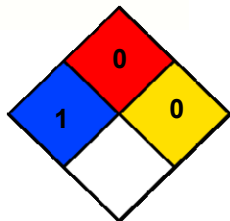




# SAFETY DATA SHEET

## Probiotic Solutions® Micro Plex-FLP

Rev B 1/25/18



HMIS	
HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0
PPE	A

### SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION

**PRODUCT IDENTIFIER:** Probiotic Solutions® Micro Plex-FLP **Product #958**

**GENERAL USE:** Used in biological treatment plants receiving aqueous wastes from pulping and paper making operations.

**PRODUCT DESCRIPTION:** A tan granular powder having a slight organic odor.

**INFORMATION PROVIDED BY:** Bio Huma Netics, Inc.  
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 tan granular powder having a slight organic odor. Dust may be irritating to the eyes and skin, inhalation of dust may be irritating to the entire respiratory tract. Ingestion of this product may cause gastrointestinal irritation.



**CLASSIFICATION:** HAZARD CATEGORY 2 and 2A

**SIGNAL WORD:** WARNING

**HAZARD STATEMENT:** H319 – eye irritant, H315 skin irritant

**PRECAUTIONARY STATEMENT:** P261 - Avoid breathing fumes or vapors.

P264 - Wash hands thoroughly after handling.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P280 - Wear protective gloves.

P302 + P352 - IF ON SKIN: Wash with soap and plenty of water.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333 + P313 - If skin irritation or rash occurs, get medical advice/attention.

P337 + P313 - If eye irritation persists, get medical advice/attention.

P362 + P364 - Take off contaminated clothing and wash it before reuse.

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

**Additional Information:** 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. Crystalline silica is a known cause of silicosis (a non-cancerous lung disease). Prolonged and/or repeated inhalation must be avoided.

### SECTION 3: COMPOSITION & INFORMATION ON INGREDIENTS

COMPONENT	CAS #	OSHA HAZARD	WT %	ACGIH		OSHA	
				TLV <sub>(TWA)</sub>	STEL	PEL <sub>(TWA)</sub>	STEL
Dolomite	16389-88-1	Inhalation, eye and skin irritant	<45%	10 mg/m3	None	5 mg/m3	None
Urea	57-13-6	Inhalation/Irritant	1-3%	10 mg/m3 {3*	None	15 mg/m3 {5}*	None
Diammonium Phosphate	7783-28-0	Eye and skin irritant	<1%	10 mg/m3 {3}*	None	15 mg/m3 {5}*	None
Protease	9014-01-1	Inhalation, eye and skin irritant	<1%	0.00006 mg/m3 (as pure protease)	None	None	None
Amylase	9000-90-2	Inhalation	<1%	None	None	None	None
Crystalline Silica	14808-60-7	Inhalation	<0.4%	0.1 mg/m3	None	0.1 mg/m3	None

\* Specific limits not set for these chemicals. Limits are shown for Particles Not Otherwise Regulated (PNOR) or Particles Not Otherwise Classified (PNOC). First number is for total dust second number { } is for respirable dust

#### SECTION 4: FIRST AID MEASURES

- INHALATION:** May cause sensitization by inhalation in hypersensitive individuals. Avoid product handling which results in dust generation. If inhaled, remove from contaminated area to fresh air. Report situation. Seek medical attention if allergic response exhibited.
- EYE CONTACT:** Product may cause eye irritation. Direct contact with eyes should be avoided. In case of contact with eyes, flush eyes with water for at least 15 minutes. If irritation persists, seek medical attention.
- SKIN CONTACT:** Product may cause skin irritation. Direct contact with skin should be avoided. In case of contact with skin, wash skin with soap and water. Remove contaminated clothing and wash.
- INGESTION:** Ingestion of material may cause mouth and throat irritation and/or gastric disturbance. If swallowed, rinse mouth and throat with tap water. Drink water.
- 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, with possible central nervous system effects following absorption into the blood stream. Careful gastric lavage with an endotracheal tube in place should be considered. 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 organic compound. The Uniform Fire Code health hazard classification for this product is: **Irritant**.

