## Section 1 - Chemical Product and Company Identification

Product details	
Trade name: Root King	
Application of the substance/the preparation: plant growth stimulant	
Manufacturer/Supplier:	
Panpan Industry Co., Limited	
Add: Building 9th, National University Technology Zone, Dianchang Road, Zhengzhou, Henan,	
China	
Tel.: 0371-60383117	
Mail: 3954776@QQ.COM info@pandustry.com	
Internet: www.pandustry.com www.plantgrowthhormones.com	
Informing department:	
Technical central	
Tel:0371-63675701-8010	
Emergency information:	
Emergency phone: 0371-60383117-8010	

## Section 2 - Composition, Information on Ingredients

Component	Percent
Root King	≥98%
Water	≤2%

## Section 3 - Hazards Identification

### **EMERGENCY OVERVIEW**

Appearance: white to off-white powder.

**Warning!** Causes respiratory tract irritation. Irritant. Causes eye and skin irritation. May be harmful if inhaled. May cause digestive tract irritation. May cause central nervous system depression.

Target Organs: Central nervous system, cardiovascular system.

### Potential Health Effects

Eye: Causes eye irritation. May cause chemical conjunctivitis.

Skin: Causes skin irritation.

**Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause cardiac disturbances. May cause central nervous system depression.

**Inhalation:** Causes respiratory tract irritation. May be harmful if inhaled. May cause cardiac abnormalities. Can produce delayed pulmonary edema. Inhalation at high concentrations may cause CNS depression and asphixiation.

Chronic: Effects may be delayed.

### Section 4 - First Aid Measures

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:** Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

**Inhalation:** Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Notes to Physician: Treat symptomatically and supportable.

### Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Contact with metals may evolve flammable hydrogen gas. Containers may explode when heated. Non-combustible, substance itself does not burn but may decompose upon heating to produce irritating, corrosive and/or toxic fumes. Runoff from fire control or dilution water may cause pollution.

**Extinguishing Media:** Do NOT get water inside containers. For small fires, use dry chemical, carbon dioxide, or water spray. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray. Cool containers with flooding quantities of water until well after fire is out. **Flash Point:** Not applicable.

Auto-ignition Temperature: Not applicable.

Explosion Limits, Lower:Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 2; Flammability: 0; Instability: 0

### Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8. **Spills/Leaks:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use with adequate ventilation.

**Storage:** Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

OSHA Vacated PELs: No OSHA Vacated PELs are listed for this chemical.

#### **Personal Protective Equipment**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN374.

Skin: Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 374. Use a NIOSH/MSHA or European Standard EN 374 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

# Section 9 - Physical and Chemical Properties

Physical State: powder Appearance: white to off-white Odor: None reported. pH: 5-9 Vapor Pressure: 8.76E-0.5mmHg at 25°C Vapor Density: Not available. Evaporation Rate:Not available. Evaporation Rate:Not available. Viscosity: Not available. Boiling Point: 340.2°C at 760mmHg Flash point: Not available. Freezing/Melting Point:Not available. Decomposition Temperature:Not available. Solubility: Soluble in water methanol, ethanol and acetone, stable in acidic, neutral and alkaline media.

### Section 10 - Stability and Reactivity

**Chemical Stability:** Stable at room temperature in closed containers under normal storage and handling conditions.

**Conditions to Avoid:** Incompatible materials, excess heat, strong oxidants, exposure to moist air or water.

Incompatibilities with Other Materials: Oxidizing agents, moisture.

Hazardous Decomposition Products: Not available.

Hazardous Polymerization: Has not been reported.

### Section 11 - Toxicological Information

#### LD50/LC50:

Inhalation, rat: No information available. Oral, mouse: No information available. Oral, rabbit: No information available. Oral, rat: No information available. Skin, rabbit: No information available.

Epidemiology: No information available. Teratogenicity: No information available. Reproductive Effects: No information available. Mutagenicity: No information available. Neurotoxicity: No information available.

### Section 12 - Ecological Information

No information available.

### Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

### Section 14 - Transport Information

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Land Transport(ADR/RID): Not classified as dangerous in the meaning of land transport regulations. Shipping transport(IMD): Not classified as dangerous in the meaning of shipping transport regulations. Air transport(IATA): Not classified as dangerous in the meaning of air transport regulations.

### Section 15 - Regulatory Information

#### TSCA

Not listed on the TSCA inventory. It is for research and development use only. Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

#### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

#### **TSCA Significant New Use Rule**

None of the chemicals in this material have a SNUR under TSCA.

#### **CERCLA Hazardous Substances and corresponding RQs**

None of the chemicals in this material have an RQ.

### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

Section 313 No chemicals are re-portable under Section 313.

#### **Clean Air Act:**

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

#### **Clean Water Act:**

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

#### **OSHA:**

None of the chemicals in this product are considered highly hazardous by OSHA.

#### STATE

Not present on state lists from CA, PA, MN, MA, FL, or NJ. Not present on state lists from CA, PA, MN, MA, FL, or NJ.

## Section 16 - Additional Information

#### MSDS Creation Date: 9/02/2018 Revision #7 Date: 10/03/2018

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchant-ability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising.

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