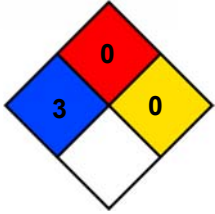




SAFETY DATA SHEET

HUMA GRO® Sili-Max



HMIS	
HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	0
PPE	C

SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION

PRODUCT IDENTIFIER:	HUMA GRO® Sili-Max	Product# 303
GENERAL USE:	Used as a part of a plant nutrition program.	
PRODUCT DESCRIPTION:	A clear to slightly hazy, amber liquid having no characteristic odor.	
SUPPLIER INFORMATION:	Bio Huma Netics, Inc. 1331 W Houston Avenue Gilbert, AZ 85233	EMERGENCY PHONE NUMBERS
For Additional SDS call:	PHONE: (480) 961-1220	CHEMTREC: (In the USA) 800-424-9300 (International) 703-527-3887

SECTION 2: HAZARDS IDENTIFICATION

HAZARDS OVERVIEW:

A clear to slightly hazy, amber liquid having no characteristic odor. The liquid and mists may be severely irritating to the eyes. The liquid and mists may cause irritation to the skin and respiratory tract. This product may be slightly corrosive to Aluminum, Magnesium, Lead, Tin and Zinc.

CLASSIFICATION: MILD SKIN IRRITATION – HAZARD CATEGORY 3

SIGNAL WORD: WARNING

HAZARD STATEMENT: H316 - WARNING - causes mild skin irritation

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

SECTION 3: COMPOSITION & INFORMATION ON INGREDIENTS

COMPONENT	CAS #	OSHA HAZARD	WT %	ACGIH		OSHA	
				TLV _(TWA)	STEL	PEL _(TWA)	STEL
Silicic Acid, Sodium Salt	1344-09-8	Eye, skin and respiratory irritant	20 ± 1	None	None	None	None
				NDA = No Data Available		N/A = Not Applicable	

SECTION 4: FIRST AID MEASURES

INHALATION:	If inhaled, immediately move to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. 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.
SKIN CONTACT:	In case of contact, flush skin with plenty of clean running water. Remove contaminated clothing and shoes, and wash before reuse. If irritation occurs and persists, get medical attention.
INGESTION:	If swallowed, give plenty of water to drink. Call a physician. DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
NOTE TO PHYSICIANS:	Treat exposure symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

Flashpoint and Method: This product does not flash.

Flammable Limits (in air, % by volume) **Lower:** Not applicable **Upper:** Not applicable

Autoignition Temperature: Not applicable

GENERAL HAZARD: This product is primarily an alkaline, aqueous solution of an inorganic salt. The Uniform Fire Code health hazard classification for this product is: **Irritant**. Spills of this product may be slippery. This product may produce hazardous mists or hazardous decomposition products.

FIRE FIGHTING INSTRUCTIONS: **EXTINGUISHING MEDIA:** Water, foam, CO₂ or dry chemicals.
Use the extinguishing media appropriate for the surrounding fire. Use a water spray or fog 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: When heated to dryness and decomposition, it emits toxic silicon dioxide and sodium oxide, with trace or ultra-trace toxic oxide amounts, of nitrogen, phosphorus, potassium, sulfur, iron, zinc, manganese and carbon.

SECTION 6: ACCIDENTAL RELEASE MEASURES

RELEASE TO LAND: Wearing recommended protective equipment and clothing, dike the spill and pick up the bulk of liquid using pumps or a vacuum truck, or absorb the liquid in sand or a commercial absorbent. Place in approved containers for recovery, disposal, or satellite accumulation. Neutralize the alkalinity, of the remaining liquid, using a dilute acid solution appropriate for neutralizing alkaline liquids. Liberally cover the spill area with sodium bicarbonate. Flush the spill area with water; collect the rinsates for disposal or sewer, as appropriate.

RELEASE TO WATER: Wear recommended protective equipment and clothing if contact with hazardous material can occur. Stop or divert water flow. Dike contaminated water and remove for disposal and/or treatment. As appropriate, notify all downstream users of possible contamination.

SECTION 7: HANDLING AND STORAGE

STORAGE TEMPERATURE: Ambient **STORAGE PRESSURE:** Ambient

GENERAL: Store in a cool, dry area away from incompatible materials and products. Protect against product freezing. Protect eyes, skin and clothing from contact with this product. Wear recommended personnel protective equipment. Avoid breathing mists or aerosols. Use with adequate ventilation. Keep the container tightly closed when not in use. Wash thoroughly after handling this product.

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 below the OSHA-PEL, ACGIH-TLV or levels that may cause irritation.

RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT

RESPIRATOR: A respirator is not normally required in handling this product. If use generates a mist or aerosol that may cause irritation, a NIOSH approved full facepiece or half mask air-purifying cartridge respirator equipped with a good mist/particulate cartridge or supplied air is recommended. **Note:** Always consult the respirator manufacturer's data when determining the suitability of respiratory protective devices prior to use.

