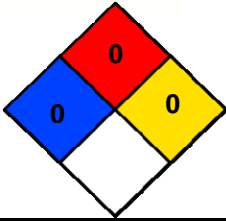




SAFETY DATA SHEET

Probiotic Solutions® Micro Plex-BP

Rev A 3 -2-16



HMIS	
HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	0
PPE	A

SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION

PRODUCT IDENTIFIER: Probiotic Solutions® Micro Plex-BP® **Product # 1950**

GENERAL USE: Used to establish/augment microbial ecosystems for bioremediation of waste water and for increased bio-oxidation.

PRODUCT DESCRIPTION: A solid brown to grayish brown block.

INFORMATION PROVIDED BY: Bio Huma Netics
1331 W Houston Avenue
Gilbert, AZ 85233

EMERGENCY PHONE NUMBERS

For SDS call: **PHONE: (480) 961-1220**

**CHEMTREC: (In the USA) 800-424-9300
(International) 703-527-3887**

SECTION 2: HAZARDS IDENTIFICATION

HAZARDS OVERVIEW: A solid brown to grayish brown block having a slight earthy organic ammonia odor. The material may be irritating to the eyes and skin. Ingestion of this product may cause gastrointestinal irritation.

CLASSIFICATION: HAZARD CATEGORY 2B – SERIOUS EYE DAMAGE/IRRITATION

SIGNAL WORD: WARNING

HAZARD STATEMENT: H320 – Causes eye irritation

PRECAUTIONARY STATEMENT: P337 + P313 – If eye irritation persists get medical advice/attention

CLASSIFICATION: HAZARD CATEGORY 3 – CAUSES MILD SKIN IRRITATION

SIGNAL WORD: WARNING

HAZARD STATEMENT: H316 – Causes mild skin irritation

PRECAUTIONARY STATEMENT: P332 + P313; If skin irritation occurs; get medical advice/attention

SECTION 3: COMPOSITION & INFORMATION ON INGREDIENTS

COMPONENT	CAS #	OSHA HAZARD	WT %	ACGIH		OSHA	
				TLV _(TWA)	STEL	PEL _(TWA)	STEL
Biological Growth Stimulants	NA	None	6 – 10%	10mg/m3*	None	15mg/m3 (total)* 5mg/m3 (respirable)*	None
Proprietary Organic Compounds	NA	None	6 – 9%	10mg/m3*	None	15mg/m3 (total)* 5mg/m3 (respirable)*	None
Sodium Nitrate	7631-99-4	Oxidizer; eye, skin and respiratory irritant	2 – 5%	10mg/m3*	None	15mg/m3 (total)* 5mg/m3 (respirable)*	None

*Applies to nuisance particulates not otherwise regulated

SECTION 4: FIRST AID MEASURES

- INHALATION:** May cause slight respiratory tract irritation, remove to fresh air. If breathing is difficult, give oxygen. Call a physician.
- EYE CONTACT:** In case of contact, immediately flush eyes with plenty of clean running water for at least 15 minutes, lifting the upper and lower lids occasionally. Remove contact lenses, if worn. Get medical attention if irritation persists.
- SKIN CONTACT:** In case of contact, wash exposed area with soap and water. Remove contaminated clothing and shoes and wash before reuse. If irritation occurs and persists, seek medical attention.
- INGESTION:** May cause nausea or diarrhea if ingested. If large quantities of this product are ingested, call a physician immediately. DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

NOTE TO PHYSICIANS:

Based on component information, this product is slightly toxic by ingestion. If a large amount is ingested, consideration should be given to careful endoscopy as stomach or esophageal irritation may occur. Treat exposure symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

Flashpoint and Method: This product does not flash.

Flammable Limits (in air, % by volume) **Lower:** No data available **Upper:** No data available

Autoignition Temperature: Not determined

GENERAL HAZARD: This product is a solid mixture of organic compounds. The Uniform Fire Code health hazard classification for this product is: **Irritant**. It may produce hazardous decomposition products.

