

## TruPhos Platinum

### SECTION 1. IDENTIFICATION

<b>Product Identifier</b>	TruPhos Platinum
<b>Other Means of Identification</b>	Fertilizer
<b>Recommended Use</b>	The user should seek the advice of the county agricultural representative or a professional agricultural consultant.
<b>Restrictions on Use</b>	None known.
<b>Manufacturer/Supplier Identifier</b>	NutriAg Limited, 39 Gail Grove, Toronto, Ontario, M9M 1M5
<b>Emergency Phone No.</b>	Canutec, 613-996-6666, 24 hours
<b>SDS No.</b>	0157
<b>Date of Preparation</b>	December 12, 2016

### SECTION 2. HAZARD IDENTIFICATION

#### Classification

Eye irritation - Category 2A; Respiratory sensitization - Category 1; Skin sensitization - Category 1; Carcinogenicity - Category 1B; Reproductive toxicity - Category 1B; Aquatic hazard (Acute) - Category 2

#### Label Elements



Signal Word:

Danger

Hazard Statement(s):

H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H350	May cause cancer.
H360	May damage fertility or the unborn child.
H401	Toxic to aquatic life.

Precautionary Statement(s):

Prevention:

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing mist, spray.
P264	Wash hands and skin thoroughly after handling.
P272	Contaminated work clothing must not be allowed out of the workplace.
P280	Wear eye protection/face protection.
P284	In case of inadequate ventilation wear respiratory protection (NIOSH approved air-purifying respirator with an appropriate cartridge).

Response:

P302 + P352	IF ON SKIN: Wash with plenty of water.
P304 + P341	IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/attention.

P321 Specific treatment (see supplemental first aid instruction on this label).

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTRE or doctor.

P363 Wash contaminated clothing before reuse.

Storage:

P405 Store locked up.

Disposal:

P501 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
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

Not applicable.

##### Medical Conditions Aggravated by Exposure

Dermatitis.

### SECTION 5. FIRE-FIGHTING MEASURES

#### Extinguishing Media

Product Identifier: TruPhos Platinum

Date of Preparation: December 12, 2016

Page 02 of 07

### 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/m <sup>3</sup>	3 mg/m <sup>3</sup>				
Cobalt(II) chloride, hexahydrate	0.02 mg/m <sup>3</sup>					
Iron(II) sulfate (1:1), heptahydrate	1 mg/m <sup>3</sup>					

### 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

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

<b>Appearance</b>	Clear yellow - brown.
<b>Odour</b>	Odourless
<b>Odour Threshold</b>	Not available
<b>pH</b>	< 2
<b>Melting Point/Freezing Point</b>	Not available (melting); Not available (freezing)
<b>Initial Boiling Point/Range</b>	Not available
<b>Flash Point</b>	Not available
<b>Evaporation Rate</b>	Not available
<b>Flammability (solid, gas)</b>	Not available
<b>Upper/Lower Flammability or Explosive Limit</b>	Not available (upper); Not available (lower)
<b>Vapour Pressure</b>	Not available
<b>Vapour Density (air = 1)</b>	Not available
<b>Relative Density (water = 1)</b>	1.27 - 1.28 at 20 °C (68 °F)
<b>Solubility</b>	Soluble in water
<b>Partition Coefficient, n-Octanol/Water (Log Kow)</b>	Not available
<b>Auto-ignition Temperature</b>	Not available
<b>Decomposition Temperature</b>	Not available
<b>Viscosity</b>	Not available (kinematic); Not available (dynamic)
<b>Other Information</b>	
<b>Physical State</b>	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

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

Product Identifier: TruPhos Platinum  
Date of Preparation: December 12, 2016

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.

**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Harmful to aquatic life.

**Acute Aquatic Toxicity**

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Phosphoric acid (85%)	138 mg/L (96-hour)			

Product Identifier: TruPhos Platinum

Date of Preparation: December 12, 2016

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	3082	Environmentally Hazardous Substance, Liquid N.O.S	Class 9	III
IATA (Air)	3082	Environmentally Hazardous Substance, Liquid N.O.S	Class 9	III
US DOT	3082	Environmentally Hazardous Substance, Liquid, N.O.S	Class 9	III

**Environmental Hazards** Environmentally Hazardous Substance

**Special Precautions** Please note: Avoid release into the environment

**Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

**Other Information** UN#3082 Environmentally Hazardous substance, Liquid N.O.S Class 9

**SECTION 15. REGULATORY INFORMATION**

**Safety, Health and Environmental Regulations**

**Canada**

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

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

**Date of Preparation** December 12, 2016

**Date of Last Revision** December 12, 2016

**Revision Indicators** Version 1.0

**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 Platinum

Date of Preparation: December 12, 2016

Page 07 of 07