



Nutriculture® 13-0-44 Hi-K Special

Safety Data Sheet

In accordance with 29CFR §1910.1200 (g); (OSHA HCS 2012) (GHS-US)

Revision Date: 9/3/2015

Version: 2.0

SECTION 1: IDENTIFICATION OF SUBSTANCE/MIXTURE AND COMPANY

Product Identifier

Nutriculture® 13-0-44 Hi-K Special

Other Means of identification

None

Recommended Use of Product

Fertilizer

Name, Address, and Telephone of Responsible Party

Plant Marvel Laboratories, Inc.
371 East 16th Street
Chicago Heights, IL 60411
(708) 757-7500 (office) (708) 757-5224 (fax)

Emergency Telephone Number

USA and Canada (Transportation Emergency): 800-535-5053 (InfoTrac, 24 hours)
USA and Canada (Medical Emergency): 800-752-7869 (InfoTrac, 24 hours)
International Emergency Number: +1-352-323-3500 (InfoTrac, 24 hours)

SECTION 2: HAZARDS IDENTIFICATION

Classification of Substance/Mixture

Classification: Oxidizing Solid, 3

Label Elements

Hazard Pictograms:



Signal Word: Warning

Hazard Statements: May intensify fire; oxidizer

Precautionary Statements: Keep away from heat, sparks, open flames, and other ignition sources. No smoking.

Keep away from clothing and other combustible materials.
Wear eye protection.

In case of fire: Use any suitable means to extinguish surrounding fire. Spray water for small fires. For large fires flood with abundant water.

Dispose of contents and container in accordance with local, regional, national, and international regulations.

Hazards not Contributing to Classification:

Product may form slippery surface when wet.



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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Composition of Mixture

Chemical Name	CAS Number	Concentration (w/w)*
Potassium Nitrate	7757-79-1	>95%

Other Ingredients: There are no additional ingredients present in concentrations above the relevant cut-off values which in the best knowledge of the supplier would contribute to the hazards of this product.

*Exact concentrations of ingredients deemed to be trade secrets may be withheld in accordance with 29CFR §1910.1200 (i)

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

- Eye Contact** Immediately flush eyes with plenty of water for at least 15 minutes, keeping eyelids open. Check for and remove any contact lenses. Get medical attention if irritation persists or worsens.
- Ingestion** Rise out mouth with water. If material has been swallowed and exposed person is conscious, give plenty of water to drink. Do not induce vomiting unless advised to do so by medical personnel. Get medical attention if exposed person feels unwell.
- Inhalation** Remove exposed person to fresh air. Get medical attention if exposed person feels unwell.
- Skin Contact** Remove contaminated clothing. Wash affected area with soap and water. Get medical attention if skin irritation develops or persists.

Most Important Symptoms and Effects

- Eye Contact** May cause redness or irritation.
- Ingestion** Ingestion of large amounts may cause gastrointestinal disturbances.
- Inhalation** Inhaled dusts may cause respiratory tract irritation.
- Skin Contact** May cause redness or irritation.

Delayed Symptoms: Delayed lung affects after short term exposure due to thermal degradation products.

Indication of Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, seek medical attention. Physician should treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Flooding quantities of water.

Unsuitable Extinguishing Media: Dry chemical, carbon dioxide, or foam.

Specific Hazards Arising from Material

Thermal decomposition products include oxides of nitrogen, oxides of carbon, and ammonia. Toxic or corrosive gasses may be produced in a fire.

Protective Equipment and Precautions for Fire Fighters

Protective Equipment: Full turn-out gear with self-contained breathing apparatus (SCBA).

Special Precautions: Remain upwind of the fire. Avoid breathing dusts or fumes from burning material. Do not attempt to smother the fire with steam or sand. Water spray onto molten material may cause spattering.

SECTION 6: ACCIDENTAL RELEASE MEASURES



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Personal Precautions, Protective Equipment, and Emergency Procedures

General Precautions: Handle in accordance with good industrial hygiene practices. Avoid breathing dust. Avoid contact with eyes, skin, and clothing. Spilled product creates a slippery surface when wet.

For Non-Emergency Personnel

Protective Equipment: Chemical resistant gloves, eye protection, and respiratory protection (if dusty).
Emergency Procedures: Evacuate unnecessary personnel. Avoid walking through spilled material.
Ventilate area as necessary

For Emergency Personnel

Protective Equipment: Chemical resistant gloves, eye protection, and respiratory protection (if dusty).
Emergency Procedures: Evacuate unnecessary personnel. Avoid walking through spilled material.
Ventilate area as necessary

Environmental Precautions

Care should be taken to prevent material from entering waterways, sewers, or drains.

Methods for Containment and Clean-Up

Clean up spills immediately. Contain any spills with dikes to prevent from reaching drains or waterways. Scoop or shovel spilled material into an appropriate container. Avoid sweeping in dry conditions to prevent dust generation. Dispose of contents and container in accordance with local, regional, national, and international regulations. Spilled uncontaminated dry material and solutions may be applied to plants or land as a fertilizer according to package directions.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Wear eye protection/face protection. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wear respiratory protection if dust is generated.

