



1. CHEMICAL IDENTIFICATION AND COMPANY INFORMATION

PRODUCT NAME: Deconstructed MS Group II (KNO3), 50x Murashige & Skoog (MS)
 PRODUCT NUMBER: M5632
 COMPANY INFO: PhytoTech Labs Inc.
 14610 W 106th St. Lenexa, KS 66215
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EMERGENCY PHONE NUMBER 1-800-535-5053 - US Only
 (INFOTRAC): 1-352-323-3500 - International

RECOMMENDED USE: For Research Use Only

RESTRICTIONS ON USE: Products sold by PhytoTech Labs Inc. are intended for research and laboratory use only. Products are not to be used as human or animal therapeutics, cosmetics, agricultural or pesticidal products, food additives, in vitro diagnostics, or as household chemicals.

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture:

GHS Classification:
 H315 – Skin irritation (Category 2)
 H319 – Eye Irritation (Category 2A)

GHS Label elements, including hazard and precautionary statements:

Pictogram :

Signal Word: **Warning**

Hazard Statements:

H315 – Causes skin irritation.
 H319 – Causes serious eye irritation.

Precautionary Statements:

P264 – Wash exposed skin thoroughly after handling.
 P280 – Wear eye protection, protective gloves.
 P302+P352 – If on skin: Wash with plenty of soap and water.
 P305+P351P338 – If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P332+P313 – If skin irritation occurs: Get medical advice/attention.
 P337+P313 – If eye irritation persists: Get medical advice/attention.
 P362 – Take off contaminated clothing and wash before reuse.

Hazards not otherwise classified (HNOC) or not covered by GHS: - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Percent	Hazardous
Water	7732-18-5	90.5%	No exposure limits established by OSHA or ACGIH
Potassium Nitrate	7757-79-1	9.5%	No exposure limits established by OSHA or ACGIH

4. FIRST AID MEASURES

General Advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Route of Entry	Symptoms	First Aid Procedures
Ingestion	May cause irritation if swallowed	If swallowed, wash out mouth with water. Never give anything by mouth to an unconscious person. Get medical attention.
Inhalation	May cause irritation to respiratory tract	Safely remove victim to fresh air. If not breathing, institute cardiopulmonary resuscitation (CPR). If breathing is difficult, ensure clear airway and give oxygen. Get medical attention.
Eye Contact	Direct contact may cause irritation. May cause redness, tearing, or blurred vision.	Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get medical attention if irritation persists.
Skin Contact	Irritating. May cause reddening, itching or inflammation.	Wash area thoroughly with soap and water. Remove and wash contaminated clothing. Get medical attention if irritation persists.

Most Important Symptoms or Effects, Both Acute and Delayed:

See section 2 and/or section 11

Recommendation for Immediate Medical Care and Special Treatment Needed:

No data available

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Water spray, carbon dioxide, dry chemical powder, or appropriate foam. Use extinguishing media suitable for surrounding fire.

Special Protective Equipment and Precaution for Firefighters: In the event of a fire, wear full protective clothing and NIOSH approved self-contained breathing apparatus. Evacuate the area and fight fire from a safe distance.

Hazardous Combustion Products: May emit toxic fumes under fire conditions. (Nitrogen oxides (NO_x))

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Use personal protection recommended in Section 8. Avoid dust formation. Avoid breathing dust, vapors, mist or gas. Ensure adequate ventilation, especially in confined areas. Evacuate personnel to safe areas.

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Method of Containment and Cleanup: Wear suitable protective clothing. Avoid dust formation. Carefully sweep up and remove. Place material in a dry container and cover. Remove from the area. Flush spill area with water. Do not let product enter drains.

7. HANDLING AND STORAGE

Precaution for Safe Handling: Avoid contact with skin and eyes. Avoid dust formation and aerosols. Avoid incompatible substances. Provide adequate ventilation at places where dust is formed. Wash thoroughly after use.

Conditions for Safe Storage: Keep in a tightly closed container and store in a cool, dry, and well-ventilated area. Product is hygroscopic.

Incompatibilities: Strong acids, strong bases, strong reducing agents

Recommended Storage Temperature: 2-8°C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA's Permissible Exposure Limits (PELs): None

Threshold Limit Values (TLVs): None

Engineering Controls: Handle in accordance to general industrial hygiene and safety practice.

