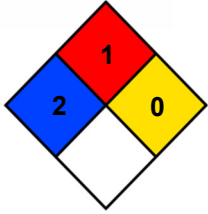




# SAFETY DATA SHEET

## HUMA GRO® Carbofol™



HMIS	
HEALTH	2
FLAMMABILITY	1
PHYSICAL HAZARD	0
PPE	C

### SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION

<b>PRODUCT IDENTIFIER:</b>	<b>HUMA GRO® Carbofol™</b>	<b>Product# 810</b>
<b>GENERAL USE:</b>	Used as a part of a plant nutrition program.	
<b>PRODUCT DESCRIPTION:</b>	A hazy to opaque, brown liquid having a unique characteristic odor.	
<b>SUPPLIER INFORMATION:</b>	Bio Huma Netics, Inc. 1331 W Houston Avenue Gilbert, AZ 85233	<b>EMERGENCY PHONE NUMBERS</b>
<b>For Additional SDS call:</b>	<b>PHONE: (480) 961-1220</b>	<b>CHEMTREC: (In the USA) 800-424-9300 (International) 703-527-3887</b>

### SECTION 2: HAZARDS IDENTIFICATION

#### HAZARDS OVERVIEW:

A hazy to opaque, brown, slightly acidic liquid having a unique characteristic odor. Exposure to this product's mists or liquid can cause severe irritation to the eyes and may cause severe irritation to the skin and respiratory tract, especially on prolonged exposure. This product can be toxic upon ingestion.

**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 <sub>(TWA)</sub>	STEL	PEL <sub>(TWA)</sub>	STEL
Glycerin	56-81-5	Mild Eye & Skin Irritant; Mild to Moderate Respiratory Irritant	10 ± 1	10 mg/m <sup>3</sup> (Mists)	None	Mist: Total Dust = 15 mg/m <sup>3</sup>  Respirable Fraction = 5 mg/m <sup>3</sup>	None
Thyme Oil	8007-46-3	Combustible Liquid; Eye, Skin & Respiratory Irritant; Moderately Toxic by Ingestion	5 ± 1	None	None	None	None

NDA = No Data Available

N/A = Not Applicable

## SECTION 4: FIRST AID MEASURES

<b>INHALATION:</b>	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.
<b>EYE CONTACT:</b>	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.
<b>SKIN CONTACT:</b>	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.
<b>INGESTION:</b>	If large quantities of this product are swallowed, 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.
<b>NOTE TO PHYSICIANS:</b>	Aspiration hazard. If 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, possibly severe, may occur. Careful gastric lavage with an endotracheal tube in place should be considered. Treat exposure symptomatically.

## SECTION 5: FIRE FIGHTING MEASURES

<b>Flashpoint and Method:</b>	This product is not expected to flash.		
<b>Flammable Limits (in air, % by volume)</b>	<b>Lower:</b> Not applicable	<b>Upper:</b> Not applicable	
<b>Autoignition Temperature:</b>	Not Determined		
<b>GENERAL HAZARD:</b>	This product is an aqueous solution of inorganic salts and natural plant oils. The Uniform Fire Code health hazard classification for this product is: <b>Irritant</b> . This product may produce hazardous mists or hazardous decomposition products.		
<b>FIRE FIGHTING INSTRUCTIONS:</b>	<b>EXTINGUISHING MEDIA:</b> Water, foam, CO <sub>2</sub> or dry chemicals. Use a water spray or fog to cool the containers exposed to the heat of a fire.		
<b>FIRE FIGHTING EQUIPMENT:</b>	Fire fighters should wear full protective equipment, including self-contained breathing apparatus.		
<b>HAZARDOUS COMBUSTION PRODUCTS:</b>	When heated to dryness and decomposition, it emits toxic Ammonia gas with toxic carbon monoxide and carbon dioxide, plus trace or ultra-trace toxic oxide amounts, of potassium, nitrogen, sulfur, zinc, manganese, iron, calcium and sodium, along with dense, irritating smoke.		

## SECTION 6: ACCIDENTAL RELEASE MEASURES

<b>RELEASE TO LAND:</b>	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.
<b>RELEASE TO WATER:</b>	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

<b>STORAGE TEMPERATURE:</b>	Ambient	<b>STORAGE PRESSURE:</b>	Ambient
<b>GENERAL:</b>	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 OSHA-PEL, ACGIH-TLV 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 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 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:** If contact is likely, 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

<b>Appearance:</b>	Hazy to opaque, brown	<b>Bulk Density (pounds/ft<sup>3</sup>):</b>	Not applicable
<b>Physical State:</b>	Liquid	<b>Vapor Pressure:</b>	No data available
<b>Odor:</b>	Unique, characteristic	<b>Vapor Density (air=1):</b>	No data available
<b>Odor Threshold:</b>	No data available	<b>Evaporation Rate (n-Butyl Acetate=1):</b>	No data available
<b>Molecular Formula:</b>	Mixture	<b>VOC Content / Organic Matter:</b>	No data available / Not applicable
<b>Molecular Weight:</b>	Not applicable	<b>% Volatile:</b>	No data available
<b>Boiling Point:</b>	Greater than 100° C. (212° F.)	<b>Solubility in H<sub>2</sub>O:</b>	Dispersible
<b>Freezing/Melting Point:</b>	Less than 0° C. (32° F.)	<b>Octanol/Water Partition Coefficient:</b>	No data available
<b>Specific Gravity:</b>	1.00 – 1.10 @ 20° C.	<b>pH (as is):</b>	4.5 – 5.5
<b>Density (pounds/gallon):</b>	Approximately 8.34	<b>pH (1% solution):</b>	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 carbon, plus trace or ultra-trace toxic oxide amounts, of potassium, nitrogen, 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

