

SAFETY DATA SHEET



SDS No.:
Date Created: April 28, 2016
Supercedes: NA

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Bio Humic Acid™
General Use: Soil or Foliar Nutrient Enhancer for Plant Growth
Product Description: Dark Brown Liquid

MANUFACTURER
BioScientific, Inc.
4405 S. Litchfield Road
Avondale, Arizona 85323

EMERGENCY TELEPHONE NUMBER:
(800)-424-9300 CHEMTREC USA & CANADA
+1 (703) 527-3887 Int'l & Maritime

2. HAZARD IDENTIFICATION

Components having exposure limits established by recognized authorities

Component	EXPOSURE LIMITS 8 hrs TWA (ppm)			
	OSHA PEL	ACGIH TLV	NIOSH REL	AIHA WEEL
Humic Acid/Humates	None Established	None Established	None Established	None Established
Potassium Hydroxide	None Established	2 mg/m ³	2 mg/m ³	None Established

EMERGENCY OVERVIEW

GHS CLASSIFICATION OF SUBSTANCE

Flammable Liquid	Not Applicable
Aspiration Toxicity	Not Applicable
Skin Irritation	No classification Under GHS
Eye Irritation	Category 2B
Carcinogenicity	No classification Under GHS
Specific Organ Toxicity Repeated Exposure	No classification Under GHS
Specific Organ Toxicity Single Exposure	No Classification Under GHS
Reproductive Toxicity	No Classification Under GHS
Acute Toxicity	No Classification Under GHS
Germ Cell mutagenicity	No Classification Under GHS
Hazardous to the aquatic env.	No classification Under GHS

GHS LABEL ELEMENTS

No pictogram

WARNING

Hazard Statements

H320 - May cause eye irritation if splashed into the eyes

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Precautionary Statements

General:

P101 - If medical advice is needed, have product container or label at hand.

Prevention:

P262 - Do not get in eyes, on skin, or on clothing.

Response:

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P338+351 - EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so.

P337+P313 - If eye irritation persists: Get medical advice/attention.

Storage/Disposal:

P402+P404 - Store in a dry place. Store in a closed container at ambient temperature.

UN GHS

According to the Globally Harmonized Standard for Classification and Labeling (GHS), this product is considered hazardous for eye contact due to alkaline pH.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>wt%</u>	<u>CAS Registry #</u>
Humates	10 - 20	1415-93-6
Potassium Hydroxide	1 - 4	1310-58-3

4. FIRST AID MEASURES

INHALATION:

Material is not sufficiently volatile to create an inhalation hazard unless it is aspirated as a mist in some manner.

If inhalation exposure is suspected, remove person to fresh air and seek medical attention.

EYE CONTACT:

Remove contact lens (if present). Rinse eyes immediately with plenty of clean water for at least 15 minutes.

If necessary, gently hold the eyelid open during the flush. If eye irritation persists, seek medical attention.

SKIN CONTACT:

Immediately wash skin with soap and plenty of water. Consult a physician if redness or irritation occurs.

INGESTION:

The material has an alkaline pH and will neutralize stomach acids. Not expected to cause problems unless a significant quantity is ingested. Seek medical attention if symptoms of indigestion occur.

5. FIRE FIGHTING MEASURES

Flashpoint and Method: Unknown

Flammable Limits: Unknown

Autoignition Temperature: Unknown

GENERAL HAZARD:

Material is water based and not expected to be a significant fire hazard.

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FIRE FIGHTING INSTRUCTIONS:

Water fog or fine spray; dry chemical fire extinguishers; carbon dioxide fire extinguishers; foam; alcohol resistant foams (ATC type).

FIRE FIGHTING EQUIPMENT:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. For small outdoor fires, which may be easily extinguished with a portable fire extinguisher, use of protective equipment is generally unnecessary.

FURTHER INFORMATION:

During a fire, smoke may contain the original material in addition to combustion products which might be more irritating.

HAZARDOUS COMBUSTION PRODUCTS:

Carbon dioxide, carbon monoxide, sulfur oxides, aldehydes and miscellaneous organic gases.

6. ACCIDENTAL RELEASE MEASURES

LAND SPILL RESPONSE:

Material is a nutrient enhancer and designed to be used in soils. Small spills will dissipate on their own. Larger spills can be diluted through mixing impacted soils with other soils to utilize the value of the soil nutrient enhancement.

WATER SPILL:

Material is water based and will mix with the water. Small spill effects are negligible. Large spills may alter the pH of the water body, however, this would need to be a spill of a tank volume rather than a spill of normal packaging.

RECOMMENDED DISPOSAL:

The material is not hazardous according to U.S. EPA CFR 40. Dispose of in accordance with local and state regulatory agency requirements.

