



**Back To Your Roots Soil Solutions**

**High Brix Manufacturing**

**Organic Paperwork for Verification 2023**

**Diverse-A-Tea**

March 1, 2023

To Whom it Concerns

Diversity-A-Tea Brewing Services is an independently owned company that contracts and provides the service of brewing microbial tea.

The process of brewing is a well studied and systematic process to remove and extract microbes from sources, incubate and proliferate microbial life in a water solution. End use includes acceleration of compost production, application to forages, plants and soil. Dr. Elaine Ingham has done extensive research on the making and the use of compost teas, "Teaming with Microbes" is an excellent resource for individuals that are looking for additional information about this practice of brewing, uses and ingredients.

The brewing process used by Diverse-a-Tea Brewers starts with water treated with 5 mechanical processes to aerate, heat, and energize prior to the brewing. The aeration process includes the use of atmospheric air to reach the aeration point identifier for best brewing conditions based on temperature, microbe populations, etc. Following the aeration processes, the water is transferred to the brewing tank. Products identified by the contractor are added at this point. This is brewed using forced atmospheric air for a period of 24 hours. At the end of the brewing process, the tea is strained, stabilized to a pH of approximately 4.0 with citric acid and transferred to plastic totes.

Cleaning of the equipment occurs following each batch with the use of peroxide to clean and disinfect and a double rinse with clean water.

The contract used for this service is included in this package, along with a disclaimer form, and an information sheet about what ingredients can be used to establish bacterial or fungal dominant teas.

The brewer does have access to several different brewing ingredients used in the brewing process. Paperwork needed to substantiate organic use will need to be verified by the producer with their own certifier. These papers will be made available upon request.

Sincerely,

Greg Moline, Owner of Diverse-A-Tea Brewing Services.

25147 TWP 490  
Leduc County, AB T4X 2N4  
**Phone: 780-690-5130**

**Customer Signature:**

# Diverse-A-Tea Brewing Services

Date:

Contract Number 2000

Customer Name:

Address:

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Attached is an Order Form for the brewing service for the Microbial Tea. Please sign this document and the order form, retain copies for your records and return the top copies with your payment.

Diverse-a-Tea Brewing Service is a privately owned company that provides only the service of brewing aerobic microbe tea. We use a protected process to aerate and brew tea and then stabilize the microbes for storage and shipping.

We take no responsibility for the contents of the product, use of the product, nor for the disposal of any remaining product or containers. Please refer to your local, municipal, and provincial guidelines for more information. We only use ingredients requested and provided by our customers.

In order to ensure quality of your Microbial tea, our customers must identify what ingredients they want included in the tea. Customers requiring organic tea must identify any protocols for cleaning or ingredients prior to ordering the service. Use of Phosphoric acid is required to stabilize the tea after brewing. Please contact your rep. for information about ingredients often used in microbial tea.

I have read and understand the above information:

Customer Signature: \_\_\_\_\_ Date:

Customer Printed Name:

**For more information about compost teas, microbial teas, or microbes of the soil, please refer to the following resources:**

## **Teaming with Microbes**

Authors: Jeff Lowenfels and Wayne Lewis, with foreword by Dr. Elaine Ingham.

## **Adding Biology**

Author: Dr. Elaine Ingham and Carole Ann Rollins

## **Compost Tea Brewing Manual 5th Ed. Elaine Ingham**

## **Soil Biology Primer**

Authors: Dr. Elaine Ingham, Andrew R. Moldenke & Clive A. Edwards



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## **Verified Tea Starter Ingredient List:**

**Worm Castings**

**Molasses**

**Sugar**

**Humic Acid**

**Soft Rock Phosphate**

**Pacific Natural Fresh Fish Fertilizer**

**Citric Acid**

**Zumzil**

# Earthly Matters Vermiculture Inc.

<b>Date:</b>	February 1, 2022
<b>RE:</b>	Earthly Matters All Purpose organic compliance

Earthly Matters 4-4-4 All Purpose is derived 100% from inputs compliant with the CFIA Canada Organic Regime Permitted Substances List under Can/CGSB-32.311-2015. Below is an organic summary of the ingredients.

If you are undergoing an organic inspection please have your inspector contact us directly for complete documentation.