<b>Components:</b>	<b><u>Proud 3 (Complete Industrial Product)</u></b>	<b><u>Thyme Oil</u></b>
<b>Eye Contact:</b> (OPPTS 870.2400)	Classified as non-irritating to the eye	No data available
<b>Skin Contact:</b> (OPPTS 870.2500 & 870.2600)	Classified as moderately irritating to the skin but not considered to be a contact sensitizer	No data available
<b>Oral Rat LD<sub>50</sub></b> (OPPTS 870.1100)	>2000 mg/kg	No data available
<b>Dermal Rat LD<sub>50</sub>:</b> (OPPTS 870.1200)	>2000 mg/kg	No data available
<b>Inhalation Rat LC<sub>50</sub>:</b> (OPPTS 870.1300)	>2.08 mg/L	No data available
<b>Human Data:</b>		
<b>Other Toxicological Data:</b>	No data available	No data available
<b>Carcinogenicity:</b>	No data available	No data available
<b>Teratogenicity:</b>	No data available	No data available
<b>Mutagenicity:</b>	No data available	No data available
<b>Synergistic Products:</b>	None Reported	None Reported
<b>Target Organs:</b>	Eyes, Skin, Mucous membranes & Lungs	Eyes, Skin, Mucous membranes & Lungs
<b>Medical Conditions Aggravated By Exposure:</b>	Skin	Skin or Respiratory disorders

<b>Components:</b>	<b><u>Glycerin</u></b>
<b>Eye Contact:</b>	Rabbit: 500 mg/24 hours; Mild
<b>Skin Contact:</b>	Rabbit: 500 mg/24 hours; Mild
<b>Oral Rat LD<sub>50</sub>:</b>	12,600 mg/kg
<b>Dermal Rabbit LD<sub>50</sub>:</b>	Greater than 10 gm/kg
<b>Inhalation Rat LC<sub>50</sub>:</b>	Greater than 570 mg/m <sup>3</sup> /1 hour
<b>Human Data:</b>	Oral Human TD <sub>Lo</sub> : 1,428 mg/kg; Headache, Gastrointestinal effects
<b>Other Toxicological Data:</b>	Oral Mouse LD <sub>50</sub> : 4,090 mg/kg
<b>Carcinogenicity:</b>	No data available
<b>Teratogenicity:</b>	Oral Rat TD <sub>Lo</sub> : 100 mg/kg (male 1 Day prior to mating) Effects on Fertility – Post-implantation mortality
<b>Mutagenicity:</b>	Human DNA Inhibition; Lymphocyte: 200 mmol/Liter
<b>Synergistic Products:</b>	None reported
<b>Target Organs:</b>	Eyes, Skin, Mucous membranes, Lungs & Kidneys
<b>Medical Conditions Aggravated By Exposure:</b>	Skin, Respiratory or Kidney 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

**Hazard Class:** Not applicable      **UN Number:** N/A      **Packing Group:** N/A

**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:** N/A      **Packing Group:** N/A

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

**Primary/Subsidiary Placards:** None Required

**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:	<u>Thyme Oil</u>	<u>Glycerin</u>
<b><u>OSHA Target Organs:</u></b>	Eyes, Skin, Mucous membranes & Lungs	Eyes, Skin, Mucous membranes, Lungs & Kidneys
<b><u>Carcinogenic Potential:</u></b>		
Regulated by OSHA:	No	No
Listed on NTP Report:	No	No
Listed by IARC:	No	No
IARC Group:	Not applicable	Not applicable
<b>ACGIH Appendix A:</b>	Not listed	Not listed
A1 Confirmed Human:	Not applicable	Not applicable
A2 Suspected Human:	Not applicable	Not applicable

### U.S. EPA Requirements

#### Release Reporting

##### **CERCLA (40 CFR 302)**

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

### SARA TITLE III

#### **Section 302 & 303 (40 CFR 355):**

<b>Listed Substance:</b>	Not listed	Not listed
Reportable Quantity:	Not applicable	Not applicable
Planning Threshold:	Not applicable	Not applicable

#### **Section 311 & 312 (40 CFR 370):**

Hazard Categories (product):	<b>Fire: <u>N</u></b>	<b>Sudden Release of Pressure: <u>N</u></b>	<b>Reactive: <u>N</u></b>	<b>Acute Health: <u>Y</u></b>	<b>Chronic Health: <u>N</u></b>
Planning threshold:	10,000 pounds	10,000 pounds			

#### **Section 313 (40 CFR 372):**

<b>Listed Toxic Chemical:</b>	Not listed	Not listed
Reporting Threshold:	Not applicable	Not applicable

### U.S. TSCA Status

<b>Listed (40 CFR 710):</b>	Yes	Yes
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### State Regulations

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

Carcinogen:	No	No
Reproductive Toxin:	No	No

### Other Regulations

<b>State Right To Know Laws:</b>	MA, PA	MA, PA
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### Canadian Regulations

#### **Product Information:**

Controlled Product:	<b>Yes</b>
WHMIS Hazard Symbols:	<b>Material Causing Other Toxic Effects</b>
WHMIS Class & Division:	<b>D.2B</b>

#### **Ingredient Information:**

IDL Substance:	No	No
DSL or NDSL Lists:	DSL	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:** Revised Date: 9/08/2020

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

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

**Date Prepared:** October 21, 2014

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