Safety Data Sheet

Section 1. Identification

Product Name: Roots Organics Phos Bat Guano

Recommended for use as a plant nutrient. Great for plants but do not breathe in, spill on, or feed to people or pets.

Company: Aurora Innovations post office box 22041 • Eugene, Oregon 97402 www.aurorainnovations.com

Phone: 866 376 8578 (toll free); Emergency Phone: 1 (800) 424-9300

Section 2. Hazard(s) identification

Hazardous components:

OSHA PEL ACGIH TVL

Nuisance dust CAS Total Respirable Total Respirable Non-hazardous N/A 15 mg/m3 15 mg/m3 10 mg/m3 3 mg/m3

Product not classified hazardous under OSHA Hazard Communication Standard 29 CFR 1910.1200, Health Hazard.

Classified under ACGIH as Nuisance Dust or Particulates Not Otherwise Classified.

See product label for ingredients and use instructions

Section 3. Composition

Chemical description: Bat Guano. Dry brown powder with odor of ammonia.

Section 4. First Aid Measures

Inhalation: Dust can cause irritation and choking. Biologically active. Persons allergic to spores

may be sensitive. Acute or chronic lung infection (Histoplasmosis) may occur from inhalation of fine bat guano dust containing spores of Histoplasma capsulatum. Remove to fresh air, if breathing difficult, administer oxygen. Consult physician.

Eyes: Will irritate on contact, wash out quickly to remove particulate matter. Contact a physician if irritation persists.

Ingestion: Purge by vomiting if victim is conscious.

Skin: Wash skin or open wounds gently with mild soap/detergent and flowing water.

Signs/symptoms of exposure: Inhaling nuisance dust over long periods may cause congestion and irritation of the lungs and upper respiratory system; may overload lung clearance and make lungs vulnerable to respiratory disease. May aggravate medical conditions such as bronchitis, emphysema, asthma and upper respiratory and lung diseases.

Carcinogenicity: None known.

Section 5. Fire Fighting Measures and Explosion Information

Flash point Not applicable

Flammable limits May char or smolder if exposed to fire, may be induced to burn

Extinguishing media Water, CO2

Special fire and explosion hazards May emit corrosive fumes when charred by intense heating

Section 6. Accidental Release Measures

Avoid creating dust when cleaning up. Scoop, shovel or sweep to labeled containers for recycling/ salvage if not contaminated by other material. Dispose of as soil.

Section 7. Handling and Storage

Respiratory protection: Not normally needed. If dusting occurs, use approved respirator to eliminate exposure.

Protective gloves/clothing: Rubber or plastic recommended if repeated or prolonged contact expected.

Eye protection: Safety glasses or chemical splash goggles recommended where dusting is expected.

Work practices: Use good housekeeping practices. Keep containers tightly closed.

Ventilation: Exhaust fan recommended for dust control and potential ammonia odor.

Incompatibility: None known.

Precautions in storing and handling: Product should be kept dry. Avoid storage in wet or moist areas.

Section 8. Exposure controls/personal protection

Respiratory protection: Use approved dust mask with organic filter to eliminate exposure. If wet, use respirator to protect against ammonia. Dust can cause irritation and choking.

Protective gloves/clothing: Rubber or plastic recommended if repeated or prolonged contact expected.

Eye protection: Chemical splash goggles recommended if splash hazard possible. Safety glasses suffice otherwise.

Work practices: Use good housekeeping practices. Keep containers tightly closed.

Ventilation: Typically none is required. Exhaust fan recommended where dust is expected or if breathing difficult.

No data available

Waste disposal method: Package material for removal to an approved landfill, or dispose of as soil.

Section 9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

a) Appearance Brown powder
b) Odor Odor of ammonia
c) Odor Threshold No data available

d) pH 7.6 @10% dispersion in water

e) Melting/freezing point
f) Initial Boiling Point
Not applicable
g) Flash Point
No data available
h) Evaporation Rate
i) Flammability
No data available
y) Upper/Lower Flammability or
No data available
No data available

Explosive Limits k) Vapor Pressure No data available I) Vapor Density No data available m) Relative density No data available n) Water Solubility No data available o) Partition coefficient: n-octanol/water No data available p) Auto-ignition Temperature No data available g) Decomposition Temperature No data available s) Explosive Properties No data available

9.2 Other safety Information

t) Oxidizing properties

Section 10. Stability and Reactivity

10.1 Reactivity

No data available

10.2 Chemical Stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to Avoid

No data available

10.5 Incompatible Materials Strong oxidizing agents

10.6 Hazardous Decomposition Products

No data available

Section 11. Toxicological Information

11.1 Information on Toxicological Effects

Acute Toxicity

No data available

Inhalation: No data available Dermal: No data available Ingestion: No data available **Skin corrosion/irritation**

No data available

Serious eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product present at levels greater or equal to 0.1% is identified as a probable, possible or confirmed carcinogen by IARC.

ACGIH: No component of this product present at levels greater or equal to 0.1% is identified as a probable, possible or confirmed carcinogen by ACGIH.

NTP: No component of this product present at levels greater or equal to 0.1% is identified as a probable, possible or confirmed carcinogen by NTP.

OSHA: No component of this product present at levels greater or equal to 0.1% is identified as a probable, possible or confirmed carcinogen by IARC.

Reproductive Toxicity

No data available

Specific Target Organ Toxicity-Single Exposure

No data available

Specific Target Organ Toxicity-Repeated Exposure

No data available

Aspiration Hazard

No data available

Other information

To the best of our knowledge, the chemical, physical, and toxicological properties of this product have not been thoroughly tested.

Section 12. Ecological Information

No data available

Section 13. Disposal Considerations

Dispose of any unused product and packaging in accordance with all applicable local, state and federal regulations.

Section 14. Transport information

DOT

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

Section 15. Regulatory Information

SARA 302

No chemicals in this product are subject to the reporting requirement of SARA Title III, section 302

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, 313

Section 16. Other Information

The information and data herein are believed to be accurate and have been compiled from sources believed to be current and reliable. It is offered for your consideration, investigation and verification. Buyer assumes all risks of use, storage and handling of product in compliance with applicable federal, state and local laws and regulations.