- Alfalfa Meal: Certified Organic
- Blackstrap Molasses: Certified Organic
- Blood Meal: Pure sterilized animal blood with no synthetic additives
- Bone Meal: Pure ground and sterilized bone with no specified risk materials
- Feather Meal: Pure sterilized feathers with no synthetic additives
- Frass: Ecocert Canada attested
- Glacial Rock Dust: Pure mined glacial moraine with no synthetic additives
- Greensand: OMRI Canada listed
- Gypsum: Pure mined agricultural gypsum with no synthetic additives
- Leonardite: Pure mined leonardite with no synthetic additives
- Kelp Meal: Certified Organic
- Langbeinite: Pure mined langbeinite with no synthetic additives
- Mineralized Phosphate: pure mined phosphatic rock with no synthetic additives. Low cadmium.
- Potassium Sulfate: Ecocert Canada attested
- Rock Phosphate: Pure mined rock phosphate with no synthetic additives. Low cadmium.

No chemicals or synthetic processing agents are used in the production process and packaged exclusively at our facility in Coaldale, Alberta.

Earthly Matters Vermiculture  
Inc.  
1623 22 ST, Coaldale, Alberta  
T1M 1K4  
info@earthlymatters.ca

## Compost Detail

Report prepared for:  
Greg Moline  
Box 5211 Leduc Main PO  
Leduc, Alberta T9E 6L6 Canada

Report Sent: 29 Jun 2020  
Sample #: 01-132542  
Unique ID: Casting#1  
Invoice Number: 19106  
Sample Recieved: 19 Jun 2020



Earthfort, LLC  
635 SW Western Blvd  
Corvallis, OR 97333  
+1 (541) 257-2612  
info@earthfort.com  
http://earthfort.com

**For interpretation of this report please  
contact your local Soil Steward or the lab.**

Assay Name	Result	Units	Desired Level	Commentary
<b>Organism Biomass Data</b>				
Dry Weight	0.39	N/A	0.20 to 0.85	Within normal moisture levels.
Active Fungi	<b>0.00</b>	µg/g	> 3.00	No fungal activity observed, foods may be required. -
Total Fungi	2,807.49	µg/g	> 300.00	Good fungal biomass. - Good fungal diversity. Hyphal diameter: 1.5 to 7 µm.
Hyphal Diameter	2.90	µm		Good balance of fungi. -
Active Bacteria	71.77	µg/g	> 3.00	Bacterial activity within normal levels.
Total Bacteria	996.85	µg/g	> 300.00	Good bacterial biomass. -
Actinobacteria	29.39	µg/g	< 40.00	
<b>Organism Biomass Ratios</b>				
TF:TB	2.82		0.10 to 10.00	Balanced fungal and bacterial biomass.
AF:TF	0.00		< 0.10	Good fungal activity.
AB:TB	0.07		< 0.10	Good bacterial activity.
AF:AB	<b>0.00</b>		0.10 to 10.00	Fungal dominated, becoming more bacterial.
<b>Protozoa (Protists)</b>				
Flagellates	71,978.66	number/g	> 10,000.00	Should provide a good inoculum of protozoa.
Amoebae	359,893.28	number/g	> 100,000.00	
Ciliates	119.42	number/g	< 4319.00	
Nitrogen Cycling Potential	300+	lbs/acre		Nitrogen levels dependent on plant needs. Estimated availability over a 3 month period
<b>Nematodes</b>				
Nematodes	Not Ordered	number/g	> 10.00	
Bacterial	Not Ordered	number/g		
Fungal	Not Ordered	number/g		
Fungal/Root	Not Ordered	number/g		
Predatory	Not Ordered	number/g		
Root	Not Ordered	number/g		
<b>Miscellaneous Testing</b>				
E.coli	Not Ordered	CFU/g	< 800.00	For most areas, the maximum E.coli CFU/g is 800 - 1000. Please check your local regulations for more information. -
pH	Not Ordered			
Electrical Conductivity	Not Ordered	µS/cm	< 1000.00	

Compost Notes:  
African Night Crawlers

# Compost Biology Report

Report prepared for:  
Greg Moline  
Box 5211 Leduc Main PO  
Leduc, Alberta T9E 6L6 Canada

Report Sent: 29 Jun 2020  
Sample #: 01-132542  
Unique ID: Casting#1  
Invoice Number: 19106  
Sample Recieved: 19 Jun 2020



