

### 1: IDENTIFICATION

|                               |  |                          |   |
|-------------------------------|--|--------------------------|---|
| <b>Chemical Name</b>          | Potassium Humate, Bentonite  | <b>Trade Name</b>        | <b>BHUMIKA BIOACTIVE</b>                                    |
| <b>Synonyms</b>               | Humic acid, Bentonite  | <b>Molecular Formula</b> | C <sub>9</sub> H <sub>9</sub> K <sub>2</sub> O <sub>6</sub> |
| <b>Uses</b>                   | Bio Fertilizer- Phosphate solubilizing bacteria  |                          |   |
| <b>Manufacturer/ Supplier</b> | Ulink AgriTech Pvt. Ltd.<br>Office Nos. 001 And 002, Ground Floor Wing "A" And Nos. 003 And 004 Ground Floor Wing "B", Nyati Tech Park, Wadgaon Sheri,<br>Pune - 411014, Maharashtra |                          |   |
| <b>Emergency Contact</b>      | 9503095030   | <b>E-mail</b>            | <a href="mailto:info@agrostar.in">info@agrostar.in</a>      |

### 2: COMPOSITION/INFORMATION OF INGREDIENTS

| Chemical Name       | CAS # | Percent or Content (w/w) |
|---------------------|-------|--------------------------|
| Bacillus megaterium | -     | 5*10 <sup>7</sup> cfu/g  |
| Granule carrier     | -     | Q.S                      |

*Ingredients not precisely identified are proprietary and/or non-hazardous*

### 3: HAZARD IDENTIFICATION

**Danger category and abbreviation:** No symbol assigned

**Danger to the health of human:** No risk expected and environment

**Emergency Overview:** The product is a black granule with a characteristic odor which is intended to be used for plant health supplementation. Organisms used are non-pathogenic but can cause infection when in contact with open wounds. These organisms are susceptible to many commonly used antibiotics. There is no specific antidote for any form of irritation observed. Treat symptomatically. Immediately seek medical attention

### 4: FIRST AID MEASURES

**General:** Have the product container, label or safety data sheet while seeking medical attention, a poison control center or physician, or going for treatment.

**Symptoms:** Exposure to the product does not cause acute symptoms

**Inhalation:** Move victim from contaminated area to fresh air. Apply artificial respiration, if necessary. In the event of physical complaints arising, seek medical advice.

**Ingestion:** The product is not harmful if ingested. If any irritation is observed give plenty of water to drink and consult a physician. In the event of physical complaints arising, seek medical advice immediately. If poisoning is suspected, consult a physician immediately. The concerned examiner should be informed the complete product name and details and amount of exposure. Describe the symptoms and follow the advice given.

**Skin Contact:** In case of contact with product, wash immediately skin including hair and under finger nails with plenty of water and soap. No medicating agents should be applied except on the advice of physician. Remove and isolate contaminated clothing and shoes.

**Eye Contact:** Rinse immediately with plenty of water for several minutes. After 5 minutes remove contact lenses if present and continue rinsing with plenty of water. Continue to rinse with eyelid wide open for at least 15-20 minutes. No medicating agents should be applied except on the advice of physician. Seek medical attention if irritation develops.

**Potential Health Effects:**

**Routes(s) of Entry:** Eye, Skin, Oral, Inhalation      **Human effects and symptoms of exposure:** Causes irritation of eyes, skin or respiratory tract

**Acute eye contact:** Causes irritation.

**Acute skin contact:** May cause irritation.

**Chronic eye contact:** Chronic exposure is not likely from normal use.

**Chronic ingestion:** Chronic exposure is not likely from normal use.

**Medical conditions generally aggravated by exposure:** Not known.

**Note to Physician:** No specific Antidote. Treat symptomatically.

### 5: FIRE FIGHTING MEASURES

**Extinguishing Media:** Water spray, foam, fog, dry chemical or carbon dioxide

**Unsuitable Extinguishing Media:** Not Applicable

**Specific Hazard:** The product is non-flammable.

**Special Procedures:** Do not discharge extinguishing water into the drain or water bodies. If risk of water pollution occurs, notify appropriate authorities. Move containers away from area if it can be done without risk. If possible without risk, remove containers from fire zone, cool with water spray. Approach fire from upwind to avoid hazardous vapours and toxic decomposition products. Dike area to prevent water runoff. Avoid contamination with strong oxidising agents

**Protection of Fire Fighters:** Wear a self-contained breathing apparatus and protective clothing.

### 6: ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Use personal protective equipment. Avoid dust formation. Avoid breathing dust, vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas

**Environmental Precaution:** None

**Methods for Cleaning-up:** Sweep the area keeping the dust to a minimum and place an approved container. Wash the spill area with water and detergent, absorb with absorbent material. Seal the container and handle in an approved manner.

