BIO HUMAC Probiotic Solutions® MicroPlex® UASB						Rev A 11/29/18	
	>						
	SECTIO	N 1: CHEMICAL I	PRODUCT 8				
PRODUCT IDENT	-	biotic Solutions®			duct # 1962		
GENERAL USE:	For	anaerobic digestion	of waste wate	r.			
PRODUCT DESCR	IPTION: Tan	granular powder hav	ving no odor.				
INFORMATION PROV	IFORMATION PROVIDED BY: Bio Huma N 1331 W Hous Gilbert, AZ 8		ston Ävenue			ENCY PHONE NUMBERS	
For	SDS call: PHO	PHONE: (480) 961-1220		C		(In the USA) 800-424-9300 International) 703-527-3887	
		SECTION 2:	HAZARDS	IDENTIFICATI	ON		
	SIGNAL WOR HAZARD STA H320; Causes PRECAUTION P264 - Wash 1 P280 - Wear p P302 + P352 P305 + P351 Present and e P332 + P313 P337 + P313 P362 + P364 Additional Inf Other Hazard sensitization.	eye irritation; H315; NARY STATEMENT: choroughly after hand protective gloves. - IF ON SKIN, wash v + P338 - IF IN EYES asy to do. Continue r - If skin irritation occu - If eye irritation pers - Take off contamina formation: None s: May aggravate ast	Causes skin lling. with soap and : Rinse cautio insing. urs, get medic ists, get medic ted clothing an hmatic, bronc	irritation plenty of water. usly with water for al advice/attention ad wash it before hial systems. Hyp	or several min on. or reuse. persensitive in	utes. Remove conta dividuals are more a	
	SECTIO	ON 3: COMPOSITI	ON & INFO	RMATION ON ACGIH	INGREDIEN	TS OSHA	
<u>COMPONENT</u>	CAS #	OSHA HAZARD	<u>WT %</u>	ACGIH TLV _(TWA)	STEL		STEL
Dolomite	16389-88-1	Inhalation, eye and skin irritant	30-40%	10 mg/m3	None	5 mg/m3	None

SECTION 4: FIRST AID MEASURES				
	respiratory tract. Avoid product handling which results in dust generation. If inhaled, ted area to fresh air. Report situation. Seek medical attention if allergic response or xhibited.			
May cause eye irritation or injury. In case of contact with eyes, flush eyes with water for at least 15 minutes and seek medical attention.				
May cause skin irritation. It is recommended that prolonged direct contact with skin be avoided. In case of contact with skin, wash skin with soap and water. Remove contaminated clothing and wash.				
Ingestion of material ma water. Consult physician	ay cause gastric disturbance, irritation. If swallowed, rinse mouth and throat with tap if symptoms persist.			
Treat exposure symptomatically. NS:				
SI	ECTION 5: FIRE FIGHTING MEASURES			
its (in air, % by volume)	Lower: No data available Upper: No data available			
mperature: Not determ	ined			
D: The Uniform Fire Cod	e health hazard classification for this product is: Irritant.			
	EXTINGUISHING MEDIA: Water fog, foam, CO ₂ or dry chemicals. Use a water fog or spray to cool the containers exposed to the heat of a fire.			
UIPMENT:	Fire fighters should wear full protective equipment, including self-contained breathing apparatus. Material will become slippery if wet.			
BUSTION PRODUCTS:	This material is not highly combustible.			
SECTI	ON 6: ACCIDENTAL RELEASE MEASURES			
	tergent and thoroughly rinse. Dispose of in accordance with federal, state and local			
lot applicable, product car	n be used in water treatment plant.			
	ECTION 7: HANDLING AND STORAGE			
	STORAGE PRESSURE: Ambient			
	ated, area away from incompatible materials and products. y ventilate when handling this product. Provide eyewash capability. o special requirements.			
	remove from contaminar difficulty in breathing is e May cause eye irritation seek medical attention. May cause skin irritation with skin, wash skin with Ingestion of material ma water. Consult physician Treat exposure symptom Treat exposure symptom Structions: Structions: UIPMENT: BUSTION PRODUCTS: UIPMENT: BUSTION PRODUCTS: SECTI Vash down area with de equirements tot applicable, product car Struct: Struct: Ambient			

