

1. CHEMICAL IDENTIFICATION AND COMPANY INFORMATION

PRODUCT NAME: DL-Phosphinothricin, Monoammonium Salt

PRODUCT NUMBER: P679

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 Laboratory-use or Further Manufacture 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:

- H302 - Acute toxicity, Oral (Category 4)
- H332 - Acute toxicity, Inhalation (Category 4)
- H361 - Reproductive toxicity (Category 2)
- H373 - Specific target organ toxicity – repeated exposure (Category 2)

GHS Label elements, including hazard and precautionary statements:

Pictogram
:



Signal Word: **Danger**

Hazard Statements:

- H302 + H332 – Harmful if swallowed or if inhaled.
- H361 – Suspected of damaging the unborn child.
- H373 – May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements:

- P202 – Do not handle until all safety precautions have been read and understood.
- P260 – Do not breathe dust.
- P280 – Wear protective gloves/protective clothing/eye protection/face protection.
- P301 + P312 + P330 – IN SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.
- P304 + P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: PPT; 2-Amino-4-(hydroxymethylphosphinyl)butanoic Acid, Monoammonium Salt

CAS No: 77182-82-2

Formula: C₅H₁₅N₂O₄P

Molecular Weight: 198.19 g/mol

EC No.: 278-636-5

Ingredient	CAS Number	Percent	Hazardous
DL-Phosphinothricin,	77182-82-2	>90 %	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.

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. Keep away from combustible materials. Wash thoroughly after use.

Conditions for Safe Storage: Keep in a tightly closed container and store in a cool, dry, and well-ventilated area. Protect from moisture.

Incompatibilities: Strong oxidizing agent

Recommended Storage Temperature: Room Temperature

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 Yellow Powder

pH: Under Development

Solubility: Soluble in water

Melting Range: 209.1 – 215.0 °C

Vapor Density: No data available

Vapor Pressure: No data available

Specific Gravity: 1.4

Odor: May have pungent odor

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): > 100 °C (>212 °F)

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 oxidizing agents

Hazardous Decomposition Products: Carbon oxides, nitrogen oxides (NOx), Oxides of phosphorus

11. TOXICOLOGICAL INFORMATION

Toxicity: LD₅₀ (Oral-Rat)(mg/Kg) 1620

LD₅₀ (Inhalation-Rat)(mg/Kg) 1260

LD₅₀ (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: Respiratory system, gastrointestinal system, central nervous system, kidney, blood

Routes of Entry: Inhalation and ingestion

NIOSH/RTECS NO: EK7713600

The toxicological properties of this product have not been thoroughly investigated

12. ECOLOGICAL INFORMATION

Ecotoxicity: Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 710 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates
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

Massachusetts Right to Know Components: This product is not on the Massachusetts Substance List (MSL).

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 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
	3	1	0	B
NFPA Rating:	Health Hazard	Fire Hazard	Instability	Special Hazard
	2	1	0	

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