**Supplementary information:** Can be mixed in soil.

### 7: HANDLING & STORAGE

**Handling:** Do not smoke, drink, or eat during handling. Wash hands and other exposed areas with soap and water before and after handling the product. Good personal hygiene procedures for agricultural product must be practiced.

**Storage:** Store the material in a well ventilated, clean, cool and dry place out of reach of children and domestic animals. Keep away from direct sunlight. Keep containers tightly closed when not in use. Do not store in metallic containers. Do not store along with chemical pesticides.

**Shelf Life:** Use before 2 years from the day of manufacture

## 8: EXPOSURE CONTROL/PERSONAL PROTECTION

**Engineering Measures:** Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice.

**General Protection:** Avoid eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. After use and before eating, drinking and smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.

**Personal Protection:** Follow all precautions and instructions on the label. In all other cases the following recommendations would apply.

**Respiratory Protection:** To avoid breathing dust, use adequate ventilation and wear a NIOSH-approved dust or pesticide respirator with a dust filter.

**Skin Protection:** Chemical resistant clothing is recommended. Routinely wash work clothing and protective equipment to remove contaminants.

**Hand Protection:** Wear suitable chemical protection gloves. Check leak-tightness/impermeability prior to use. Before reuse, clean and air them well.

**Eye Protection:** Wear safety glasses or goggles fitted with side shields. Do not wear contact lenses. Safety showers and eyewash should be easily available.

**Others:** Wash clothing before reusing.

## 9: PHYSICAL/CHEMICAL PROPERTIES

**Appearance:** Black granule

**Physical State:** Solid

**pH:** 5 - 7

**Colour:** Black

**Melting Point [°C]:** Not determined

**Odour :** Characteristic odour

**Bulk Density[ g/cc]:** Not determined

**Boiling Point [°C]:** Not determined

**Solubility in Water:** Insoluble

## 10: STABILITY & REACTIVITY

**Stability:** Stable under normal circumstances.

**Hazardous Decomp. Products:** None

**Decomposition:** Easily biodegradable

**Conditions to Avoid:** Heat, flames, ignition sources and incompatibles. Temperature above 35 °C. Preferably store between 4 – 10 °C

**Material to Avoid:** Strong acids or alkali compounds may inactivate biological cultures as well as strong oxidizing agents, disinfectants and biocides. Chemical pesticides may inactivate the active ingredient.

## 11: TOXICOLOGICAL INFORMATION

Toxicological studies are not available. The ingredients used are not known to be toxic.

**Note:** Prolonged contact with eyes, skin and respiratory tract may cause irritation. The product is formulated using microbes specially selected from the natural environment and that are known to be non-pathogenic to humans, animals or plants. It is advised to cover open wounds when in use.

## 12: ECOLOGICAL INFORMATION

The product contains non-pathogenic, non-hazardous and non-toxic, naturally occurring constituents

No phytotoxic effect

**Other Adverse Effects:** Not expected

**Bioaccumulative Potential:** Not anticipated to bioaccumulate

**Persistence/ Degradability:** Totally biodegradable in nature

**Mobility:** No data available

## 13: DISPOSAL CONSIDERATION

**Waste-disposal Procedures:** Do not reuse product packing materials and residues. Dispose the product packing materials and residues according to local state and federal health and environmental regulations.

**Contaminated Packaging:** Dispose empty containers, surplus material and washings from spray equipments in a safe manner so as to prevent environmental or water pollution, or contamination of food and animal feed. Never use the empty containers for storing food or water.

## 14: TRANSPORT INFORMATION

**UN No.:-**

**Proper shipping name:-**

**Transportation Data:** The product is not regarded as hazardous

**Packing Group:** -

## 15: REGULATORY INFORMATION

The product is not registered under the Fertilizer Control Act (FCO)- Indian fertilizer regulatory and the Central Insecticides Board (CIB)- Indian pesticides regulatory. The product is not claimed to be a Fertilizer. The product is not claimed to be a Pesticide / Insecticide.

## 16: OTHER INFORMATION

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