



**PhytoTechnology  
Laboratories®**

# SAFETY DATA SHEET

## 1. CHEMICAL IDENTIFICATION AND COMPANY INFORMATION

PRODUCT NAME: Deconstructed MS Group I (NH<sub>4</sub>NO<sub>3</sub>), 100x Murashige & Skoog (MS)  
 PRODUCT NUMBER: M5631  
 COMPANY INFO: *PhytoTechnology Laboratories®*  
 PO Box 12205, Shawnee, KS 66282-2205  
 Phone: 1-888-749-8682 or 1-913-341-5343; Fax: 1-888-449-8682 or 1-913-341-5442  
 www.phytotechlab.com  
 EMERGENCY PHONE NUMBER: 1-800-424-8802  
 RECOMMENDED USE: Research Only  
 RESTRICTIONS ON USE: Products sold by *PhytoTechnology Laboratories®* 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, or as household chemicals.

## 2. HAZARDS IDENTIFICATION

GHS Classification:

Oxidizing liquids (Category 3), H272

GHS Label Element:

Pictogram:



Signal Word: WARNING

Hazard Statements:

H272 – May intensify fire: oxidizer.

Precautionary Statements:

P210 – Keep away from heat.  
 P220 – Keep/Store away from clothing/combustible materials.  
 P221 – Take any precaution to avoid mixing with combustibles.  
 P280 – Wear protective gloves/protective clothing/eye protection/face protection.  
 P370 + P378 – In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.  
 P501 – Dispose of contents/container to an approved waste disposal plant.

HMIS Rating:

Health	Flammability	Reactivity	Physical Hazard
2	0		3

NFPA Rating:

Health	Flammability	Reactivity	Special Hazard
2	0	0	

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: N/A  
 CAS No: N/A

Formula: N/A

Molecular Weight: N/A

Ingredient	CAS Number	Percent	Hazardous
Water	7732-18-5	83.5%	No exposure limits established by OSHA or ACGIH
Ammonium Nitrate	6484-52-2	16.5%	No exposure limits established by OSHA or ACGIH

#### 4. FIRST AID MEASURES

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. <b>Get medical attention.</b>
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. <b>Get medical attention.</b>
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. <b>Get medical attention if irritation persists.</b>
Skin Contact	Irritating. May cause reddening, itching or inflammation.	Wash area thoroughly with soap and water. Remove and wash contaminated clothing. <b>Get medical attention if irritation persists.</b>

#### 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. (Ammonia gas)

#### 6. ACCIDENTAL RELEASE MEASURES

Ventilation:	Ventilation hood recommended
Eye/Skin Protection:	Have eye-washing facilities readily available where eye contact can occur. Wear chemical safety goggles. Use appropriate chemical protective gloves when handling. Showering and changing into street clothes after work is recommended.
Protective Equipment:	A NIOSH/MSHA approved air purifying respirator is recommended where airborne concentrations are expected to exceed exposure limits. Protection provided by purifying respirators is limited. Wear suitable protective clothing and a self-contained breathing apparatus if available.
Method of Containment and Cleanup:	Carefully sweep up and remove. Place material in a dry container and cover. Remove from the area. Flush spill area with water.

#### 7. HANDLING AND STORAGE

Storage and Handling Precaution:	Keep in a tightly closed container, stored in a cool, dry, ventilated area. Avoid incompatible substances. Wash thoroughly after use.
Incompatibilities:	Strong acids, strong bases, strong reducing agents

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA's Permissible Exposure Limits (PELs): N/A

Threshold Limit Values (TLVs): N/A

Engineering Controls: N/A  
Personal Protective Equipment (PPE): Safety glasses, protective gloves, lab coat, and an appropriate dust mask

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, colorless liquid  
pH: 4.5 – 6.5  
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: Odorless  
Odor Threshold: No data available  
Flash Point (Closed Cup): N/A  
Flammable Limits: Upper – N/A % Lower – N/A %

## 10. STABILITY AND REACTIVITY

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

## 11. TOXICOLOGICAL INFORMATION

Toxicity: LD<sub>50</sub> (Oral-Rat)(mg/Kg): 2,217  
LD<sub>50</sub> (Oral-Mouse)(mg/Kg): No data available  
LD<sub>50</sub> (Dermal-Rabbit)(mg/Kg): No data available

Carcinogenicity: NTP: No  
IARC: No  
Z List: No  
OSHA Reg: No

Teratogenicity: N/A  
Effects of Overexposure: Irritation, sneezing, gastrointestinal upset  
Target Organs: None identified  
Medical Conditions Aggravated By Exposure: None identified  
Routes of Entry: Inhalation, Ingestion

***The toxicological properties of this product have not been thoroughly investigated***

## 12. ECOLOGICAL INFORMATION

Ecotoxicity:  
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.

EPA Hazardous Waste Number: N/A

### 14. TRANSPORT INFORMATION

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

Hazard Class: 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: No

Section 304 (EHS/CERCLA) Ingredients: No

SARA TITLE III NOTIFICATION INFORMATION

Acute Health Hazard: Yes

Chronic Health Hazard: Yes

Fire Hazard: No

Sudden Release of Pressure Hazard: No

### 16. OTHER INFORMATION

***PhytoTechnology Laboratories***® provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. The above information is intended to be used only as a guide to the appropriate precautionary handling of this material by a properly trained person. *PhytoTechnology Laboratories*® shall not be held liable for any damage resulting from handling or from contact with the above product. This product is intended for LABORATORY USE ONLY. Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticidal products, food additives or as household chemicals.

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