

SECTION 1 IDENTIFICATION

Company Name Solutions 4Earth
Address 931 American Pacific Drive, #104
City, State, Zipcode Henderson, NV 89014
Phone Numbers 855-834-3882
Website www.solutions4earth.com

24 HOUR EMERGENCY NUMBER/CHEMTREC (USA)
1-800-424-9300 or 1-414-277-1311

Poison Control Center (USA)
1-800-222-1212

Product Identity **Nutricor® HighPhos**
Reference/Item Number R30132A
Intended Use See technical data sheet.
Application Method See technical data sheet.
Recommended Use For fertilizing agricultural crops, turfgrass and ornamental plants
Restrictions For Use: Not for use other than what is recommended above.

SECTION 2 HAZARD(S) IDENTIFICATION

This chemical is not considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910. 1200). Using the toxicity data listed in Sections 11 and 12, the product is labeled as follows:

GHS Classification(s): Skin Corrosion/Irritation Category 2
 Serious Eye Damage/Eye Irritation Category 2B
 Reproductive Toxicity Category 2
 Specific Target Organ Systemic Toxicity (STOT)
 - Single Exposure Category 3



GHS Label Elements:
Signal Word: Warning
Hazard Statements: Causes skin and eye irritation.
 May cause respiratory irritation.
 Suspected of damaging fertility or the unborn child.

Precautionary Statements:

Prevention: Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Avoid breathing dust, gas, mist, vapors or spray.
 Wash thoroughly after handling.
 Use only outdoors or in a well-ventilated area.
 Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF ON SKIN: Wash with plenty of water
 IF INHALED: Remove victim to fresh air and keep at rest in a position 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 or attention.
 Call a POISON CENTER or doctor if you feel unwell.
 Specific treatment (see First Aid on SDS or on this label).
 If skin irritation occurs: Get medical advice or attention.
 If eye irritation persists: Get medical advice or attention.
 Take off contaminated clothing and wash before reuse.

Storage: Store in a well-ventilated place. Keep container tightly closed.
 Store in a secure manner.

Disposal: Dispose of in accordance with local, regional and international regulations.

Hazards Not Otherwise Classified: May be corrosive to certain metals.

Percentage of Components with Unknown Acute Toxicity:

Oral: 42.30%
Dermal: 51.60%
Inhalation Vapor: 51.60%
Inhalation Dust/Mist: 52.60%

SECTION 3

COMPOSITION/INFORMATION ON INGREDIENTS

Substances/Mixtures:

Chemical or Common Name/Synonyms	CAS Number	% by Wt.
Proprietary mixed salt	Proprietary	< 40 %
Urea	57-13-6	< 10 %
Ammonium Polyphosphate	68333-79-9	< 5 %
Citric Acid	77-92-9	< 5 %
Boric acid (H ₃ BO ₃), compound with 2-aminoethanol	(1:?) 26038-87-9	< 1.0 %

Note: Any chemical identity and/or exact percentage not expressly stated is withheld as a trade secret or is due to batch variation.

SECTION 4

FIRST AID MEASURES

[DESCRIPTIONS]:

Eye Contact:

If in eyes: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention.

Skin Contact:

If on skin: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Do not reuse clothing and shoes until cleaned. Wash with soap and water.

Inhalation:

If inhaled: Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration, preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY.

Ingestion:

If swallowed: If fully conscious, drink a quart of water. DO NOT induce vomiting. CALL A PHYSICIAN IMMEDIATELY. If unconscious or in convulsions, take immediately to a hospital or a physician. NEVER induce vomiting or give anything by mouth to an unconscious victim. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Give 2-4 glasses of water to drink. If vomiting occurs and the victim is conscious, give water to further dilute the chemical.

Most Important Symptoms/Effects, Acute and Delayed:

Eye Contact:

Causes severe irritation. May cause: blinking, redness, tearing.

Skin Contact:

Causes mild to moderate irritation. Prolonged contact may cause: drying, chapping.

Skin Absorption:

No absorption hazard expected under normal use.

Inhalation:

Causes moderate irritation. Mists may cause: coughing, sneezing, sore throat, shortness of breath, burning sensation. May irritate: nose, mouth, throat.

Ingestion:

May cause severe irritation. Large amounts may cause: abdominal cramps, nausea, vomiting, diarrhea.