7. HANDLING AND STORAGE

STORAGE TEMPERATURE: Ambient

STORAGE PRESSURE: Atmospheric

GENERAL:

Store in a dry location at normal room temperature.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

Component	EXPOSURE LIMITS 8 hrs TWA (ppm)			
	OSHA PEL	ACGIH TLV	NIOSH REL	AIHA WEEL
Humic Acid/Humates	None Established	None Established	None Established	None Established
Potassium Hydroxide	None Established	2 mg/m ³	2 mg/m ³	None Established

ENGINEERING CONTROLS:

None required. An eye wash is recommended if routinely using large volumes as might occur at a growing facility.

PERSONAL PROTECTION:

None required.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Vapor Pressure:	NA	Vapor Density:	Unknown
Specific Gravity:	1.05 gm/cc	Evaporation Rate:	similar to water
Solubility in Water:	disperses in water	Freezing Point:	32 F (stratifies)
		Odor:	slight
pH:	9.8	Appearance:	dark brown
Boiling Point:	>200 F @ 1 atm	Physical State:	liquid
Kinematic Viscosity:	Unknown	Flammable Range:	NA
Flash Point:	NA		

10. STABILITY AND REACTIVITY

GENERAL:

Stable; Avoid ignition sources, and excess heat.

INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID:

Oxidizing agents

HAZARDOUS DECOMPOSITION:

None

11. TOXICOLOGICAL INFORMATION

TOXICITY TO ANIMALS:

<u>Component</u>	<u>Acute Test</u>	<u>Value</u>	<u>Species</u>
Potassium Hydroxide	LD50 oral	273 mg/kg	rat
Humates	LD50 oral	>10 gm/kg	rat

ROUTES OF ENTRY:

Skin contact; eye contact through splashing; and oral contact through accidental ingestion; respiratory inhalation is not a significant route unless a mist is created.

CHRONIC EFFECTS ON HUMANS:

Clinical studies administering Humifulvate concentrate to humans has identified it as an agent removing heavy metals from the system. It is being studied for health properties and does not appear to have negative chronic health impact.

Eyes:

Alkaline pH will cause eye irritation and possible irreversible effects if eyes are not washed immediately after eye contact with the liquid material.

Skin:

Alkaline pH may cause some skin irritation with prolonged contact.

Ingestion:

Ingesting large quantities may result in gastrointestinal distress.

Inhalation:

Not a significant route of exposure unless a mist is created.

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12. ECOLOGICAL INFORMATION

<u>Component</u>	<u>Acute Test</u>	<u>Value</u>	<u>Species</u>
Potassium hydroxide	LC50	80 mg/l 96hr	Western mosquito fish (Gambusia affinis)
Humates are naturally occurring and are not known to be aquatically toxic.			

PRODUCTS OF BIODEGRADATION:

Less toxic than the material, itself.

13. DISPOSAL CONSIDERATIONS

This is not a hazardous waste based on EPA CFR40 unless mixed with something that would render it hazardous. Dispose of in accordance with local and state regulatory requirements.

14. TRANSPORT INFORMATION

The following proper shipping name, hazard class and packing group are in accordance to transportation regulations.

Mode of Transportation	Domestic Surface (USDOT)	Domestic Air	International Air (IATA)
UN Number	Not Regulated	Not Regulated	Not Regulated
Proper Shipping Name			
Hazard Class			
Packing Group			
Hazard Label			
Handling Label(s)			
ERG#:			
Packaging Instructions:			

15. REGULATORY INFORMATION

Chemical Inventory Status

Ingredients listed on: TSCA, DSL, Japan, and EC inventories.

SARA Section 302 - Emergency Planning Notification - None

SARA Section 304 - Emergency Release Notification - None None

SARA 311/312 - Hazard categories for SARA Section 311/312 Reporting - None

CERCLA - Hazardous Substance - None

RCRA Hazardous Waste Classification - None

California Proposition 65:

No components listed on Proposition 65 list of known cancer causing agents.

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16. OTHER INFORMATION

UNITED STATES NATIONAL FIRE PROTECTION ASSOCIATION (U.S. NFPA)

NFPA Category	BioHumic Acid™
Health:	1
Fire:	0
Reactivity:	0

CREATION/REVISION SUMMARY:

Created on:

28-Apr-16

Cheryl Sykora, CIH, CSP, CHMM

Registered Specialist, SDS and Label Authoring #118534

LEGEND TECHNICAL SERVICES, INC.

88 Empire Drive, Saint Paul, Minnesota 55103

651-221-4085



THE INFORMATION RELATES TO THIS SPECIFIC INFORMATION. IT MAY NOT BE VALID FOR THIS MATERIAL IF USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS. IT IS THE USER'S RESPONSIBILITY TO SATISFY ONESELF AS TO THE SUITABILITY AND COMPLETENESS OF THIS INFORMATION FOR HIS OWN PARTICULAR USE. ALL MATERIALS MAY PRESENT UNKNOWN HAZARDS AND SHOULD BE USED WITH CAUTION. ALTHOUGH CERTAIN HAZARDS ARE DESCRIBED HEREIN, WE CANNOT GUARANTEE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.