Earthfort, LLC  
635 SW Western Blvd  
Corvallis, OR 97333  
+1 (541) 257-2612  
info@earthfort.com  
http://earthfort.com

**For interpretation of this report please  
contact your local Soil Steward or the lab.**

Assay	Below Range	Desired Range	Above Range	Range	Result
Dry Weight				0.2 - 0.85	0.39
Active Fungi				> 3 µg/g	<b>0.00 µg/g</b>
Total Fungi				> 300 µg/g	2,807.49 µg/g
Active Bacteria				> 3 µg/g	71.77 µg/g
Total Bacteria				> 300 µg/g	996.85 µg/g
TF:TB				0.1 - 10	2.82
AF:TF				< 0.1	0.00
AB:TB				< 0.1	0.07
AF:AB				0.1 - 10	<b>0.00</b>
Flagellates				> 10000 /g	71,978.66 /g
Amoebae				> 100000 /g	359,893.28 /g
Ciliates				< 4319 /g	119.42 /g



Earthly Matters

1623 22nd Street, Coaldale, T1M 1K4, Alberta, CANADA

Client # : 219688

## RESULT OF THE DOCUMENTARY EVALUATION

**ISSUED : December 19, 2022**

**EXPIRES : March 24, 2024**

Madam/Sir,

ECOCERT CANADA has reviewed the declared formulae for the products listed below against the National Standard of Canada on Organic Production Systems and Permitted Substances Lists (CAN/CGSB 32.310 and CAN/CGSB 32.311).

ECOCERT CANADA has verified that all the declared ingredients appear on the Permitted Substances Lists (CAN/CGSB-32.311) applicable sections and are compliant with any restrictions regarding their production and composition.

ECOCERT CANADA has also verified that the declared processes used in the manufacture of this/ these products and its/ their ingredients are compliant with section 1.4, 1.5 and section 6.4.4 of CAN/CGSB-32.310.

When restrictions apply regarding the use of such substances, they are indicated in the table in annex.

We remind you that no reference to ECOCERT CANADA is allowed on the labels and promotional material of these products

This document is valid until its expiration date. A new evaluation is required every year.

**Organic operators must check with the certifier before using any input.**

Cordially,



**Etienne Nadeau**

**Sector Manager – Organic Certification Canada**

Earthly Matters

1623 22nd Street, Coaldale, T1M 1K4, Alberta, CANADA

Client # : 219688

## ANNEX

**ISSUED : December 19, 2022**

**EXPIRES : March 24, 2024**

Product Name	Applicable section of CAN-CGSB 32.311	Restriction	Trademark
Worm Castings	4.2 – Substances for crop production. Column 1 - Soil amendments		Earthly Matters

This annex is not valid without the evaluation letter to **Earthly Matters**, dated **December 19, 2022**.

**Organic operators must check with the certifier before using any input.**



# International Certification Services, Inc.

## Organic Certification Schedule

Buffalo Molasses, LLC  
PO Box 74  
E Aurora, NY 14052  
UNITED STATES  
Tel: 716-714-9709  
buffmolasses@gmail.com

Client ID Number: 0806540  
Certificate number: ICS-24017-2020  
Effective Date: 10/04/2006  
Issue Date: 04/11/2021  
Last Inspection Date: 05/21/2020

Categories of Organic Operation: Handling/Processing

This operation is in compliance with the following standards and programs:

### USDA National Organic Program

Certified

### US-Canada

Certified in compliance with the terms of  
the US-Canada Organic Equivalency  
Arrangement

This schedule is documentation of the organic status of products, crops, livestock, products and services of ICS certified entities, and **is not valid without the Certificate of Organic Operation.**

### Products

*Certified for:*

Product	Programs
Handling, Storage, and Delivery of Molasses	NOP

*organic*

Product	Programs
Molasses 72 DM	NOP, US-Canada



Operation Profile (9092125801) updated on 4/5/2022

*This Operation Profile was generated by the USDA Agricultural Marketing Service National Organic Program. Additional up-to-date details about certified products can be found online in the INTEGRITY Operation Profile through the QR Code or URL printed at the bottom of this page, or by contacting the Certifier directly.*



