

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION: HUMICIL (Humic Liquid Formulation)

Humic Acid - based liquid (water-based BIOSTIMULANT)

CAS No: 1415-93-6

COMPANY IDENTIFICATION:

Dinkal Agro Products Pvt. Ltd.

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2. COMPOSITION/INFORMATION ON INGREDIENTS:

USA-origin OMRI certified HUMIC ACID extract ... up to 6%

Water ... 94%

Solubility ... Soluble in Water

pH – 9.5 to 10.5

Specific Gravity – 1.02 g/ml (approximately)

3. HAZARDOUS IDENTIFICATIONS:

Route Of Entry	Effects Of Exposure / Symptoms		Emergency Treatment
Not pertinent (non-hazardous)	Inhalation:	Dermatitis, dizziness, vomiting and diarrhea. Normally slightly irritating	Obtain medical attention immediately.
	Skin contact:	Slightly irritating.	
	Eye contact:	Medium to Seriously irritating.	
	Ingestion:	Vomiting and diarrhea.	

4. FIRST AID:

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. 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.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance, and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

Rinse skin with water/shower.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

Indication of any immediate medical attention and special treatment needed

None

5. FIRE FIGHTING MEASURES:

Flash Point °C	Not Applicable (water-based product)	Flammability LEL % v UEL % v	Not Applicable (water-based product)	TDG Flammability	Product is not flammable
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Explosion sensitivity to impact	Product does not present an explosion hazard.	Explosion Sensitivity to Static Electricity	Product does not present an explosion hazard.	Auto-ignition Temp. °C	Product does not self-ignite
Combustible Material	No	Explosive Material	No	Hazardous Polymerization	No
Flammable Material	No	Oxidizer	No	Corrosive Material	Slightly
Pyrophoric Material	No	Organic Peroxide	No	Other Information :- --- Non-hazardous	
Hazardous Combustion Products		Non-Hazardous Water-based organic fertilizer			

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Material will not burn.

Extinguishing Media: CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Flash Point: Not applicable (water-based product).

Autoignition Temperature: Does not auto-ignite.

Explosion Limits, Lower: Product does not present an explosion hazard.
Upper: Product does not present an explosion hazard.

NFPA Rating: (estimated) Health: 1; Flammability: 0; Instability: 0

6. ACCIDENTAL RELEASE MEASURES:

For small spills, sweep up and place in a suitable container for disposal. Keep product out of sewers.

7. HANDLING AND STORAGE:

Keep out of reach of children. Wash thoroughly with soap and water after handling and before eating, drinking or smoking. Recommend storage in a cool, dry place away from high temperatures, hot pipes, and direct sunlight. Store in original container.

Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Take precautionary measures against static discharge. Use only in well-ventilated areas. Ground/bond container and receiving equipment.

- Specific notes/details

Dust deposits may accumulate on all deposition surfaces in a technical room. The product in the delivered form is not dust explosion capable.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feed items.

Conditions for safe storage, including any incompatibilities.

Managing of associated risks

- Explosive atmospheres Removal of dust deposits.
- Ventilation requirements Use local and general ventilation.

Specific end use(s)

- See section 16 for a general overview.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

HANDLING AND STORAGE PRECAUTIONS	Store in cool, clean, ventilated, fireproof storage area. Keep away from heat, spark, open flame, incompatible material (oxidizing agents). Avoid freezing. Protect containers against physical damage.
ENGINEERING CONTROLS	Good general ventilation should be sufficient to control airborne levels. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
INDIVIDUAL PROTECTION MEASURES:	<p>Eye / Face Protection: Goggles or shielded safety glasses are recommended.</p> <p>Skin Protection: Chemical resistant clothing is recommended. Routinely wash work clothing and protective equipment to remove contaminants. The use of chemical-resistant gloves is recommended when handling undiluted product. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.</p> <p>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.</p>

APPLICATORS AND ALL OTHER HANDLERS: Please refer to the product label for personal protective clothing and equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Boiling Point/Range °C	102 °C (Approx.)	Physical State	Liquid	Appearance	Dark brown
Melting/Freezing Point °C	0°C	Vapour Pressure at 20 °C , mm Hg.	23	Odour	Mild, Earthy
Vapour Density (Air=1)	0.16	Solubility in water at 30 °C	Soluble	Other Information : - Contains no hazardous substance. It is naturally occurring product. Contains traces of alkali.	
Specific Gravity at 20 °C Water = 1	1.02 g/ml	pH	9.5 to 10.5		

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions.
Incompatibility With Other Material	None, except medium to serious irritation in eyes
Reactivity	Strong acids
Hazardous Reaction Products	Decomposition may release oxides of carbon and sulfur and unknown materials
Conditions to Avoid	None

11. TOXICOLOGICAL INFORMATION:

CAS No: 1415-93-6

Permissible Exposure Limits			STEL(ACGIH)	DNA
LD50 Oral Rat : DNA	1786 mg/kg (rat) This is an estimated value, based on less than 2% KOH in solution	DNA	Odour threshold	DNA
NFPA Hazard Signals	Health - (0)	Flammability - (0)	Reactivity - (0)	Special - (-)

Epidemiology: No information found.

Teratogenicity: No information found.

Reproductive Effects: No information found.

Mutagenicity: No information found.

Neurotoxicity: No information found.

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.

12. ECOLOGICAL INFORMATION

Toxicity

- Aquatic toxicity: Non-Toxic.
- Persistence and degradability: Shelf life of 3 years

Behavior in environmental systems:

- Bio accumulative potential: No further relevant information available.
- Mobility in soil: No further relevant information available.
- Additional ecological information: Not Available

General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
 Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Rinse-off of undiluted bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value may harm aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.
- Other adverse effects: No further relevant information available.

13. DISPOSAL METHOD:

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. After use empty containers should not be re-used but destroyed by burning or burying.

14. TRANSPORT INFORMATION:

	IATA	IMO	RID/ADR
Shipping Name	Not Regulated for Transport (Non-Hazardous)		
Hazard Class			
UN Number			
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 datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

16. OTHER INFORMATION:

Disclaimer: Information in this Material Safety Data Sheet is believed to be reliable but no representation, guarantee or warranties of any kind are made as to its accuracy, suitability for a particular application or results to be obtained from them. It is up to the User/Distributor to ensure that the information contained in the Material Safety Data Sheet is relevant to the product manufactured /handled or sold by him as the case may be. Dinkal Agro Products Pvt. Ltd. makes no warranties, expressed or implied, in respect of the accuracy of this document for any particular purpose.