**FIRE FIGHTING INSTRUCTIONS:**      **EXTINGUISHING MEDIA:** Water fog, foam, CO<sub>2</sub> 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:** This material is not highly combustible but contains organic matter which may be explosive as a dust in very high concentrations. Generally considered a low explosion hazard.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

**RELEASE TO LAND:** Spilled product should be removed immediately to avoid formation of dust. Dispose of in accordance with federal, state and local requirements

**RELEASE TO WATER:** Spilled product should be removed immediately to avoid formation of dust. Dispose of in accordance with federal, state and local requirements

#### SECTION 7: HANDLING AND STORAGE

**STORAGE TEMPERATURE:** Ambient

**STORAGE PRESSURE:** Ambient

**GENERAL:** Store in a cool, dry, well-ventilated, area away from incompatible materials and products. Avoid creating dust. Adequately ventilate when handling this product. Provide eyewash capability. Store in a suitable container, No special requirements. This material is not highly combustible but contains organic matter which may be explosive as a dust in very high concentrations. Generally considered a low explosion hazard.

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

**CONTROL MEASURES:** 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.

### RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT

**RESPIRATOR:** Respiratory protection is not normally required. If use creates dusts, 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:** 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 & EQUIPMENT:** 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 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

<b>Appearance:</b>	Tan granular powder	<b>Bulk Density (pounds/ft<sup>3</sup>):</b>	Not applicable
<b>Physical State:</b>	Solid	<b>Vapor Pressure:</b>	No data available
<b>Odor:</b>	Slight organic odor	<b>Vapor Density (air=1):</b>	No data available
<b>Odor Threshold:</b>	No data available	<b>Evaporation Rate (n-Butyl Acetate=1):</b>	Not applicable
<b>Molecular Formula:</b>	Mixture	<b>VOC Content / Organic Matter:</b>	Nil / No data available
<b>Molecular Weight:</b>	Not applicable	<b>% Volatile:</b>	No data available
<b>Boiling Point:</b>	Not applicable	<b>Solubility in H<sub>2</sub>O:</b>	<5%
<b>Freezing/Melting Point:</b>	No data available	<b>Octanol/Water Partition Coefficient:</b>	No data available
<b>Specific Gravity:</b>	No data available	<b>pH (as is):</b>	Not applicable
<b>Density (pounds/gallon):</b>	No data available	<b>pH (1% solution):</b>	6 to 9

## 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 90° F (30° C)

**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 material is not highly combustible but contains organic matter which may be explosive as a dust in very high concentrations. Generally considered a low explosion hazard.

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

<b>Components:</b>	<u>Complete Industrial Product</u>
<b>Eye Contact:</b>	Irritating to eyes
<b>Skin Contact:</b>	Irritating to skin
<b>Oral Rat LD<sub>50</sub>:</b>	No data available
<b>Dermal Rabbit LD<sub>50</sub>:</b>	No data available
<b>Inhalation Rat LC<sub>50</sub>:</b>	No data available
<b>Human Data:</b>	No data available
<b>Other Toxicological Data:</b>	No data available
<b>Carcinogenicity:</b>	No data available; This product does not contain any known or anticipated carcinogens according to criteria of the NFP Annual Report on carcinogens and OSHA 29 CFR § 1920, Z
<b>Teratogenicity:</b>	No data available
<b>Mutagenicity:</b>	No data available
<b>Synergistic Products:</b>	None reported
<b>Target Organs:</b>	Eyes, Skin, Mucous membranes
<b>Medical Conditions Aggravated By Exposure:</b>	Skin disorders

## 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 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 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 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:** Complete Industrial  
Product

**OSHA Target Organs:** Not determined

### Carcinogenic Potential:

**Regulated by OSHA:** No  
**Listed on NTP Report:** No  
**Listed by IARC:** No  
IARC Group: Not applicable  
**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):**

Hazard Categories (product): **Fire: N**    **Sudden 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 Drinking 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: **No**

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:** 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-FLP® 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: 1/25/18

**SDS Distributed by:** Bio Huma Netics, Inc.

**Prepared By:** Frank S. Pidgeon, Sr. EHSS Director

**Date Prepared:** August 2<sup>nd</sup> 2016

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