CONTROL Use a local or general, mechanical exhaust ventilation system capable of maintaining emissions, in the work area, above the ACGIH-TLV, AIHA WEEL or levels that may cause irritation. **MEASURES:** RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT **RESPIRATOR:** Respiratory protection is not normally required. If an ACGIH-TLV is exceeded, a NIOSH approved full facepiece or half mask air-purifying cartridge respirator equipped with an organic vapor cartridge and a dust / mist pre-filter or supplied air may be required. Note: Always consult the respirator manufacturer's data when determining the suitability of respiratory protective devices prior to use. EYES: Safety glasses or goggle are not necessary when handling this product but if utilized wear chemical goggles/safety glasses recommended by ANSI Z87.1-1979. Note: Always consult the protective eyewear manufacturer's data when determining the suitability of protective eyewear prior to use. GLOVES: Use rubber or vinyl gloves when handling this product. Note: Always consult the glove manufacturer's permeation data when determining the suitability of gloves prior to use. **CLOTHING &** Protective clothing is not necessary when handling this product but if utilized wear a rubber or vinyl apron. An eye wash station and safety shower should be available in the work area. Note: Always consult the EQUIPMENT: clothing/equipment manufacturer's permeation data when determining the suitability of clothing/equipment prior to use. Protective footwear is not necessary when handling this product. Note: Always consult the footwear FOOTWEAR: manufacturer's permeation data when determining the suitability of footwear prior to use. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES Appearance: Tan Granular Powder Bulk Density (pounds/ft3): Not applicable **Physical State:** Granular Powder Vapor Pressure: No data available Odor: None Vapor Density (air=1): No data available **Odor Threshold:** No data available Evaporation Rate (n-Butyl Acetate=1): No data available Molecular Formula: Mixture VOC Content / Organic Matter: Nil / No data available Not applicable % Volatile: Molecular Weight: No data available **Boiling Point:** No data available Solubility in H₂O: Soluble **Octanol/Water Partition Coefficient:** Freezing/Melting Point: No data available No data available **Specific Gravity:** No data available pH (as is): NA pH (1% solution): Density (pounds/gallon): No data available No data available SECTION 10: STABILITY AND REACTIVITY **GENERAL:** This product is stable and hazardous polymerization will not occur. **CONDITIONS TO AVOID:** Do not store this product below 50° F (10° C) or above 100° F (37.7° C) INCOMPATIBLE MATERIAL: Strong acids, bases or oxidizers HAZARDOUS DECOMPOSITION PRODUCTS: None known SENSITIVITY TO MECHANICAL IMPACT: This product is <u>not</u> sensitive to mechanical impact. **SENSITIVITY TO STATIC DISCHARGE:** This material is not highly combustible.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

SECTION 11: TOXICOLOGICAL INFORMATION (additional toxicological information in section 16) Components: **Complete Industrial Product** Eye Contact: May be infected by viable organisms Skin Contact: May exhibit dermal sensitivity Oral Rat LD₅₀: No data available Dermal Rabbit LD₅₀: No data available Inhalation Rat LC₅₀: No data available Human Data: No data available Other Toxicological Data: No data available Carcinogenicity: None Teratogenicity: No data available **Mutagenicity:** None reported Synergistic Products: None reported **Target Organs:** Eyes, Skin, lungs **Medical Conditions** Respiratory disorders Aggravated By Exposure: SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE:

This product is completely soluble in water and is not expected to affect the pH of water. No specific environmental fate data is available, but the organic portion of this product is expected to be biodegradable.

ENVIRONMENTAL CONSIDERATIONS:

The aquatic toxicity for this product has not been determined.

SECTION 13: DISPOSAL CONSIDERATIONS

RCRA 40 CFR 261 CLASSIFICATON:

Non-RCRA Hazardous Waste (United States)

U.S. EPA WASTE NUMBER/DESCRIPTION: Not applicable

If this product is disposed of as shipped, it does not meet the criteria of a hazardous waste as defined under 40 CFR 261, in that it does not exhibit the characteristics of a hazardous waste of Subpart C, nor is it listed as a hazardous waste under Subpart D due to toxicity. As a non-hazardous liquid waste, it should be disposed of in accordance with all local, state, and federal regulations. Consult state or local officials for proper disposal method.

