

# Material Safety Data Sheet

## Roots Organics HPK 0-5-4

Last Revision: December, 2009

Emergency Phone: (541) 913-9612

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### Product Identification

Name: **HPK**

Chemical description: Soluble phosphate and potassium extracted from Guano and Langbeinite

Hazardous components: None

Company: Aurora Innovations, Inc. (541) 359-1580 [www.aurorainnovations.com](http://www.aurorainnovations.com)

### Physical/Chemical Characteristics

Boiling point	Above 212 F
Vapor pressure	Not determined
Vapor density	Not determined
Evaporation rate	Not determined
Melting point	NA
Specific gravity	1.3
pH	3.9
Solubility in water	Low concentration of soluble P <sub>2</sub> O <sub>5</sub> and K <sub>2</sub> O as well as fine, insoluble sediment suspension
Appearance	Tan to brown thick liquid
Odor	Non-offensive chalky smell

### Fire and Explosion Information

Flash point	Not applicable
Flammable limits	Not determined
Extinguishing media	Water, CO <sub>2</sub>
Special fire fighting procedures	No special methods required
Special fire and explosion hazards	None

### Reactivity Data

Stability	Stable at normal temperatures
Conditions to avoid	High pH conditions
Incompatibility	High pH or Calcium products may cause P <sub>2</sub> O <sub>5</sub> precipitation
Hazardous decomposition	None
Hazardous polymerization	Will not occur

### Spill or Leak Procedures

Contain spill to prevent discharge into the environment. Absorb spill with appropriate material and flush with water.

**Health Effects/First Aid Information**

Inhalation: Help victim to fresh air, if breathing difficult, administer oxygen. Consult physician.

Eyes: Will irritate on contact, wash out quickly to remove all particulate matter.

Ingestion: If swallowed contact a physician immediately for course of action.

Skin: Avoid contact, may cause irritation. Wash with soap and water.

Carcinogenicity: Ingredients not listed as carcinogenic in NTP or IARC listings. Not OSMA regulated.

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**Precautions for Safe Handling and Use:**

Respiratory protection: Not normally needed.

Ventilation: Typically none is required.

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

Eye protection: Chemical splash goggles recommended where splash hazard is possible.

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

Precautions for storing and handling: Avoid storage areas with high temperatures or direct sunlight.

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