FIRE FIGHTING INSTRUCTIONS: **EXTINGUISHING MEDIA:** Water fog, foam, CO₂ or dry chemicals.
Use a water fog or spray to cool the containers exposed to the heat of a fire.

FIRE FIGHTING EQUIPMENT: Fire fighters should wear full protective equipment, including self-contained breathing apparatus.

HAZARDOUS COMBUSTION PRODUCTS: None known

SECTION 6: ACCIDENTAL RELEASE MEASURES

RELEASE TO LAND: Product is live microorganisms in vegetative form, is considered biodegradable and intended as an amendment to treat waste water. Wash spilled product into waste water stream.

RELEASE TO WATER: Product is live microorganisms in vegetative form and is considered biodegradable.

SECTION 7: HANDLING AND STORAGE

STORAGE TEMPERATURE: Between 50° – 80° F

STORAGE PRESSURE: Ambient

GENERAL: Store in a cool, dry place between 50-80 degrees F, away from incompatible materials and products. Protect eyes, skin and clothing from contact with product. Wear recommended personal protective equipment when handling this product. Do not take internally. Keep the container tightly closed when not in use. Wash thoroughly after handling this product.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL MEASURES: Use appropriate PPE such as gloves, a mechanical exhaust ventilation system to keep levels below what may cause irritation.

RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT

RESPIRATOR: Respiratory protection is not normally required. If use creates mists or aerosols, or 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: When handling this product utilized Neoprene or Nitrile gloves. **Note:** Always consult the glove manufacturer's permeation data when determining the suitability of gloves prior to use.

CLOTHING & EQUIPMENT: Protective clothing is not necessary when handling this product but if utilized wear a Neoprene apron. An eye wash station and safety shower should be available in the work area. **Note:** Always consult the clothing/equipment manufacturer's permeation data when determining the suitability of clothing/equipment prior to use.

FOOTWEAR: Protective footwear is not necessary when handling this product. **Note:** Always consult the footwear manufacturer's permeation data when determining the suitability of footwear prior to use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Brown-grayish solid	Bulk Density (pounds/ft³):	No data available
Physical State:	Solid	Vapor Pressure:	No data available
Odor:	Slight, organic/ammonia odor	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:	Nil
Molecular Weight:	No data available	% Volatile:	No data available
Boiling Point:	No data available	Solubility in H₂O:	Soluble
Freezing/Melting Point:	No data available	Octanol/Water Partition Coefficient:	No data available
Specific Gravity:	Approximately 3.0g/cc	pH (as is):	No data available
Density (pounds/gallon):	No data available	pH (1% solution):	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 80° F

INCOMPATIBLE MATERIAL: Oxidizers, reducing agents, caustics, strong alkaline materials and antimicrobial chemicals.

HAZARDOUS DECOMPOSITION PRODUCTS: None known

SENSITIVITY TO MECHANICAL IMPACT: This product is not sensitive to mechanical impact.

SENSITIVITY TO STATIC DISCHARGE: This product is not sensitive to static discharge.

SECTION 11: TOXICOLOGICAL INFORMATION (additional toxicological information in section 16)

Components:	<u>Biological Growth Stimulants</u>	<u>Proprietary Organic Compounds</u>	<u>Sodium Nitrate</u>
Eye Contact:	No data available	No data available	Causes eye irritation with redness, itching, and pain
Skin Contact:	No data available	No data available	Causes skin irritation with redness, itching, and pain
Oral Rat LD₅₀:	No data available	No data available	1267 mg/kg
Dermal Rabbit LD₅₀:	No data available	No data available	No data available
Inhalation Rat LC₅₀:	No data available	No data available	No data available
Human Data:	No data available	No data available	No data available
Other Toxicological Data:	No data available	No data available	No data available
Carcinogenicity:	Not listed by ACGIH, IARC, NTP, or CA Prop 65.	Not listed by ACGIH, IARC, NTP, or CA Prop 65.	Not listed by ACGIH, IARC, NTP, or CA Prop 65.
Teratogenicity:	No data available	No data available	No data available
Mutagenicity:	No data available	No data available	Mutagenic for bacteria and/or yeast. May cause damage to the following organs: blood.
Synergistic Products:	None reported	None reported	None reported
Target Organs:	Eyes, Skin, Mucous membranes	Eyes, Skin, Mucous membranes	Blood, respiratory system, eyes, skin
Medical Conditions Aggravated By Exposure:	Skin disorders	Skin disorders	Blood disorders

SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE:

This product is 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 CLASSIFICATION: 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 waste solid, 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 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>Biological Growth Stimulants</u>	<u>Proprietary Organic Compounds</u>	<u>Sodium Nitrate</u>
OSHA Target Organs:	Not determined	Not determined	Not determined
<u>Carcinogenic Potential:</u>			
Regulated by OSHA:	No	No	No
Listed on NTP Report:	No	No	No
Listed by IARC:	No	No	No
IARC Group:	Not applicable	Not applicable	Not applicable
ACGIH Appendix A:	Not listed	Not listed	Not listed
A1 Confirmed Human:	Not applicable	Not applicable	Not applicable
A2 Suspected Human:	Not applicable	Not applicable	Not applicable
<u>U.S. EPA Requirements</u>			
Release Reporting			
CERCLA (40 CFR 302)			
Listed Substance:	Not listed	Not listed	Not listed
Reportable Quantity:	Not applicable	Not applicable	Not applicable
Category:	Not applicable	Not applicable	Not applicable
RCRA Waste No.:	Not applicable	Not applicable	Not applicable
Unlisted Substance:	Not applicable	Not applicable	Not applicable
Reportable Quantity:	Not applicable	Not applicable	Not applicable
Characteristic:	Not applicable	Not applicable	Not applicable
RCRA Waste No.:	Not applicable	Not applicable	Not applicable
<u>SARA TITLE III</u>			
Section 302 & 303 (40 CFR 355):			
Listed Substance:	Not listed	Not listed	Not listed
Reportable Quantity:	Not applicable	Not applicable	Not applicable
Planning Threshold:	Not applicable	Not applicable	Not applicable
Section 311 & 312 (40 CFR 370):			
Hazard Categories (product):	Fire: <u>N</u>	Sudden Release of Pressure: <u>N</u>	Reactive: <u>N</u>
Planning threshold:	10,000 pounds	10,000 pounds	10,000
Section 313 (40 CFR 372):			
Listed Toxic Chemical:	Not listed	Not listed	Listed
Reporting Threshold:	Not applicable	Not applicable	10,000

SECTION 15: REGULATORY INFORMATION (Continued)

	<u>Biological Growth Stimulants</u>	<u>Proprietary Organic Compounds</u>	<u>Sodium Nitrate</u>
<u>U.S. TSCA Status</u>			
Listed (40 CFR 710):	No	No	Yes
<u>State Regulations</u>			
State of California: Safe Drinking Water and Toxins Enforcement Act, 1986 (Proposition 65):			
Carcinogen:	No	No	No
Reproductive Toxin:	No	No	No
<u>Other Regulations</u>			
State Right To Know Laws:	None	None	None
<u>Canadian Regulations</u>			
Product Information:			
Controlled Product:	No		
WHMIS Hazard Symbols:	NA		
WHMIS Class & Division:	NA		
Ingredient Information:			
IDL Substance:	No	No	Yes
DSL or NDSL Lists:	DSL	DSL	DSL

SECTION 16: OTHER INFORMATION

EPA Registration number: Not applicable

Approved Product Uses: To balance microbial ecosystems for bioremediation of water and soil for increased bio-oxidation.

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.

Special Instructions:

Store Micro Plex-BP® in a cool, dry, well ventilated, area away from incompatible materials and products. When making dilutions, always add this product to water, or aqueous solutions, with adequate mixing to ensure a uniform solution. Do not add strong alkali, caustics or antimicrobial chemicals to this product.

SDS Revision Information: Revised Date: NA

SDS Distributed by: Bio Huma Netics

Prepared By: Frank S. Pidgeon, EHS Director	Date Prepared: March 3 rd 2016
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