



**1. CHEMICAL IDENTIFICATION AND COMPANY INFORMATION**

PRODUCT NAME: Systemin  
 PRODUCT NUMBER: S7625  
 COMPANY INFO: PhytoTech Labs Inc.  
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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:

Not a hazardous substance or mixture.

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

Not a hazardous substance or mixture.

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

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Formula: C<sub>85</sub>H<sub>144</sub>N<sub>26</sub>O<sub>28</sub>S  
 Molecular Weight: 2010.3 g/mol

Ingredient	CAS Number	Percent	Hazardous
Systemin	N/A	>98 %	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. <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: Reducing agents, alkalis, phosphates, hydroxylamine, finely powdered metals, steel

Recommended Storage Temperature: -20°C or below

## 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: White to off-white powder

pH: Under Development

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: No data available  
 Incompatibles Materials: No data available  
 Hazardous Decomposition Products: No data available

**11. TOXICOLOGICAL INFORMATION**

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

Marine Pollutant: N/A

International:

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

Hazard Class: N/A

UN/NA: N/A

Labels: N/A

Marine Pollutant: N/A

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

Hazard Class: N/A

UN/NA: 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: No SARA Hazards

**Massachusetts Right to Know Components:** This product is not on the Massachusetts Toxic or Hazardous Substance List (301 CMR 41.00).

**Pennsylvania Right to Know Components:** This product is not listed on the Pennsylvania Code's Hazardous Substance List (Chapter 323).

**New Jersey Right to Know Components:** This product is not listed amongst the New Jersey Right to Know Hazardous Substance Fact Sheets.

**California Prop. 65 Components:** This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

HMIS Rating:	<b>Health Hazard</b>	<b>Flammability</b>	<b>Physical Hazard</b>	<b>Personal Protection</b>
	2	0	0	B
NFPA Rating:	<b>Health Hazard</b>	<b>Fire Hazard</b>	<b>Instability</b>	<b>Special Hazard</b>
	2	0	0	

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