## Vital Earth's®

### High Phos. Bat Guano

**0-13-0**

Material Safety Data Sheet

**I. PRODUCT NAME/TRADE NAME:** Vital Earth's® High Phos. Bat Guano 0-13-0  
Sizes: Sample, 1 lb/0.4536 kg, 4.4 lb/1.9958 kg, 22 lb/9.9790 kg, 44 lb/19.958 kg  
EPA REGISTRATION #: none  
CHEMICAL NAME/COMMON NAME: Bat Guano/Bat Guano  
WHIMIS Classification of Product: Is not a controlled product and is not covered under Hazardous Product Act and WHIMIS.  
Product use: Fertilizer (Natural)

**Emergency Telephone Number:** 503-493-2784  
**Information Telephone Number:** 503-493-2784  
**Date Prepared:** 01/15/08

**II. HAZARDOUS INGREDIENTS**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>%</th>
<th>CAS #</th>
<th>LD50</th>
<th>LC50</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Based on Bat Guano</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NE</td>
<td>NE</td>
</tr>
</tbody>
</table>
### III. PHYSICAL/CHEMICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>NE</td>
</tr>
<tr>
<td>Specific Gravity (H₂O=1)</td>
<td>NA</td>
</tr>
<tr>
<td>Vapor Pressure (mmHg)</td>
<td>NA</td>
</tr>
<tr>
<td>Vapor Density (Air = 1)</td>
<td>NE</td>
</tr>
<tr>
<td>Melting Point</td>
<td>NA</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>NA</td>
</tr>
<tr>
<td>Evaporation Rate (Butyl Acetate + 1)</td>
<td>NA</td>
</tr>
<tr>
<td>% Volatiles by vol.</td>
<td>NE</td>
</tr>
<tr>
<td>Density</td>
<td>Variable</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Soluble</td>
</tr>
<tr>
<td>Appearance and Odor</td>
<td>Tan colored dry material, slight guano odor</td>
</tr>
<tr>
<td>Flash Point/Method</td>
<td>NA</td>
</tr>
<tr>
<td>pH</td>
<td>NA</td>
</tr>
</tbody>
</table>

### IV. FIRE AND EXPLOSION HAZARD DATA

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash point (Method Used)</td>
<td>NA</td>
</tr>
<tr>
<td>Flammable Limits</td>
<td>This material is slightly combustible due to residual protein. Direct flame results in short lived sustained flame.</td>
</tr>
<tr>
<td>Extinguishing Media</td>
<td>Water, Carbon Dioxide, Dry Chemicals</td>
</tr>
<tr>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Hazardous Combustion Products:</td>
<td>Dioxides from fire</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Sensitivity to Mechanical Impact:</td>
<td>NA</td>
</tr>
<tr>
<td>Sensitivity to Static Discharge:</td>
<td>NA</td>
</tr>
<tr>
<td>Auto Ignition (°C):</td>
<td>NA</td>
</tr>
<tr>
<td>Special Fire Fighting Procedures:</td>
<td>Treat as class A. Fight fire upwind. Wear positive pressure self-contained breathing apparatus and full protective equipment. Do not breathe smoke or spray mist. Avoid fallout and runoff. Dike to prevent entering drains, sewers, or water courses. Evacuate people downwind from fire.</td>
</tr>
</tbody>
</table>
Unusual Fire and Explosion Hazards: Avoid production of an extremely dusty air space in areas of local burning or electrical sparking

V. REACTIVITY DATA

Chemical Stability: Stable

Incompatibility (Products to Avoid): Fire, Water

Hazardous Decomposition or Byproducts: COx, SOx

Hazardous Polymerization: Will Not Occur

Condition to Avoid: Exposure to heat and acid

Reactivity, and under what conditions: NA

VI. TOXICOLOGICAL PROPERTIES/HEALTH HAZARD DATA

Route(s) of Entry

Skin: Wear proper personal protective equipment to reduce skin exposure.
Ingestion: Do not ingest. Wash hands and face thoroughly before eating, drinking or smoking.

