



## 1. CHEMICAL IDENTIFICATION AND COMPANY INFORMATION

PRODUCT NAME: Nitsch & Nitsch Basal Medium w/ Vitamins  
PRODUCT NUMBER: N616  
COMPANY INFO: PhytoTech Labs Inc.  
14610 W 106<sup>th</sup> 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:

- H301 – Acute toxicity, Oral (Category 3)
- H315 – Skin irritation (Category 2)
- H319 – Eye Irritation (Category 2A)
- H335 – Specific target organ toxicity – single exposure – Respiratory system (Category 3)

### GHS Label elements, including hazard and precautionary statements:

Pictogram  
:



Signal Word: **Warning**

Hazard Statements:

- H272 – May intensify fire; oxidizer.
- H315 – Causes skin irritation.
- H319 – Causes serious eye irritation.
- H335 – May cause respiratory irritation.

Precautionary Statements:

- P221 – Take any precaution to avoid mixing with combustibles.
- P280 – Wear protective gloves/protective clothing/eye protection/face protection.
- P302 + P352 + IF ON SKIN: Wash with plenty of soap and water
- P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture that contains, but is not limited to, the following components that may cause harm to the user or environment or may be suspected to do so:

Ingredient	CAS Number	Percent	Hazardous
Ammonium Nitrate	6484-52-2	32.62 %	No exposure limits established by OSHA or ACGIH
Potassium Nitrate	7757-79-1	43.04 %	No exposure limits established by OSHA or ACGIH
EDTA, Disodium Salt, Dihydrate	6381-92-6	1.69 %	No exposure limits established by OSHA or ACGIH
Cupric Sulfate, Pentahydrate	7758-99-8	0.001 %	NIOSH REL: 1 mg/m <sup>3</sup>
Sodium Molybdate(VI), Dihydrate	10102-40-6	0.01 %	OSHA PEL: 5 mg(Mo)/m <sup>3</sup> ; ACGIH TLV: 0.5 mg(Mo)/m <sup>3</sup>
Manganese Sulfate, Monohydrate	10034-96-5	0.01 %	OSHA PEL: 5 mg (Mn)/m <sup>3</sup> ; ACGIH TLV: 0.2 mg (Mn)/m <sup>3</sup>
Boric Acid	10043-35-3	0.45 %	No exposure

#### 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. <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>

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:	No data available

#### 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 oxidizing agent
Recommended Storage Temperature:	2 to 8 °C

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA's Permissible Exposure Limits (PELs):	Manganese Sulfate, Monohydrate : 5 mg (Mn)/m <sup>3</sup> Sodium Molybdate(VI), Dihydrate: 5 mg (Mo)/m <sup>3</sup>
Threshold Limit Values (TLVs):	Sodium Molybdate(VI), Dihydrate: 5 mg (Mo)/m <sup>3</sup>
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:	Yellow Powder
pH:	No data available
Solubility:	Soluble in 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: Moisture, excessive heat  
Incompatibles Materials: Strong oxidizing agents  
Hazardous Decomposition Products: Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides, Hydrogen chloride gas, Potassium oxides, Sodium oxides, Cobalt/cobalt oxides, Molybdenum oxides, Copper oxides

#### 11. TOXICOLOGICAL INFORMATION

Toxicity: LD<sub>50</sub> (Oral-Rat)(mg/Kg) 482  
LD<sub>50</sub> (IPR-Mouse)(mg/Kg) 33  
LD<sub>50</sub> (Dermal-Rat)(mg/Kg) >2,000

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, Ingestion, skin and eye contact

NIOSH/RTECS NO: Not listed

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

#### 12. ECOLOGICAL INFORMATION

Ecotoxicity: No data available  
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: No

#### SARA TITLE III:

Section 302 (EHS) Ingredients: No

Section 313 Ingredients: No

Section 304 (EHS/CERCLA) Ingredients: No

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

**Massachusetts Right to Know Components:** Potassium Nitrate 7757-79-1  
Ammonium Nitrate 6484-52-2

**Pennsylvania Right to Know Components:** Potassium Nitrate 7757-79-1  
Ammonium Nitrate 6484-52-2  
Manganese Sulfate 10034-96-5

**New Jersey Right to Know Components:** Potassium Nitrate 7757-79-1  
Ammonium Nitrate 6484-52-2

**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
	2	0	0	B
NFPA Rating:	Health Hazard	Fire Hazard	Instability	Special Hazard
	2	0	0	OX

**PhytoTech Labs Inc. 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. PhytoTech Labs Inc. 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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