Personal Protective Equipment (PPE):

Eye/Face Protection:	Chemical safety glasses or goggles. Have eye-washing facilities readily available where eye contact can occur.
Skin Protection:	Protective gloves
Body Protection:	Lab coat
Respiratory Protection:	A NIOSH/MSHA approved air purifying respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colorless liquid
pH:	6.0-8.0
Solubility:	Miscible with water
Melting Range:	No data available
Vapor Density:	No data available
Vapor Pressure:	No data available
Specific Gravity:	No data available
Odor:	No data available
Odor Threshold:	No data available
Viscosity:	No data available
Relative Density:	No data available
Evaporation Rate:	No data available
Initial Boiling Point and Boiling Range:	No data available
Flammability (solid, gas):	No data available
Partition coefficient: n-octanol/water):	No data available
Auto-ignition Temperature:	No data available
Decomposition Temperature:	No data available
Flash Point (Closed Cup):	No data available
Flammable Limits:	Upper (%) – No data available Lower (%) – No data available

10. STABILITY AND REACTIVITY

Reactivity:	No data available
Chemical Stability:	Stable under normal conditions of use
Possibility of Hazard Reactions:	No data available
Conditions to Avoid:	No data available
Incompatibles Materials:	Strong acids, strong bases, strong reducing agents
Hazardous Decomposition Products:	Carbon monoxide, carbon dioxide, nitrogen oxides

11. TOXICOLOGICAL INFORMATION

Toxicity:	LD ₅₀ (Oral-Rat)(mg/Kg)	3750
	LD ₅₀ (Oral-Mouse)(mg/Kg)	No data available
	LD ₅₀ (Dermal-Rabbit)(mg/Kg)	No data available
Carcinogenicity:	NTP:	No
	IARC:	No

OSHA Reg: No

Reproductive Toxicity: No data available
Specific Target Organ Toxicity: Single Exposure: No data available
Repeated Exposure: No data available
Target Organs: No data available
Routes of Entry: Inhalation and ingestion
NIOSH/RTECS NO: No data available

The toxicological properties of this product have not been thoroughly investigated

12. ECOLOGICAL INFORMATION

Ecotoxicity: LC₅₀ (Fishes 1)(mg/L): 162 (96 H; Pisces; Lethal)
LC₅₀ (Other Aquatic Organisms 1)(mg/L): 39 (96 H; Daphnia magna)
EC₅₀ (Other Aquatic Organisms 1)(mg/L): 200 – 1000 (Plankton; Nocivity Test)
LC₅₀ (Fish 2)(mg/L): 1378 (Poecilia reticulata)
LC₅₀ (Other Aquatic Organisms 2)(mg/L): 490 (48 H; Daphnia magna)
Persistence and Degradability: No data available
Bioaccumulative Potential: No data available
Mobility in Soil: No data available
Other Adverse Effects: No data available

13. DISPOSAL CONSIDERATION

Disposal Procedure: Dispose in accordance with all applicable federal, state, and local environmental regulations.

14. TRANSPORT INFORMATION

Domestic (D.O.T.): Proper Shipping Name: CHEMICALS, N.O.S. (NON-REGULATED)

Hazard Class: N/A

Reportable Quantity: N/A

UN/NA: N/A

Labels: N/A

International:

IMDG: Proper Shipping Name: CHEMICALS, N.O.S. (NON-REGULATED)

Hazard Class: N/A

UN/NA: N/A

Labels: N/A

IATA: Proper Shipping Name: CHEMICALS, N.O.S. (NON-REGULATED)

Hazard Class: N/A

UN/NA: N/A

Labels: N/A

15. REGULATORY INFORMATION

TSCA: Yes

SARA TITLE III:

Section 302 (EHS) Ingredients: No

Section 313 Ingredients: Yes

Section 304 (EHS/CERCLA) Ingredients: No

Section 311/312 Hazard: Acute Health Hazard, Chronic Health Hazard

Massachusetts Right to Know Components: CAS No.: 7757-79-1 Potassium Nitrate

Pennsylvania Right to Know Components: CAS No.: 7757-79-1 Potassium Nitrate

New Jersey Right to Know Components: CAS No.: 7757-79-1 Potassium Nitrate

California Prop. 65 Components: This product is not known to the State of California to cause cancer or reproductive toxicity.

16. OTHER INFORMATION

HMIS Rating:	Health Hazard	Flammability	Physical Hazard	Personal Protection
	1	0	0	B
NFPA Rating:	Health Hazard	Fire Hazard	Instability	Special Hazard
	1	0	0	

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