Inhalation: Wear proper respiratory protection for the exposures encountered.

Eye Contact: Can cause eye irritation. Wear proper eye protection to reduce exposure. If contact occurs, flush eyes with water for a minimum of 15 minutes.

Health Hazard (Acute of Chronic): NA

Carcinogenicity: IARC monographs NTP OSHA
None Known None Known None

Signs and Symptoms of Exposure: NA

Irritancy of product: NA

Sensitization to Product: NA

Teratogenicity: None

Reproductive Toxicity: None
VII. PRECAUTION FOR SAFE HANDLING AND USE

Personal Protective Equipment

Respiratory: When dust is present, use a NIOSH/MSHA approved half- or a full-face respirator with a High Efficiency Particle Aerosol (HEPA) cartridge

Skin: Wear proper personal protective equipment to reduce skin exposure.

Eyes: Use appropriate eye protection e.g.: goggles, to minimize contact with dust.

Other: Wear sturdy work clothing and footwear for the specific application.

Environmental Hazards: Dike area to prevent entering drains, sewers or water courses.

Engineering controls: In restricted spaces, use effective ventilation, e.g. Local Air Ventilation. Do not permit excessive accumulation of dust in work areas.
Steps to be taken in case material is released or spilled:

Best practice is to clean up with a vacuum equipped with a HEPA filter.

If uncontaminated, collect for reuse or disposal.
Use a clean up system which does not create dust, e.g. a vacuum equipped with a HEPA filter. If contaminated or not required for reuse, dispose in approved landfill in accordance with local regulations.

Waste Disposal Method:

If uncontaminated, dispose as a non-metallic mineral. If contaminated, use appropriate method for containment with applicable local regulation(s).

Precaution to be taken in handling and storing:

Product should be kept in a dry place. Avoid creation of respirable dust if possible. Protect workers as above. Use effective ventilation and dust collection. Avoid eye and skin contact with wet product during use.

Special shipping information: NA

VIII. CONTROL/FIRST AID MEASURES/HEALTH PRECAUTION DATA

Respirator Protections: Use only NIOSH/MSHA - approved respiratory protection for nuisance particles up to 10 times
**Ventilation:**
Local exhaust/general ventilation to control nuisance dust.

**Protective/Work Gloves:**
Rubber, latex, vinyl, or other impervious gloves recommended

**Eye Protection:**
Safety Goggles or glasses with side shields and brow protection Recommended.

**Other Protective Clothing or Equipment:**
Not required

**Work / Hygienic Practices:**
Wash to remove dust after use

**Eyes:**
Flush with tempered water for at least 20 minutes. Obtain medical attention

**Skin:**
Wash with soap and water. For caustic burns to skin consult a doctor.

**Ingestion:**
Drink large amounts of water. Do not induce vomiting. Seek immediate medical attention.
Gross inhalation of dust: Remove victim to fresh air and administer CPR if necessary.

IX. SPECIAL PRECAUTIONS

Keep out of reach of children. Do not wash down storm or sanitary sewer system. Read and follow all label instructions.

X. REGULATORY DATA

SARA HAZARD CLASS: Acute

SARA 313: NO

SARA 302: NO

TPQ:

CERCLA: NO

RQ:

RCRA: NO

NFPA HAZARD RATING: NFPA HAZARD RATING SCALE:

Health: [1] 0 = Minimal 3 = Serious
Fire: [2] 1 = Slight 4 = Severe
Reactivity: [0] 2 = Moderate
Special: [ ]

HMIS CODES: HMIS HAZARD RATING SCALE:
Health: [1] 0 = Minimal 3 = Serious
Fire: [2] 1 = Slight 4 = Severe
Reactivity: [0] 2 = Moderate

XI. PREPARATION DATE OF MSDS

Prepared by: Conscious Earthworks, LLC
Phone: 503-493-2784
Date: 01/15/08

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