

PhitaK

SECTION 1. IDENTIFICATION

Product Identifier	PhitaK
Other Means of Identification	Fertilizer
Recommended Use	The user should seek the advice of the county agricultural representative or a professional agricultural consultant.
Restrictions on Use	None known.
Manufacturer/Supplier Identifier	NutriAg Limited, 39 Gail Grove, Toronto, Ontario, M9M 1M5
Emergency Phone No.	Canutec, 613-996-6666, 24 hours
SDS No.	0027
Date of Preparation	April 30, 2015

SECTION 2. HAZARD IDENTIFICATION

Classification

Corrosive to metals - Category 1; Serious eye damage - Category 1

Label Elements



Signal Word:

Danger

Hazard Statement(s):

May be corrosive to metals.

Causes serious eye damage.

Contains 34-37% of ingredients of unknown toxicity (inhalation)

Contains 27-29% of ingredients of unknown toxicity (dermal)

Precautionary Statement(s):

Prevention:

Keep only in original packaging.

Wear eye protection/face protection.

Response:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Immediately call a POISON CENTRE or doctor.

Absorb spillage to prevent material damage.

Storage:

Store in corrosive resistant container with a resistant inner liner.

Disposal:

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

Other Hazards

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Hazard Not Otherwise Classified (HNOC).

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Phosphorous acid	10294-56-1	27-29	N/A	
Mono Potassium Phosphite	13977-65-6	7-8	N/A	

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Move to fresh air.

Skin Contact

Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes.

Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. If eye irritation persists, get medical advice or attention.

Ingestion

Rinse mouth with water. Get medical advice or attention if you feel unwell or are concerned.

Most Important Symptoms and Effects, Acute and Delayed

If in eyes: may cause serious eye damage. May irritate or burn the eyes. Permanent damage including blindness may result.

Immediate Medical Attention and Special Treatment

Target Organs

Eyes, skin, respiratory system.

Special Instructions

Not applicable.

Medical Conditions Aggravated by Exposure

None known.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Not combustible. Use extinguishing agent suitable for surrounding fire.

Unsuitable Extinguishing Media

Not applicable.

Specific Hazards Arising from the Product

Does not burn.

Special Protective Equipment and Precautions for Fire-fighters

Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet.

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Environmental Precautions

It is good practice to prevent releases into the environment.

Methods and Materials for Containment and Cleaning Up

Small spills or leaks: contain and soak up spill with absorbent that does not react with spilled product. Place used absorbent into suitable, covered, labelled containers for disposal. Large spills or leaks: dike spilled product to prevent runoff.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Transfer equipment should be constructed of chemical-resistant plastic or stainless steel. Do not store in aluminum or steel containers. Wear chemically protective equipment during handling. Use in a well-ventilated area. Do not breathe vapours or mists. Avoid contact with eyes, skin and clothing. Do not wear contact lenses while handling this material. Wash thoroughly after handling. Keep away from extreme heat and flame. Use caution when opening containers.

Conditions for Safe Storage

Store in an area that is: ventilated, separate from incompatible materials (see Section 10: Stability and Reactivity). Empty containers may contain hazardous residue. Store separately. Keep closed. Follow all precautions given on this safety data sheet.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Phosphorous acid	1 mg/m ³	3 mg/m ³				
Mono Potassium Phosphite	Not established					

ACGIH® = American Conference of Governmental Industrial Hygienists. TLV® = Threshold Limit Value. TWA = Time-Weighted Average. STEL = Short-term Exposure Limit. OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits.

Appropriate Engineering Controls

General ventilation is usually adequate. Provide eyewash and safety shower if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

Respiratory Protection

Not required.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Clear colourless.
Odour	Odourless
Odour Threshold	Not available
pH	1 - 2 (1% solution)
Melting Point/Freezing Point	Not available (melting); Not available (freezing)
Initial Boiling Point/Range	Not available
Flash Point	Not available

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Evaporation Rate	Not available
Flammability (solid, gas)	Not available
Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)
Vapour Pressure	Not available
Vapour Density (air = 1)	Not available
Relative Density (water = 1)	1.49 - 1.50 at 20 °C (68 °F)
Solubility	Soluble in water
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available (kinematic); Not available (dynamic)
Other Information	
Physical State	Liquid
Surface Tension	Not available

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not reactive.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

None expected under normal conditions of storage and use.

Conditions to Avoid

Freezing.

Incompatible Materials

Incompatible with aluminum and steel.

Hazardous Decomposition Products

During a fire, or when heated to decomposition, irritating/toxic phosphorus oxides, such as phosphorus pentoxide may be generated.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Skin contact; eye contact; ingestion.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Phosphorous acid		1560 mg/kg (female rat)	
Mono Potassium Phosphite		> 2000 mg/kg (female rat)	> 5000 mg/kg (rat)

Skin Corrosion/Irritation

Not a skin irritant.

Serious Eye Damage/Irritation

Causes serious eye damage.

STOT (Specific Target Organ Toxicity) - Single Exposure

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Not irritating to the respiratory tract, unless it is introduced into the atmosphere as a spray or mist.

Skin Absorption

No information was located.

Ingestion

May be harmful if swallowed.

Aspiration Hazard

Not known to be an aspiration hazard.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

Symptoms may include dry, red, cracked skin (dermatitis).

Respiratory and/or Skin Sensitization

No information was located for respiratory sensitization.

Carcinogenicity

Not known to cause cancer.

Reproductive Toxicity

Development of Offspring

Not known to harm the unborn child.

Sexual Function and Fertility

Not known to cause effects on sexual function or fertility.

Effects on or via Lactation

No information was located.

Germ Cell Mutagenicity

Not known to be a mutagen.

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Phosphorous acid				153 mg/L (Pseudokirchneriella subcapitata (algae); 72-hour)

Persistence and Degradability

No information was located.

Bioaccumulative Potential

Not Established.

Mobility in Soil

Not established.

Other Adverse Effects

May cause eutrophication.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose in accordance with all applicable federal, provincial, and local regulations.

SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
Canadian TDG	2834	Phosphorous Acid Solution	8	III
IATA (Air)	2834	Phosphorous Acid Solution	8	III
US DOT	2834	Phosphorous Acid Solution	8	III

Other Information IMDG UN# 2834 Phosphorous Acid Solution, Class 8, PGIII

Proof of Dangerous Goods Classification

Date of Classification November 07, 2019
Classification corrosive to metals
Classification Method 49 CFR 173.137 and UN Manual of Tests and Criteria, Section 37

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL/NDSL.

USA

Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are listed on the TSCA Inventory.

SECTION 16. OTHER INFORMATION

SDS Prepared By NutriAg Limited

Phone No. 416-636-1555

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Revision Indicators Version 5.4

The following SDS content was changed on March 13, 2017:

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION; Individual Protection Measures; Eye/Face Protection; Skin Protection.

The following SDS content was changed on November 22, 2018:

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES; Relative Density.

The following SDS content was changed on November 07, 2019:

SECTION 2. HAZARD IDENTIFICATION; Classification; Label Elements.

SECTION 14. TRANSPORT INFORMATION; Shipping Information; Other Information; Proof of Dangerous Goods Classification; Date of Classification; Classification; Classification Method.

References

CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).
HSDB® database. US National Library of Medicine. Available from Canadian Centre for Occupational Health and Safety (CCOHS).

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