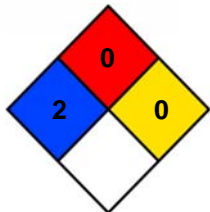




SAFETY DATA SHEET

HUMA GRO® Promax



HMIS	
HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	0
PPE	B

SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION

PRODUCT IDENTIFIER:	HUMA GRO® Promax	Product# 840
GENERAL USE:	Used as a part of a plant nutrition program containing essential minerals, thyme oil and other natural ingredients.	
PRODUCT DESCRIPTION:	A hazy to opaque, brownish liquid having a unique characteristic odor.	
SUPPLIER INFORMATION:	Bio Huma Netics 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 hazy to opaque, brownish, slightly acidic liquid having a unique characteristic odor. Exposure to this product's mists or liquid may cause severe irritation to the eyes and may cause irritation to the skin and respiratory tract. This product can be toxic upon ingestion. It may cause an allergic reaction to sensitive persons.

CLASSIFICATION: HAZARD CATEGORY 5 - MAY BE HARMFUL IF SWALLOWED

SIGNAL WORD: WARNING

HAZARD STATEMENT: H303 - WARNING – may be harmful if swallowed

PRECAUTIONARY STATEMENT: P312; Call a poison center/doctor/physician if you feel unwell

SECTION 3: COMPOSITION & INFORMATION ON INGREDIENTS

COMPONENT	CAS #	OSHA HAZARD	WT %	ACGIH		OSHA	
				TLV _(TWA)	STEL	PEL _(TWA)	STEL
Thyme Oil	8007-46-3	Combustible Liquid; Eye, Skin & Respiratory Irritant; Moderately Toxic by Ingestion	3 ± 1	None	None	None	None
Thymol	89-83-8	Combustible Liquid; Eye, Skin & Respiratory Irritant; Moderately Toxic by Ingestion; Liver, Kidney & Central Nervous System toxin	2.5 ± 1	None	None	None	None
Glycerin	56-81-5	Mild Eye & Skin Irritant; Mild to Moderate Respiratory Irritant	2 ± 1	10 mg/m ³ (Mists)	None	Mist: Total Mist = 15 mg/m ³ Respirable Fraction = 5 mg/m ³	None
Diammonium Phosphate	7783-28-0	Eye Irritant; Slight to Moderate Skin & Respiratory Irritant; Slightly Toxic by Ingestion; Central Nervous System toxin	2 ± 1	None	None	None	None
Proprietary Enzyme	Trade Secret	Mild to Moderate Eye, Skin & Respiratory Irritant; Possible Sensitizer	1 ± 0.5	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. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; use the Holger Nielsen method (back pressure-arm lift) or proper respiratory device. 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 immediately.
SKIN CONTACT:	In case of contact, immediately flush skin with plenty of clean running water for at least 15 minutes, while removing contaminated clothing and shoes. If burn or irritation occurs, call a physician.
INGESTION:	If swallowed, DO NOT induce vomiting. Get medical attention immediately. If victim is fully conscious, give plenty of water to drink. Never give anything by mouth to an unconscious person.
NOTE TO PHYSICIANS:	Aspiration hazard. Any of this product, aspirated during swallowing or vomiting, may cause lung injury. If ingested. Consideration should be given to careful endoscopy as stomach or esophageal irritation may occur. 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: Not applicable	Upper: Not applicable	
Autoignition Temperature:	Not applicable		
GENERAL HAZARD:	This product is an aqueous solution of inorganic salts, a polyol and natural plant oil. The Uniform Fire Code health hazard classification for this product is: Irritant . This product may produce hazardous mists or hazardous decomposition products.		
FIRE FIGHTING INSTRUCTIONS:	EXTINGUISHING MEDIA: Water, foam, CO ₂ or dry chemicals. 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 Ammonia gas with toxic phosphorus oxides, carbon monoxide, carbon dioxide and nitrogen oxides plus trace or ultra-trace toxic oxide amounts, of potassium, sulfur, zinc, manganese, iron, calcium and sodium, along with dense, irritating smoke.		

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 commercially absorbent material. Place in approved containers for recovery, disposal, or satellite accumulation. Neutralize the acidity, of the remaining liquid, using soda ash, lime, or other agent appropriate for neutralizing acidic liquids. 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, well-ventilated area, away from incompatible materials and products. Protect eyes, skin and clothing from contact with product. Wear recommended personal protective equipment when handling this product. Avoid breathing vapors or mists. Use with adequate ventilation. 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 a local or general, mechanical exhaust ventilation system capable of maintaining emissions, in the work area, below the ACGIH-TLV, OSHA-PEL or levels that may cause irritation.

RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT

RESPIRATOR: For exposure above the ACGIH-TLV, OSHA-PEL or levels that may cause irritation, wear a NIOSH-approved full facepiece or half mask air-purifying cartridge respirator equipped with a good mist / particulate filter cartridge or supplied air. **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 face respirator is worn. **Note:** Always consult the protective eyewear manufacturer's data when determining the suitability of protective eyewear prior to use.

GLOVES: Wear Neoprene, 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 Neoprene, 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 Neoprene, Nitrile, Butyl Rubber or Natural Rubber boots. **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:	Hazy to opaque, brownish	Bulk Density (pounds/ft³):	Not applicable
Physical State:	Liquid	Vapor Pressure:	No data available
Odor:	Unique, characteristic	Vapor Density (air=1):	No data available
Odor Threshold:	No data available	Evaporation Rate (n-Butyl Acetate=1):	Less than 1
Molecular Formula:	Mixture	VOC Content:	About 32 grams/liter
Molecular Weight:	Not applicable	% Volatile:	Approximately 93
Boiling Point:	Greater than 100° C. (212° F.)	Solubility in H₂O:	Dispersible
Freezing/Melting Point:	Less than 0° C. (32° F.)	Octanol/Water Partition Coefficient:	No data available
Specific Gravity:	1.05 – 1.10 @ 20° C.	pH (as is):	6.5 - 7.5
Density (pounds/gallon):	Approximately 9.5	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: Caustics & strong alkali, cyanides, sulfides, sulfites, chlorine releasers and all oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: When heated to dryness and decomposition, it emits toxic Ammonia gas with toxic oxides of phosphorus, carbon and nitrogen oxides plus trace or ultra-trace toxic oxide amounts, of potassium, sulfur, zinc, manganese, iron, calcium and sodium, along with dense, irritating smoke.

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>Thyme Oil</u>	<u>Thymol</u>
Eye Contact:	No data available	No data available
Skin Contact:	No data available	No data available
Oral Rat LD₅₀:	No data available	980 mg/kg
Dermal Rabbit LD₅₀:	No data available	No data available (Subcutaneous Mouse LD ₅₀ : 243 mg/kg; Toxic effects: Behavioral – Somnolence)
Inhalation Rat LC₅₀:	No data available	No data available
Human Data:	No data available	No data available
Other Toxicological Data:	No data available	Oral Mouse LD ₅₀ : 640 mg/kg
Carcinogenicity:	No data available	No data available
Teratogenicity:	No data available	Subcutaneous Rat TD _{Lo} : 20 mg/kg (female 4 Days prior to mating); Maternal Effects – Uterus Cervix Vagina
Mutagenicity:	No data available	Hamster Unscheduled DNA Synthesis; embryo: 1mg/L
Synergistic Products:	None reported	None reported
Target Organs:	Eyes, Skin, Mucous membranes & Lungs	Eyes, Skin, Lungs, Liver, Kidneys & Central Nervous System
Medical Conditions Aggravated By Exposure:	Skin or Respiratory disorders	Skin, Respiratory, Liver or Kidney disorders
Components:	<u>Glycerin</u>	<u>Diammonium Phosphate</u>
Eye Contact:	Rabbit: 500 mg/24 hours; Mild	No data available
Skin Contact:	Rabbit: 500 mg/24 hours; Mild	No data available
Oral Rat LD₅₀:	12,600 mg/kg	Greater than 1,000 mg/kg
Dermal Rabbit LD₅₀:	Greater than 10 gm/kg	No data available
Inhalation Rat LC₅₀:	Greater than 570 mg/m ³ /1 hour	No data available
Human Data:	Oral Human TD _{Lo} : 1,428 mg/kg; Headache, Gastrointestinal effects	No data available
Other Toxicological Data:	Oral Mouse LD ₅₀ : 4,090 mg/kg	No data available
Carcinogenicity:	No data available	No data available
Teratogenicity:	Oral Rat TD _{Lo} : 100 mg/kg (male 1 Day prior to mating) Effects on Fertility – Post-implantation mortality	No data available
Mutagenicity:	Human DNA Inhibition; Lymphocyte: 200 mmol/Liter	No data available
Synergistic Products:	None reported	None reported
Target Organs:	Eyes, Skin, Mucous membranes, Lungs & Kidneys	Eyes, Skin, Lungs & Central Nervous System
Medical Conditions Aggravated By Exposure:	Skin, Respiratory or Kidney disorders	Skin or Respiratory disorders

SECTION 11: TOXICOLOGICAL INFORMATION (Continued from Page 4)

Components:	<u>Proprietary Enzyme</u>
Eye Contact:	No data available
Skin Contact:	No data available
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:	No data available
Teratogenicity:	No data available
Mutagenicity:	No data available
Synergistic Products:	None reported
Target Organs:	Eyes, Skin, Mucous membranes & Lungs
Medical Conditions Aggravated By Exposure:	Skin or Respiratory disorders

SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE:

This product is heavier than water, somewhat dispersible in water and it is not expected to significantly affect the pH of the water.

