



SAFETY DATA SHEET

1. CHEMICAL IDENTIFICATION AND COMPANY INFORMATION

PRODUCT NAME: Potassium Nitrate, ACS Reagent
PRODUCT NUMBER: P100
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 1-800-535-5053 - US Only
(INFOTRAC): 1-352-323-3500 - International

RECOMMENDED USE: For Research Use 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

Classification of the substance or mixture

GHS Classification:

- H272 – Oxidizing solids (Category 3)
- H402 – Acute aquatic toxicity (Category 3)
- H412 – Chronic aquatic toxicity (Category 3)

GHS Label elements, including hazard and precautionary statements:

Pictogram:



Signal Word:

Warning

Hazard Statements:

- H272 – May intensify fire; oxidizer.
- H412 – Harmful to aquatic life with long lasting effects.

Precautionary Statements:

- P210 – Keep away from heat.
- P221 – Take any precaution to avoid mixing with combustibles.
- P273 – Avoid release to the environment.
- 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 to extinguish.

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: Saltpeter; Niter; Nitric Acid, potassium salt
CAS No: 7757-79-1
Formula: KNO_3
Molecular Weight: 101.10

Ingredient	CAS Number	Percent	Hazardous
Potassium Nitrate	7757-79-1	>99 %	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:	Dry sand, dry chemical powder, or alcohol-resistant foam.
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. Risk of fire on contact with reducing agents
Toxic Gases Produced:	Nitrogen oxides (NO _x), potassium oxides

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

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

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 products 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. Keep away from heat and sources of ignition. 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. Product is hygroscopic.
Recommended Storage Temperature:	Room Temperature

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA's Permissible Exposure Limits (PELs): No data available

Threshold Limit Values (TLVs):	No data available
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:	Appropriate respirator

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White to off-white powder or crystals
pH (1.90 g/L):	5.0 – 6.0
Solubility:	Soluble in Water
Melting Range:	334 °C
Vapor Density:	No data available
Vapor Pressure:	No data available
Specific Gravity:	No data available
Odor:	Mostly odorless
Odor Threshold:	No data available
Viscosity:	No data available
Relative Density:	2.109 g/cm ³
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 – is an oxidizer
Possibility of Hazard Reactions:	No data available
Conditions to Avoid:	No data available
Incompatibles Materials:	Reducing agents, Powdered metals, Organic materials, Strong acids
Hazardous Decomposition Products:	See Section 5

11. TOXICOLOGICAL INFORMATION

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

Routes of Entry: Inhalation and ingestion

NIOSH/RTECS NO: TT3700000

The toxicological properties of this product have not been thoroughly investigated

12. ECOLOGICAL INFORMATION

Ecotoxicity: LC50 – mosquito fish – 22.5 mg/L – 96 hrs.
EC50 – water flea – 226 mg/L – 75 hrs.

Persistence and Degradability: No data available

Bioaccumulative Potential: No data available

Mobility in Soil: No data available

Other Adverse Effects: Harmful to aquatic life.

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: Potassium Nitrate
Hazard Class: 5.1 Packing Group: III
UN: 1486
Marine pollutant: No
Poison inhalation hazard: No

International:

IMDG: Proper Shipping Name: Potassium Nitrate
Hazard Class: 5.1 Packing Group: III
UN: 1486
Marine pollutant: No

IATA: Proper Shipping Name: Potassium Nitrate
Hazard Class: 5.1 Packing Group: III
UN: 1486

15. REGULATORY INFORMATION

TSCA: Yes

SARA TITLE III:

Section 302 (EHS) Ingredients: No

Section 313 Ingredients:

CAS No.: 7757-79-1

Potassium Nitrate

Section 304 (EHS/CERCLA) Ingredients: No

Section 311/312 Hazard: Reactivity 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 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:	Health Hazard	Flammability	Physical Hazard	Personal Protection
	1	0	1	B
NFPA Rating:	Health Hazard	Fire Hazard	Instability	Special Hazard
	0	0	1	OX

*Chronic Hazard: Chronic (long-term) health effects may result from repeated overexposure.

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