

1: IDENTIFICATION

Chemical Name	Humic acid	Trade Name	NUTRO GEL
Synonyms	Humic acid 4% (Liquid)	Molecular Formula	$C_{187}H_{186}O_{89}N_9S_1$ (Commonly cited average formula for soil humic acid)
Uses	Biostimulant		
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

Ingredient Name: Humic acid (Source: Leonardite) per cent. by weight: 4%
Water, per cent. by weight, maximum : 96%

3: HAZARD IDENTIFICATION

Non-hazardous. This product does not require special labelling.

Effects Of Exposure / Symptoms:

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

Skin Contact: Slightly irritating **Eye contact:** Medium to Seriously irritating.

Ingestion: Vomiting and diarrhea.

Emergency Treatment: Obtain medical attention immediately

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.

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. Do not induce vomiting. 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. Seek medical attention if irritation persists/develops.

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.

Most Important Symptoms and Effects, both Acute and Delayed: Symptoms and effects are not known to date.

Note to Physician: No specific Antidote. Treat symptomatically.

5: FIRE FIGHTING MEASURES

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

Specific Hazard: Product does not present an explosion hazard

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. Dike area to prevent water runoff.

Protection of Fire Fighters: Wear self-contained breathing apparatus for firefighting if necessary.

6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear suitable protective clothing, gloves and eye protection. Evacuate the danger area, observe emergency procedures, consult an expert.

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: Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up mechanically or absorb (large spill) with suitable material and dispose of in accordance with local, state and federal regulations. Clean up affected area.

7: HANDLING & STORAGE

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

Handling: Do not smoke, drink, or eat during handling. Avoid direct contact with skin and eyes. Use personal protective equipment as specified in section 8. 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 away from high temperatures, hot pipes, and direct sunlight. fireproof storage area. Keep away from heat, spark, open flame, incompatible material (oxidizing agents). Avoid freezing. Protect containers against physical damage. Keep in original container and tightly closed when not in use. Keep away from food, drink and animal feeding stuffs.

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: Wear suitable protective working clothing (with elasticated cuffs and closed neck) to avoid skin contact.

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

Eye Protection: Eye protection should be worn when handling. Do not wear contact lenses. Safety showers and eyewash should be easily available.

Others: Wash clothing before reusing.

9: PHYSICAL/CHEMICAL PROPERTIES

Appearance: Liquid

Melting Point [°C]: 0

Solubility in water: Soluble

Physical State: Semi-Solid

Colour: Dark brown

pH Value: 9.5 - 10.5

Boiling Point [°C]: 102

Odour: Mild, Earthy

Specific Gravity at 20°C Water = 1[g/ml]: 1.02

Vapour Density (Air=1): 0.16

Other Information: Contains no hazardous substance. It is naturally occurring product. Contains traces of alkali.

10: STABILITY & REACTIVITY

Stability: Stable under normal circumstances.

Conditions to Avoid: Excessive heat or freezing temperatures and direct sunlight.

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

Material to Avoid: Strong acid.

11: TOXICOLOGICAL INFORMATION

Toxicity:

LD50 Oral Rat: 1786 mg/kg (rat). This is an estimated value, based on less than 2% KOH in solution

Epidemiology: No information found.

Mutagenicity: No information found.

Reproductive Effects: No information found.

Teratogenicity: 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

Ecotoxicity: Aquatic toxicity: Non-Toxic. Can be used in Aquaculture. Persistence and degradability: Shelf life of 3 years

Persistence/Degradability: No further relevant information available

Bioaccumulative Potential: No further relevant information available.

Results of PBT and vPvB Assessment: Not applicable

Other Adverse Effects: No further relevant information 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. After use empty containers should not be re-used but destroyed by burning or burying.

Contaminated Packaging: Completely emptied packages can be recycled or reused after cleaning and appropriate disposal of the cleaning agents. Handle contaminated packages in the same way as the substance itself.

14: TRANSPORT INFORMATION

General: Non-hazardous material according to transportation regulations. No special precautions are necessary.

Environmental Hazards: Not applicable

Special precautions for Users (ERG No.): Not applicable

UN "Model Regulation": Not applicable

15: REGULATORY INFORMATION

Regulatory Information: Classified as non-hazardous. Substance is subject to any prohibition or restrictions in the country or region where it is being shipped.

Safety: Keep out of reach of children.

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

16: OTHER INFORMATION

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