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-RCRA 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: N/A	Packing Group: N/A
	Primary Label: Not applicable	Subsidiary Label(s): N/A	
	Primary/Subsidiary Placards: Not applicable		
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: N/A	Packing Group: N/A
	Primary Label: Not applicable	Subsidiary Label(s): N/A	
	Primary/Subsidiary Placards: Not applicable		
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>Thyme Oil</u>	<u>Thymol</u>	<u>Glycerin</u>	<u>Diammonium Phosphate</u>
<u>OSHA Target Organs:</u>	Eyes, Skin, Mucous membranes & Lungs	Eyes, Skin, Lungs, Liver, Kidneys & Central Nervous System	Eyes, Skin, Mucous membranes, Lungs & Kidneys	Eyes, Skin, Lungs & Central Nervous System
<u>Carcinogenic Potential:</u>				
Regulated by OSHA:	No	No	No	No
Listed on NTP Report:	No	No	No	No
Listed by IARC:	No	No	No	No
IARC Group:	Not applicable	Not applicable	Not applicable	Not applicable
ACGIH Appendix A:	Not listed	Not listed	Not listed	Not listed
A1 Confirmed Human:	Not applicable	Not applicable	Not applicable	Not applicable
A2 Suspected Human:	Not applicable	Not applicable	Not applicable	Not applicable

U.S. EPA Requirements

Release Reporting

CERCLA (40 CFR 302)

Listed Substance:	Not listed	Not listed	Not listed	Not listed
Reportable Quantity:	Not applicable	Not applicable	Not applicable	Not applicable
Category:	Not applicable	Not applicable	Not applicable	Not applicable
RCRA Waste No.:	Not applicable	Not applicable	Not applicable	Not applicable
Unlisted Substance:	Yes	Not applicable	Not applicable	Not applicable
Reportable Quantity:	100 pounds	Not applicable	Not applicable	Not applicable
Characteristic:	Ignitibility	Not applicable	Not applicable	Not applicable
RCRA Waste No.:	Not listed	Not applicable	Not applicable	Not applicable

SARA TITLE III

Section 302 & 303 (40 CFR 355):

Listed Substance:	Not listed	Not listed	Not listed	Not listed
Reportable Quantity:	Not applicable	Not applicable	Not applicable	Not applicable
Planning Threshold:	Not applicable	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>	Acute Health: <u>Y</u>	Chronic Health: <u>N</u>
Planning threshold:	10,000 pounds	10,000 pounds	10,000 pounds		10,000 pounds

Section 313 (40 CFR 372):

Listed Toxic Chemical:	Not listed	Not listed	Not listed	Yes (Aqua Ammonia)
Reporting Threshold:	Not applicable	Not applicable	Not applicable	10,000 pounds

U.S. TSCA Status

Listed (40 CFR 710):	Yes	Yes	Yes	Yes
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State Regulations

State of California: Safe Drinking Water and Toxins Enforcement Act, 1986 (Proposition 65):

Carcinogen:	No	No	No	No
Reproductive Toxin:	No	No	No	No

Other Regulations

State Right To Know Laws:	MA, PA
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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	No	No	No
DSL or NDSL Lists:	DSL	DSL	DSL	DSL

SECTION 15: REGULATORY INFORMATION (Continued from page 6)

COMPONENTS: Proprietary Enzyme

OSHA Target Organs: Eyes, Skin, Mucous membranes & Lungs

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):

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

Ingredient Information:

IDL Substance: No
DSL or NDSL Lists: DSL

SECTION 16: OTHER INFORMATION

EPA Registration number: Not applicable

Approved Product Uses: Used as 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:

When making solutions, always add this product to water or other solutions with adequate mixing to ensure a uniform solution. Do not add this product to hypochlorite bleaches, chlorine sanitizers or chlorinated cleaners as this may liberate toxic, corrosive Chlorine gas. Do not add this product to strong alkali or caustics as this may release heat and toxic Ammonia gas.

SDS Revision Information: **Revision Date:** 11/19/15

SDS Distributed by: Bio Huma Netics

Prepared By:	Frank S. Pidgeon, EHS Director	Date Prepared:	October 21, 2014
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