Indication of Immediate Medical Attention and Special Treatment Needed: There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. Ingestion of large quantities of phosphate salts (over 1.0 grams for an adult) may cause an osmotic catharsis resulting in diarrhea and probable abdominal cramps. Larger doses such as 4-8 grams will almost certainly cause these effects in everyone. In healthy individuals most of the ingested salt will be excreted in the feces with the diarrhea and, thus, not cause any systemic toxicity. Doses greater than 10 grams hypothetically may cause systemic toxicity. Treatment should take into consideration both anionic and cation portion of the molecule. The following treatments should be considered for the specific group(s) of phosphate salts found in this product: --All phosphate salts, except calcium salts, have a hypothetical risk of hypocalcemia, so calcium levels should be monitored. --Potassium salts have a hypothetical risk of hyperkalemia which can cause cardiac arrhythmia. In addition to calcium levels, potassium and phosphate levels should be monitored. Also consider continuous EKG monitoring to detect hyperkalemia. --Sodium salts have a hypothetical risk of hypernatremia. In addition to calcium levels, sodium and phosphate levels should be monitored. --Ammonium salts have a hypothetical risk of ammonia toxicity. In addition to calcium levels, ammonia and phosphate level should be monitored. None.

SECTION 5

FIRE FIGHTING MEASURES

Extinguishing Media:

Not combustible. For fires in area use appropriate media. For example: Water spray. Dry chemical. Carbon dioxide. Appropriate foam.

Special Hazards:

No information available.

Fire and Explosion Hazards:

Product may react with some metals (ex.: Aluminum, Zinc, Tin, etc.) to release flammable hydrogen gas. No unusual fire and explosion hazards.

Hazardous Combustion Products:

Nitrogen oxides. Ammonia. Phosphorous oxides. Potassium oxides. Biuret. Carbon oxides. Cyanuric acid. Unidentified toxic and/or irritating compounds.

Special Protective Equipment & Precautions for Firefighters:

Evacuate area of unprotected personnel. Wear protective clothing including NIOSH-approved self-contained breathing apparatus. Remain upwind of fire to avoid hazardous vapors and decomposition products. Use water spray to cool fire-exposed containers.

SECTION 6

ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Evacuate unprotected personnel from area. Maintain adequate ventilation. Follow personal protective equipment recommendations found in Section 8. Never exceed any occupational exposure limit.

Methods and Material For Containment and Cleaning Up:

Contain spill, place into drums for proper disposal. Flush remaining area with water to remove trace residue and dispose of properly. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs.

SECTION 7

HANDLING AND STORAGE

Precautions For Safe Handling:

Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in work area. Wash thoroughly after handling. This product is corrosive to soft steel and other soft metals. Equipment should be resistant to acidic materials such as PVC or stainless steel. Rinse thoroughly with clean water after every use. Do not store diluted product in equipment tanks.

Conditions for Safe Storage, Including any Incompatibilities:

Store in a cool, well ventilated area, out of direct sunlight. Store in a dry location away from heat. Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers. Do not use aluminum equipment for storage and/or transfer. Store away from herbicides.

SECTION 8

EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA Exposure Guidelines:

Component

Limits

No components found.

ACGIH Exposure Guidelines:

Component

Limits

No components found.

Engineering Controls:

General room ventilation and local exhaust are required. General room ventilation and/or local exhaust are required. Maintain adequate ventilation. Do not use in closed or confined spaces. Avoid creating dust or mist.

Individual Protection Measures:

Eye/Face Protection:

Wear chemical safety goggles while handling this product. Wear additional eye protection such as a face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material.

Skin Protection:

Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Protective gloves: Chemical-resistant.

Respiratory Protection:

Respiratory protection must be worn if ventilation does not eliminate symptoms or keep levels below recommended exposure limits. If exposure limits are exceeded, wear: NIOSH-Approved respirator for dusts and mists. DO NOT exceed limits established by the respirator manufacturer. All respiratory protection programs must comply with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements and must be followed whenever workplace conditions require a respirator's use.

Other Protective Equipment:

Eye-wash station. Safety shower. Protective clothing.

General Hygiene Conditions:

Wash with soap and water before meal times and at the end of each work shift. Good manufacturing practices require gross amounts of any chemical be removed from skin as soon as practical, especially before eating or smoking. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9

PHYSICAL AND CHEMICAL PROPERTIES

Color:	Dark brown. Translucent.	Upper Flammability Limits:	No data available
Odor:	Mild Odor	Lower Flammability Limits:	No data available
Odor Threshold:	No information available	Vapor Pressure (Pa):	No data available
pH:	2.87 (as is)	Vapor Density:	No data available
Physical State:	Liquid	Solubility in Water:	Soluble
Melting/Freezing Points (°C):	No data available	Partition Co-efficient (n-octanol/water):	No data available
Initial Boiling Point/Range (°C):	No data available	Auto-Ignition Temperature (°C):	No data available
Flash Point:	No data available	Decomposition Temperature:	No data available
Evaporation Rate (nBuAc=1):	No data available	Viscosity (mPa/s):	No data available
Flammability (Solid, Gas):	No data available	VOC %:	No data available
Relative Density or Specific Gravity @ 25°C	1.33		
Other Information:	No other relevant information.		