	SECTION 14: TRANSPORTATION INFORMATION
DOT PROPER SHIPPING NAME:	NOT DOT REGULATED (UNITED STATES)
	Hazard Class: Not applicable UN Number: Not applicable Packing Group: Not applicable
	Primary Label: None Required Subsidiary Label(s): None Required
	Primary/Subsidiary Placards: None Required
DOT Reportable Quantity (RQ):	Not listed RQ for Product: Not applicable
Marine Pollutant:	No
2012 North American Emergency I	Response Guidebook No.: Not applicable
TDG PROPER SHIPPING NAME:	NOT RESTRICTED
	Hazard Class: Not applicable UN Number: Not applicable Packing Group: Not applicable
	Primary Label: None Required Subsidiary Label(s): None Required
	Primary/Subsidiary Placards: None Required
TDG Reportable Quantity (RQ): #	Not applicable
TDG Schedule XII:	Not listed
Regulated Limit (RL): ##	Not listed RL for Product: Not applicable
Other Shipping Information:	None

Canadian Transportation of Dangerous Goods Regulations (TDGR), Part IX, Table I, Quantities or levels for Immediate Reporting: releases of reportable quantities, RQ, that meet the definition of a "dangerous occurrence" (a threat to life, health, property, or the environment) must be reported to the appropriate authorities as outlined in TDGR 9.13(1) and 9.14(1). ## Reporting to Environment Canada is required for any releases exceeding the regulated limits, RL, of 9.2 materials (primary or secondary). The regulated limits are found in Schedule XIII of the TDGR.

SECTION 15: REGULATORY INFORMATION

COMPONENTS:	<u>Complete lı</u> Product	<u>ndustrial</u>			
OSHA Target Organs:	Not determined				
Carcinogenic Potential:					
Regulated by OSHA:	No				
Listed on NTP Report:	No				
Listed by IARC:	No				
IARC Group:	No				
ACGIH Appendix A:	Not listed				
A1 Confirmed Human:	Not applicable				
A2 Suspected Human:	Not applicable				
U.S. EPA Requirements					
Release Reporting					
CERCLA (40 CFR 302)					
Listed Substance:	Not listed				
Reportable Quantity:	Not applicable				
Category:	Not applicable				
RCRA Waste No.:	Not applicable				
Unlisted Substance:	Not applicable				
Reportable Quantity:	Not applicable				
Characteristic:	Not applicable				
RCRA Waste No.:	Not applicable				
SARA TITLE III					
Section 302 & 303 (40 CFR 355):					
Listed Substance:	Not listed				
Reportable Quantity:	Not applicable				
Planning Threshold:	Not applicable				
Section 311 & 312 (40 CFR 370):					
	Fire: N Sudde	en Release of Pressure: N	Reactive: N	Acute Health: Y	Chronic Health: N
Planning threshold:	10,000 pounds	-	—	-	—
Section 313 (40 CFR 372):					
Listed Toxic Chemical:	Not listed				
Reporting Threshold:	Not applicable				

SECTION 15: REGULATORY INFORMATION (Continued)

U.S. TSCA Status	
Listed (40 CFR 710):	No
State Regulations	
State of California: Safe Drin	king Water and Toxins Enforcement Act, 1986 (Proposition 65):
Carcinogen:	No
Reproductive Toxin:	No
Other Regulations	
State Right To Know Laws:	None
Canadian Regulations	
Product Information:	
Controlled Product:	NA
WHMIS Hazard Symbols:	NA
WHMIS Class & Division:	NA
Ingredient Information:	
IDL Substance:	No
DSL or NDSL Lists:	DSL
	SECTION 16: OTHER INFORMATION
EPA Registration number:	
Approved Broduct Uses:	For approximation of worth water

Approved Product Uses:

For anaerobic digestion of waste water.

Special Notes:

This product is not manufactured, or formulated to contain substances, which the State of California has found to cause cancer and/or birth defects or other reproductive harm. Components not precisely identified are proprietary or non-hazardous.

The microbes in this product are Class 1 microbes, defined by the US Centers for Disease Control as not likely to cause disease in healthy humans and animals. However, contact with open wounds should be avoided; persons who have a compromised immune system or a history of severe allergic response should avoid contact and/or breathing dust or mist from product handling or manufacturing processes.

Special Instructions:

Store UASB in a cool, dry, well ventilated, area away from incompatible materials and products. Do not add strong alkali, caustics, oxidizers or antimicrobial chemicals to this product.

SDS Revision Information: Revised Date: NA

SDS Distributed by: Bio Huma Netics, Inc.

Prepared By: Frank S. Pidgeon, Sr. EHSS Director	Date Prepared:	November 29 th 2018
--	----------------	--------------------------------

This Material Safety Data Sheet is provided as an information resource only. It should not be taken as a warranty or representation for which Bio Huma Netics, Inc. assumes legal liability. While Bio Huma Netics, Inc. believes the information contained herein is accurate and compiled from sources believed to be reliable, it is the responsibility of the user to investigate and verify its validity. The buyer assumes all responsibility of using and handling the product in accordance with applicable federal, state, and local regulations.