Conditions for Safe Storage

Store in a cool, dry, and well-ventilated place. Keep container tightly closed when not in use. Keep away from combustible and incompatible materials.

Incompatibilities

Combustible materials, reducing materials, organic materials, strong acids, strong bases, halogens, chlorine, chlorinated compounds, and hydrogen peroxides.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Component	OSHA - PEL	ACGIH - TLV
Potassium Nitrate	NONE	NONE

Appropriate Engineering Controls

If user operations generate dust, fumes, gas, vapor, or mist, provide appropriate ventilation controls to minimize worker exposure.

Personal Protective Equipment (PPE)

Chemical goggles, chemical-resistant gloves, and protective clothing should be worn at all times during handling. Respiratory protection appropriate to the hazard and task performed should be worn if dust, fumes, gas, vapor, or mist is generated or if adequate ventilation is not available.

Other Considerations

An eye-wash station is recommended near where this product is handled.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State: Solid
Appearance: Powder and Prilled Granules



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Color:	Pale Blue to Deep Blue
Odor:	Mild to Moderate Odor
Odor Threshold:	Not Available
pH:	7.0 – 9.0 (5% aqueous solution)
Melting/Freezing Point:	635°F
Boiling Point/Range:	Not Available
Flash Point:	Not Available
Evaporation Rate:	Not Available
Flammability:	Not Flammable
Flammability Limits:	Not Available
Vapor Pressure:	Not Available
Vapor Density:	Not Available
Relative Density:	Not Available
Solubility:	Soluble in Water
Partition Coefficient:	Not Available
Auto-Ignition Temperature:	Not Applicable
Decomposition Temperature:	>1112°F
Viscosity:	Not Available

SECTION 10: STABILITY AND REACTIVITY

Reactivity

No hazardous reaction when handled and stored appropriately.

Chemical Stability

Stable under normal storage and temperature conditions. Decomposes upon heating.

Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

Conditions to Avoid

Extreme temperatures, open flame, combustible and incompatible materials.

Incompatible Materials

Combustible materials, reducing materials, organic materials, strong acids, strong bases, halogens, chlorine, chlorinated compounds, and hydrogen peroxides.

Hazardous Decomposition Products

Thermal decomposition products include oxides of nitrogen, oxides of carbon, and ammonia.

SECTION 11: TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Eye contact, skin contact, and inhalation of dust are most likely routes of exposure. Ingestion is not expected to be a likely route of exposure through normal product use.

Symptoms Related To The Physical, Chemical And Toxicological Characteristics

Causes serious eye damage. Harmful if swallowed. Inhaled dusts may cause respiratory tract irritation. May cause skin irritation. No delayed or chronic effects from short- or long-term exposures are known.

Numerical Measures of Toxicity

Potassium Nitrate	Type	Route	Species	Result
	LD50	Oral	Rat	>2000mg/kg
	LC50	Inhalation	Rat	>0.527mg/L (4h)*
	LD50	Dermal	Rat	>5000mg/kg

*Maximum achievable concentration.

Carcinogeny

Component	NTP ¹	IARC ²	OSHA ³



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Potassium Nitrate	No	No	No
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1. National Toxicology Program (NTP) Report on Carcinogens
2. International Agency for Research on Cancer (IARC) Monographs
3. US Occupational Safety and Health Administration (OSHA)

SECTION 12: ECOLOGICAL INFORMATION

	Potassium Nitrate
Aquatic Toxicity	96-h LC50 1378mg/L Freshwater Fish
	48-h EC50 490mg/L Freshwater Flea
	10d EC50 >1700mg/L Several algae species
Persistence and Degradability	Biodegradable
Bioaccumulative Potential	
BCF	Not Available
Log Pow	Not Available
Potential	Low
Mobility in Soil	Low

Other Adverse Effects

Large quantities of fertilizer released into the environment may kill vegetation and fish and cause algae blooms if bodies of water are contaminated.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations

Dispose of contents and container in accordance with local, regional, national, and international regulations. Spilled uncontaminated dry material and solutions may be applied to plants or land as a fertilizer according to package directions. Care should be taken to prevent material from entering waterways, sewers, or drains.

SECTION 14: TRANSPORT INFORMATION

UN Number: 1486

Proper Shipping Name: Potassium Nitrate

Transport Hazard Classes: 5.1 (Oxidizer) Packing Group III

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Some components of this mixture may be subject to various regulations and reporting requirements. The regulatory status of components listed below does not affect the hazard classification of this mixture listed in Section 2 of this SDS.

	Potassium Nitrate
TSCA Inventory	Listed
SARA 302/304	Not Listed
SARA 311/312	Fire Hazard

SECTION 16: OTHER INFORMATION

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Note: The information provided in this Safety Data Sheet is correct to the best of our knowledge and belief at the date of its publication. The information presented herein is intended only as guidance for safe handling, use, storage, transportation, and disposal of the material. No warranty, express or implied, is made on the basis of this information.