SECTION 10

STABILITY AND REACTIVITY

Reactivity:	No data available
Chemical Stability:	Stable under normal conditions.
Possibility of Hazardous Reactions:	Hazardous polymerization will not occur under normal conditions.
Conditions To Avoid:	Gradually loses ammonia on exposure to air; heat accelerates loss of ammonia. HYGROSCOPIC MATERIAL. Avoid contact with moisture. Prolonged contact with metals such as aluminum, tin, lead and zinc may produce flammable hydrogen gas.
Incompatible Materials:	Heat. Alkalies. Nitrites. Sodium hypochlorite. Aluminum. Acids. Food sugars. Strong bases. Reducing agents. Chlorates. Chlorides. Chromates. Metallic powders. Copper. Cobalt. Nickel. Zinc.
Hazardous Decomposition Prod.:	Ammonia. Nitrogen oxides. May form polyphosphoric acid with heat. Reacts with alkalies to release ammonia. Phosphorous oxides. Chlorine. Phosphoric Acid. Potassium oxides.

SECTION 11

TOXICOLOGICAL INFORMATION

Routes of Exposure:	Eyes. Ingestion. Inhalation. Skin.
Symptoms/Effects: Acute, Delayed and Chronic:	
Eye Contact:	Causes severe irritation. May cause: blinking, redness, tearing.
Skin Contact:	Causes mild to moderate irritation. Prolonged contact may cause: drying, chapping.
Skin Absorption:	No absorption hazard expected under normal use.
Inhalation:	Causes moderate irritation. Mists may cause: coughing, sneezing, sore throat, shortness of breath, burning sensation. May irritate: nose, mouth, throat.
Ingestion:	May cause severe irritation. Large amounts may cause: abdominal cramps, nausea, vomiting, diarrhea.

Numerical Measures of Toxicity:

Acute Toxicity:	Ingredients	Oral LD50 mg/kg	Skin LD50mg/kg	Inhalation Vapor/Dust/Mist LD50mg/L/4hr
	Urea	Rat: 8471 mg/kg	No Data	No Data
	Ammonium	Rat: > 2000 mg/kg	No Data	No Data
	Polyphosphate			
	Citric Acid	Rat: 3000 mg/kg	Rat: > 2000 mg/kg	No Data

Cancer Information: This product does not contain 0.1% or more of the known or potential carcinogens listed in NTP, IARC, or OSHA.

Medical Conditions Aggravated by Exposure to Product: Eye disorders. Respiratory system disorders. Skin disorders.

Other: Animal ingestion studies in several species, at high doses, indicate that borates cause reproductive and developmental effects. A human study of occupational exposure to borate dust showed no adverse effect on reproduction. No target organ has been identified in humans. High dose animal ingestion studies indicate the testes are the target organs in male animals.

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicological Information: No data available.

Chemical Fate Information: No data available.

SECTION 13 DISPOSAL CONSIDERATIONS

Hazardous Waste Number: N/A

Contaminated Packaging: Dispose of in accordance with all local, state and federal regulations. DO NOT pressurize, cut, weld, solder, drill, grind or expose empty containers to heat, flame, sparks or other sources of ignition. Since emptied containers retain product residue, follow label warnings even after container is emptied.

SECTION 14 TRANSPORT INFORMATION

DOT (Department of Transportation):

Proper Shipping Name: Not regulated by the DOT.

SECTION 15 REGULATORY INFORMATION

TSCA Inventory Status: All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

SARA Title III Section 311/312 Category Hazards:

Immediate (Acute): Yes

Delayed (Chronic): Yes

Fire Hazard: No

Pressure Release: No

Reactive: No

Regulated Components:

Phosphoric acid, ammonium potassium salt CAS Number: 51601-31-1

CERCLA RQ: No

SARA EHS: No

SARA 313: Yes

U.S. HAP: No

WI HAP: No

Prop 65: No

Ammonium Polyphosphate CAS Number: 68333-79-9

CERCLA RQ: No

SARA EHS: No

SARA 313: Yes*

U.S. HAP: No

WI HAP: No

Prop 65: No

***Prop 65 - May Contain the Following Trace Components:** This product may contain a detectable level of (a) chemical(s) subject to California proposition 65.

Note: * This substance is reportable for Section 313 only if dissolved in water. If dissolved in water, the manufacturing threshold for aqueous ammonia applies. * Section 313 threshold and release determinations are based on 10% of the total aqueous ammonia manufactured, processed or otherwise used.

SECTION 16 OTHER INFORMATION

Health Rating System

Health: 2*

Flammability: 0

Reactivity: 0

* = Chronic Health Hazard

NFPA Rating System:

Health: 2

Flammability: 0

Reactivity: 0

Special Hazard: None

SDS Abbreviations

N.A. = Not Applicable

N.D. = Not Determined

HAP = Hazardous Air Pollutant

VOC = Volatile Organic Compound

C = Ceiling Limit

N.E./Not Estab. = Not Established

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