

TruPhos Pt

SECTION 1. IDENTIFICATION

Product Identifier	TruPhos Pt
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.	004
Date of Preparation	August 28, 2015

SECTION 2. HAZARD IDENTIFICATION

Classification

Corrosive to metals - Category 1; Eye irritation - Category 2; Respiratory sensitization - Category 1; Skin sensitization - Category 1; Carcinogenicity - Category 1B; Reproductive toxicity - Category 1B

Label Elements



Signal Word:

Danger

Hazard Statement(s):

May be corrosive to metals.

May cause an allergic skin reaction.

Causes serious eye irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause cancer.

May damage fertility or the unborn child.

Contains 21.5-25.9% of ingredients with unknown toxicity (inhalation)

Contains 3.5-6.5% of ingredients with unknown toxicity (dermal)

Precautionary Statement(s):

Prevention:

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep only in original packaging.

Avoid breathing mist, spray.

Wash hands and skin thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

Wear eye protection/face protection.

Product Identifier: TruPhos Pt - Ver. 4
 Date of Preparation: August 28, 2015
 Date of Last Revision: November 07, 2019

SDS No.: 004

Page 01 of 07

In case of inadequate ventilation wear respiratory protection (NIOSH approved air-purifying respirator with an appropriate cartridge).

Response:

IF ON SKIN: Wash with plenty of water.

IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

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

Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

Specific treatment is advised - see first aid instructions.

If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

If experiencing respiratory symptoms: Call a POISON CENTRE or doctor.

Wash contaminated clothing before reuse.

Absorb spillage to prevent material damage.

Storage:

Store locked up.

Store in corrosive resistant container with a resistant inner liner.

Disposal:

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

Other Hazards

Hazard Not Otherwise Classified (HNOC).

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Phosphoric acid (85%)	7664-38-2	17.5-18.5	N/A	
Iron(II) sulfate (1:1), heptahydrate	7782-63-0	1-3	N/A	
Phosphoric acid, zinc salt (2:1), dihydrate	13598-37-3	2.5-3.5	N/A	
Cobalt(II) chloride, hexahydrate	7791-13-1	0.1-0.3	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 inhaled: respiratory sensitizer. May cause asthma or an asthma-like reaction in some people. If on skin: skin sensitizer. May cause an allergic skin reaction in some people.

Immediate Medical Attention and Special Treatment

Target Organs

Eyes, skin, respiratory system.

Special Instructions

Product Identifier: TruPhos Pt - Ver. 4
Date of Preparation: August 28, 2015
Date of Last Revision: November 07, 2019

SDS No.: 004

Page 02 of 07

Not applicable.

Medical Conditions Aggravated by Exposure

Dermatitis.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Not combustible. Use extinguishing agent suitable for surrounding fire.

Unsuitable Extinguishing Media

None known.

Specific Hazards Arising from the Product

Does not burn.

In a fire, the following hazardous materials may be generated: irritating/toxic phosphorus oxides, such as phosphorus pentoxide.

Special Protective Equipment and Precautions for Fire-fighters

No special precautions are necessary.

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.

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
Phosphoric acid (85%)	1 mg/m3	3 mg/m3				
Cobalt(II) chloride, hexahydrate	0.02 mg/m3					
Iron(II) sulfate (1:1), heptahydrate	1 mg/m3					

Appropriate Engineering Controls

Product Identifier: TruPhos Pt - Ver. 4

SDS No.: 004

Date of Preparation: August 28, 2015

Date of Last Revision: November 07, 2019

Page 03 of 07

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

Individual Protection Measures

Eye/Face Protection

Not required but it is good practice to wear safety glasses or chemical safety goggles.

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 yellow - brown.
Odour	Odourless
Odour Threshold	Not available
pH	< 2
Melting Point/Freezing Point	Not available (melting); Not available (freezing)
Initial Boiling Point/Range	Not available
Flash Point	Not available
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)	1.27 - 1.28 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

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions of use.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

None expected under normal conditions of storage and use.

Conditions to Avoid

Freezing. Heat. Incompatible materials.

Incompatible Materials

Incompatible with aluminum and steel.

Hazardous Decomposition Products

Product Identifier: TruPhos Pt - Ver. 4
Date of Preparation: August 28, 2015
Date of Last Revision: November 07, 2019

SDS No.: 004

Page 04 of 07

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)
Phosphoric acid (85%)	0.84 mg/L (rabbit) (4-hour exposure)	1530 mg/kg (rat)	2740 mg/kg (rabbit)
Cobalt(II) chloride, hexahydrate		766 mg/kg (rat)	> 2000 mg/kg (rat)
Iron(II) sulfate (1:1), heptahydrate		> 2000 mg/kg (rat)	
Phosphoric acid, zinc salt (2:1), dihydrate		300-2000 mg/kg (rat)	

Skin Corrosion/Irritation

Not a skin irritant.

Serious Eye Damage/Irritation

Causes serious eye irritation.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

May cause nose and throat irritation.

Skin Absorption

No information was located.

Ingestion

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

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Carcinogenicity

May cause cancer.

Reproductive Toxicity

Development of Offspring

May harm the unborn child.

Sexual Function and Fertility

May cause effects on sexual function and/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.

Product Identifier: TruPhos Pt - Ver. 4
Date of Preparation: August 28, 2015
Date of Last Revision: November 07, 2019

SDS No.: 004

Page 05 of 07

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Phosphoric acid (85%)	138 mg/L (96-hour)			
Cobalt(II) chloride, hexahydrate	22-48 mg/L (Pimephales promelas (fathead minnow); 96-hour)			
Iron(II) sulfate (1:1), heptahydrate	0.41 mg/L (96-hour)			
Phosphoric acid, zinc salt (2:1), dihydrate	0.14-0.26 mg/L (Oncorhynchus mykiss (rainbow trout); 96-hour)			

Persistence and Degradability

May cause long-term adverse effects in the environment.

Bioaccumulative Potential

Not Established.

Mobility in Soil

Not established.

Other Adverse Effects

There is no information available.

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	1805	Phosphoric Acid Solution	8	III
IATA (Air)	1805	Phosphoric Acid Solution	8	III
US DOT	1805	Phosphoric Acid Solution	8	III

Other Information IMDG: UN# 1805 Phosphoric 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)

Product Identifier: TruPhos Pt - Ver. 4

SDS No.: 004

Date of Preparation: August 28, 2015

Date of Last Revision: November 07, 2019

Page 06 of 07

All ingredients are listed, or not specifically listed.

CEPA - National Pollutant Release Inventory (NPRI)

(Cobalt(II) chloride, hexahydrate) Part 1A.

USA

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

All ingredients are listed, or not specifically listed.

SECTION 16. OTHER INFORMATION

SDS Prepared By	NutriAg Limited
Phone No.	416-636-1555
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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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Product Identifier: TruPhos Pt - Ver. 4
Date of Preparation: August 28, 2015
Date of Last Revision: November 07, 2019

SDS No.: 004

Page 07 of 07