EYES: Wear chemical goggles (recommended by ANSI Z87.1-1979), unless a full facepiece respirator is worn. **Note:** Always consult the protective eyewear manufacturer's data when determining the suitability of protective eyewear prior to use.

GLOVES: Wear Nitrile, Butyl Rubber or Natural Rubber gloves. **Note:** Always consult the glove manufacturer's permeation data when determining the suitability of gloves prior to use.

CLOTHING & EQUIPMENT: Wear a Nitrile, Butyl Rubber or Natural Rubber apron when handling this product. 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: Wear Nitrile, Butyl Rubber or Natural Rubber boots when cleaning up a spill or if contact is likely. **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:	Clear to slightly hazy, light tan	Bulk Density (pounds/ft³):	Not applicable
Physical State:	Liquid	Vapor Pressure:	No data available
Odor:	No characteristic odor	Vapor Density (air=1):	Greater than 1
Odor Threshold:	No data available	Evaporation Rate (n-Butyl Acetate=1):	Less than 1
Molecular Formula:	Mixture	VOC Content / Organic Matter:	Nil / 0.26%
Molecular Weight:	Not applicable	% Volatile:	Approximately 90
Boiling Point:	Greater than 100° C. (212° F.)	Solubility in H₂O:	Complete
Freezing/Melting Point:	Less than 0° C. (32° F.)	Octanol/Water Partition Coefficient:	No data available
Specific Gravity:	1.15 – 1.35 @ 20° C.	pH (as is):	11.0 – 12.0
Density (pounds/gallon):	Approximately 10.6	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 90° F (30° C)

INCOMPATIBLE MATERIAL: Acids and acidic materials or products, Aluminum, Magnesium Lead, Tin and Zinc.

HAZARDOUS DECOMPOSITION PRODUCTS: When heated to dryness and decomposition, it emits toxic oxides of silicon and sodium, with trace or ultra-trace toxic oxide amounts, of nitrogen, phosphorus, potassium, sulfur, iron, zinc, manganese and carbon.

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

Components:	<u>Silicic Acid, Sodium Salt</u>
Eye Contact:	Rabbit: 10mg/24 hours; Severe
Skin Contact:	Rabbit: 500mg/24 hours; Severe
Oral Rat LD₅₀:	1,960 mg/kg
Dermal Rabbit LD₅₀:	Greater than 4,640 mg/kg
Inhalation Rat LC₅₀:	No data available
Human Data:	No data available
Other Toxicological Data:	No data available
Carcinogenicity:	No data available
Teratogenicity:	No data available
Mutagenicity:	No data available
Synergistic Products:	None reported
Target Organs:	Eyes, skin, mucous membranes and lungs
Medical Conditions Aggravated By Exposure:	Skin or respiratory disorders

SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE:

This product is completely soluble in water. No specific environmental fate data is available. This product may slightly affect the pH of water.

ENVIRONMENTAL CONSIDERATIONS:

The aquatic toxicity for this product has not been determined. The aquatic toxicity for Silicic Acid, Sodium salt is: Mosquito fish 96 hour TLm (fresh water) = 2,320 ppm.

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

Hazard Class: Not applicable **UN Number:** Not applicable **Packing Group:** Not applicable

Primary Label: None required **Subsidiary Label(s):** None

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: Corrosive

TDG Reportable Quantity (RQ): * Not applicable

TDG Schedule XII: Not applicable

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: Silicic Acid, Sodium Salt

OSHA Target Organs: Eyes, Skin, mucous membranes and lungs

Carcinogenic Potential:

Regulated by OSHA: No

Listed on NTP Report: No

Listed by IARC: No

IARC Group: 2B

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

SECTION 15: REGULATORY INFORMATION (Continued from Page 4)

COMPONENTS: Silicic Acid, Sodium Salt

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

U.S. TSCA Status

Listed (40 CFR 710): Yes

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 known

Canadian Regulations

Product Information:

Controlled Product: Yes
WHMIS Hazard Symbols: Material causing other toxic effects
WHMIS Class & Division: D.2B

Ingredient Information:

IDL Substance: No
DSL or NDSL Lists: DSL

SECTION 16: OTHER INFORMATION

EPA Registration number: Not applicable

Approved Product Uses: Used as a part of a plant nutrition program.

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. However, as it contains mined minerals, this product may contain trace (parts per million) or ultra-trace (parts per billion) of elements known to the State of California to cause cancer, birth defects or other reproductive harm.

Special instructions: Store Silimax™ in an area that is protected from freezing temperatures and away from incompatible materials and products. If it is mixed with acids or acidic materials, this product may form a gel or precipitate that is insoluble in water. Always clean up spills promptly as this product is slippery. If allowed to dry, this product can form a glass film, which can easily cut the skin. Do not add this product to hypochlorite bleaches, chlorine sanitizers or chlorinated cleaners as this liberates toxic, corrosive Chlorine gas.

SDS Revision Information: Revised Date: 4/24/18

SDS Distributed by: Bio Huma Netics, Inc.

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

Date Prepared: October 21, 2014

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