#### Operation Information

**Operation Name:** Buffalo Molasses, LLC  
**Operation Status:** Certified  
**Status Effective Date:** 10/11/2021  
**Certifier:** [WFCFO] Where Food Comes From Organic (formerly A Bee Organic)  
**NOP ID:** 9092125801  
**Certifier Client ID:** N/A  
**Other/Former Names:** N/A  
**NOP Anniversary Date:** N/A  
**Business Types/Service:** --

#### Scope and Product Summary

Scope	Status	Effective Date	Certified Products
HANDLING	Certified	10/11/2021	Other: "Molasses 72 DM"

#### Contact Information

**Name:**

**Phone:** N/A

**Email:** N/A

**Website:** N/A

**Addresses:** [Physical Address]

[Mailing Address]

1830 Perry Road  
N. Java, NY 14113  
United States of America



# OneCert International Private Limited

+91 141-2395481; +91-941-4046706 - sandeep@onecert.net

[www.onecertinternational.com](http://www.onecertinternational.com)

H-8 Mansarovar Industrial Area

Jaipur, 302020, India

certifies that

## Corelife Wholefoods Private Limited

t.yadav@lokmandal.com

### Mailing Address

Office No.2, 2nd Floor, Sr.no.21,Hissa  
No.4/1, Metropolitan Condominium,  
Pune, Maharashtra 411005, India

### Physical Address

Warehouse-1, Godown no 04, A/P Bibi  
Darphal, Taluka –North Solapur  
Solapur, Maharashtra 413222, India

is certified to the USDA organic regulations, 7 CFR Part 205, for the categories of  
Handling

Once certified, a production or handling operation's organic certification continues in effect until  
surrendered, suspended, or revoked. Status of this certification and specific certified organic products  
covered may be verified at

<https://organic.ams.usda.gov/Integrity/CP/OPP.aspx?cid=89&nopid=4920003933>

Certifier Client ID:	3933
Certificate Number(s):	41138, 41139, 41140, 41141, 954C
NOP Operation ID:	4920003933
Effective Date:	08/26/2020
Anniversary Date:	02/20/2021
Issue Date:	05/28/2021

ORGANIC CERTIFICATE



For addenda to this Organic Certificate, such as certified item lists with additional details and other operation information, contact the Accredited Certifying Agent identified at the top of this Certificate.



Operation Profile (4920003933) updated on 5/28/2021

*This Operation Profile was generated by the USDA Agricultural Marketing Service National Organic Program. Additional up-to-date details about certified products can be found online in the INTEGRITY Operation Profile through the QR Code or URL printed at the bottom of this page, or by contacting the Certifier directly.*



#### Operation Information

**Operation Name:** Corelife Wholefoods Private Limited  
**Operation Status:** Certified  
**Status Effective Date:** 08/26/2020  
**Certifier:** [OCI] OneCert International Private Limited  
**NOP ID:** 4920003933  
**Certifier Client ID:** 3933  
**Other/Former Names:** N/A  
**NOP Anniversary Date:** 02/20/2021  
**Business Types/Service:** --  
**Additional Info:** Certified in accordance with the terms of the US-Canada Organic Equivalency Arrangement.

#### Scope and Product Summary

Scope	Status	Effective Date	Certified Products
Handling	Certified	08/26/2020	Other: Ajwain, Alcohol, Amaranth/Amaranthus/Thotakura, Bajra flour/ Atta, Barley Flour, Basmati rice, Basmati rice-brown, Basmati rice-white, Black gram/Urd (Vigna sp.), Black Pepper, Broken rice, Brown gram/Gram/Chana (Cicer arietinum), Cane molasses, Cane Sugar, Chana Dal, Chia, Cloves, Coriander Powder, coriander seed, Cumin Powder, Cumin whole, Fennel Seed, Flax Seed, Garlic, Ginger Flakes, Ginger Fresh, Gram Flour/Besan, Green gram/chana/Moong (Vigna sp.), Groundnut/Peanut, Groundnut/Peanut oil (Edible grade), Indian Organic Demerara cane sugar, Indian Organic Golden Brown Cane Sugar, Indian Organic Golden Cane Sugar, Jaggery, Jaggery powder, Kabuli Chana, Lentil, Lentil dal, Maize (Corn), Mango (fresh), Masoor Dal, Mix Dal, Moong Dal, Moong Dal-Split with shell, Mustard, Onion, Onion (Powder), Pearl Millet/Bajra, Pigeon pea, Red Chilli Powder, Safflower Seed Oil (Kardi Seed Oil), Sesame seeds, Shatavari powder, Sorghum, Sorghum Flour, Soyabean/Soybean Meal, Soybean, Soybean/soyabean oil, Suji/Semolina/ Cream of Wheat, Sunflower, Sunflower Seed Oil, Tamarind/Imli (T.indica), Tur/ Toor Dal, Turmeric Dried, Turmeric Fresh, Turmeric Powder, Urad dal/Split Black gram, Urad Dal-Split with Shell, Wheat, Wheat flour, White Cane Sugar



