investigated as a mutagen, reproductive effector. (Magnesium Sulfate)

LD50: SKN-RBT, > 4640 mg/kg (Potassium Phosphate)

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY TEST: LC50: 2,820 mg/L, 96 hrs, Pimephales promelas (Fathead minnow) (Magnesium Sulfate)

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:

Dispose in accordance with all applicable federal, state, and local environmental regulations. Keep waste separate. Contact a licensed professional waste disposal service to dispose of this material if questions arise. Do not allow to reach ground water, water bodies, or sewage system.

CONTAINER INFORMATION:

Do not remove labels from containers until they have been cleaned.

SECTION 14: TRANSPORT INFORMATION

MAGNESIUM SULFATE, POTASSIUM PHOSPHATE:*

UN #

Packing Group:

Hazard Class:

IATA: Non-Hazardous for air transport

**These chemicals are not regulated for transportation and considered non-hazardous for transport.*

SECTION 15: REGULATORY INFORMATION

EU REGULATIONS

HAZARD SYMBOL(S):

MAGNESIUM SULFATE: Xi (Irritant)

POTASSIUM PHOSPHATE: Xi (Irritant)

RISK PHRASES:

MAGNESIUM SULFATE: R 36 / 37 / 38, Irritating to eyes, respiratory system, and skin.

POTASSIUM PHOSPHATE: R 36 / 37 / 38, Irritating to eyes, respiratory system, and skin.

SAFETY PHRASES:

MAGNESIUM SULFATE: S 24 / 25 / 26, Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

POTASSIUM PHOSPHATE: S 22 / 24 / 25, Avoid contact with skin and eyes. Do not breathe dust.

SECTION 16: OTHER INFORMATION

This document is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. Acumedia Manufacturers, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. These suggestions should not be confused with state, municipal or insurance requirements, and constitute NO WARRANTY.

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