ULINK AGRITECH PRIVATE LIMITED

MATERIAL SAFETY DATA SHEET : BHUMIKA (ORGANIC PLANT VITALISER)

1:IDENTIFICATION

Chemical Name	Potassium Humate, Bentonite		
Synonyms	Humic acid, Bentonite	**Trade Name**	**BHUMIKA (ORGANIC PLANT VITALISER)**
Uses	Organic Plant Growth Promoter	**Molecular Formula**	$C_9H_9K_2O_6$
Manufacturer/ Supplier	Ulink AgriTech Pvt. Ltd.		
	Office Nos. 001 And 002, Ground Floor Wing "A" And Nos. 003 And 004 Ground Floor Wing "B", Nyati Tech Park, Wadgaon Sheri, Pune - 411014, Maharashtra		
Emergency Contact	9503095030	**E-mail**	info@agrostar.in

2:COMPOSITION/INFORMATION OF INGREDIENTS

Chemical Name	CAS #	Percent or Content (w/w)
Potassium Humate	68514-28-3	3 %
Bentonite	-	97 %

3: HAZARD IDENTIFICATION

Human Health Hazard: Inhalation: Dermatitis, dizziness, vomiting and diarrhea. Normally slightly irritating

Skin contact: Slightly irritating.

Eye contact: Medium to Serious irritating.

Ingestion: Vomiting and diarrhea

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. Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Inhalation: If fumes or combustion products breathed in, move person to fresh air. If not breathing, give artificial respiration. Immediately seek medical attention if symptoms are severe or persist.

Ingestion: Rinse mouth with water thoroughly and give water to drink. Never give anything by mouth to an unconscious person. Seek medical attention immediately if feeling unwell.

Skin Contact: In case of contact with product, wash immediately skin area with plenty of water and soap. 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. Seek medical attention if irritation develops.

Note to Physician: No specific Antidote. Treat symptomatically.

Symptoms Caused by Exposure: Irritation of the skin, mucous membranes and eyes. Difficulty breathing.

5:FIRE FIGHTING MEASURES

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

Specific Hazard: Product does not present an explosion hazard. Material will not burn.

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 in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

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: Do not let product enter drains, surface water or subsoil water. Retain contaminated washing water and dispose of it

Methods for Cleaning-up: Pick up the material mechanically (sweep up and shovel) and place in a container without creating dust and dispose of in accordance with local, state and federal regulations.

7:HANDLING & STORAGE

Handling: Do not smoke, drink, or eat during handling. Avoid formation of dust. Provide appropriate ventilation at places where dust is formed. Wash hands and other exposed areas with soap and water before and after handling the product. Good personal hygiene procedures must be practiced.

Storage: Store in dry, cool and well-ventilated area. Keep in original container and tightly closed when not in use. Keep away from food, drink and animal feeding stuffs. Must be stored away from high temperatures, hot pipes, and direct sunlight. Keep away from heat, spark, open flame, incompatible material (oxidizing agents).

8:EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Measures: Ensure adequate ventilation to control airborne levels. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Handle in accordance with good industrial hygiene and safety practice.

General Protection: Avoid contact with eyes and skin. 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: In case of inadequate ventilation or risk of inhalation of dusts or vapors, use suitable respiratory equipment such as MSHA/NIOSH TC-21C or NIOSH approved respirator with N, R, P or HE filter. Wear respiratory protection during operations where spraying or misting occurs. If respirators are used, a program should be in place to assure compliance with 29 CFR 1910.134, the OSHA Respiratory Protection standard. Wear air supplied respiratory protection if exposure concentrations are unknown.

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: Safety glasses fitted with side shields must be worn at all times during the handling and application period. Do not wear contact lenses. Safety showers and eyewash should be easily available.

Others: Wash clothing before reusing.

9:PHYSICAL/CHEMICAL PROPERTIES

Appearance: Black speckled granule **Physical State:** Solid **Melting Point [°C]:** 1200 **pH:** 7.5 - 8.5

Colour: Black **Solubility in Water:** Not Soluble, but releases coated humates over time **Odour :** Odourless

Bulk Density (at 20 °C Water = 1) [g/cc]: 1.18 **Boiling Point [°C]: 350**

10:STABILITY & REACTIVITY

Stability: Stable under normal circumstances. **Conditions to Avoid:** None

Hazardous Decomp. Products: Decomposition may release oxides of carbon and sulfur and unknown materials

Material to Avoid: Strong acids

11: TOXICOLOGICAL INFORMATION

Humic acid:

Rat oral LD50 [mg/kg] : > 5000 This is an estimated value based on raw bentonite LD50 value

Rat inhalation LC50 [mg/l/4h] : No data available

Primary irritant effect:

Skin corrosion/irritation: Irritant to skin and mucous membranes.

Serious eye damage/irritation: Irritating effect.

Respiratory or skin sensitization: No sensitizing effects known.

Bentonite:

Bentonite has no determined acute toxic effects. Long-term exposure to moderate or high concentrations of Bentonite dust may affect nose and respiratory tract and chest health. Prolonged inhalation of excessive levels of Bentonite dust may cause a simple pneumoconiosis condition, not normally associated with a decrement in lung function. In cases of long-term exposure to externally high levels of dust, complicated pneumoconiosis with lung function impairment may occur.

12: ECOLOGICAL INFORMATION

Ecotoxicity: Aquatic toxicity: Non-Toxic. Can be used in Aquaculture

Bentonite has a low impact on environment. Bentonite is persistent and non-biodegradable but it is unlikely to have any long-term adverse effect on the environment.

Bioaccumulative Potential: No data available **Persistence/ Degradability:** Shelf life of 3 years **Mobility:** No data available

13: DISPOSAL CONSIDERATION

Waste-disposal Procedures: Product waste and cleansing water must be poured into hole about 50 cm deep, located more than 50 meters away from any water source. After use, empty and clean the equipment in the workplace. Do not contaminate drains, streams, rivers or waterways with the chemical or used container.

Contaminated Packaging: Use empty containers should not be re-used but destroyed by burning or burying.

14: TRANSPORT INFORMATION

UN No.: - **Proper shipping name:** Not Regulated for Transport (Non-Hazardous)

Transport Hazard Class: - **Packing Group:** -

Environmental Hazards: Not applicable **Special Precautions for Users (ERG No.)** Not applicable **UN "Model Regulation":** Not applicable

15: REGULATORY INFORMATION

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

16: OTHER INFORMATION

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