## Contact Information

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**Name:** Mr. Tukaram Yadav

**Phone:** N/A

**Email:** t.yadav@lokmandal.com

**Website:** N/A

**Addresses:** [Physical Address]

Warehouse-1, Godown no 04, A/P Bibi Darphal,  
Taluka –North Solapur

Solapur, Maharashtra 413222, India

[Mailing Address]

Office No.2, 2nd Floor, Sr.no.21,Hissa No.4/1, Metropolitan  
Condominium, Wakdevadi

Pune, Maharashtra 411005, India





*Attestation Number: 8029-INP-23*

*Initial Effective Date: 21-Mar-2022*

*Attestation Expiry Date: 31-Mar-2024*

## **Attestation of Input Compliance**

*This attestation is based on the compliance of products which are approved for use in organic production, at the discretion of the operator's certification body, with the national organic standards of Canada CAN/CGSB-32.310 and 32.311.*

This attestation expires on the date noted above or until it is suspended or cancelled by the Centre for Systems Integration.

### **High Brix Manufacturing Inc.**

25147 Township Road 490

Leduc County, AB, T4X 2N4, Canada.

**This attestation confirms the compliance of the products as per the attached list.**

**Input Supplier #: 8029-INP**

A handwritten signature in blue ink, appearing to read 'Ryan W. K.', is written over a large, faint, grey watermark of the CSI logo.

\_\_\_\_\_  
Signature of CSI Representative

31-Mar-2023

\_\_\_\_\_  
Issue Date

**Certification Body:**

**The Centre for Systems Integration (CSI)\***  
85 Albert Street, Suite 1100  
Ottawa, Ontario, Canada K1P 6A4  
1-800-516-3300

\* A division of Seeds Canada





Input Supplier: High Brix Manufacturing Inc.  
Input Supplier Number: 8029-INP  
Attestation Number: 8029-INP-23  
Issue Date: 31-Mar-2023

### LIST OF PRODUCTS APPROVED FOR USE IN ORGANIC PRODUCTION

*An operator intending to use any product listed below as approved for use in organic production under the Canadian organic standards, CAN/CGSB-32.310 and CAN/CGSB-32.311, must verify with their certification body that the product is acceptable for use prior to incorporation into the organic system plan.*

PRODUCT	Intended use (CF=crop fertility; CP=crop protection; LF=Livestock feed; LH=Livestock healthcare; P=Processing input)	BRAND NAME	RESTRICTIONS
Mineralized Soft Rock Phosphate	CF	High Brix Manufacturing	
GSR Calcium Genesis Soil Rite Dormant Mix	CF	Soil Works	
GSR Calcium Genesis Soil Rite Growing Mix	CF	Soil Works	
Zumsil	CF	High Brix Manufacturing	To be used when soil and plant silica deficiencies are documented by visual symptoms or by testing of soil and/or plant tissue, or when the need for a preventative application can be documented.



## ATTESTATION

**for inputs suitable for use in Organic Farming according to the  
National Organic Program (NOP)**

Attestation reference: 7980US2100n2e  
Number of products: 4

This attestation is issued to the operator below:

**HUMIC GROWTH SOLUTIONS**  
**709 Eastport Rd.**  
**Jacksonville, FL 32218**  
**USA**

**Ecocert SA confirms after inspection that the following products are approved for use in  
NOP organic production:**

PRODUCT NAME	CATEGORY	STATUS
<b>Diamond Grow® Humi[K] WSP</b>	Soil conditioner	NOP allowed
<b>Diamond Grow® Humi[K] WSG</b>	Soil conditioner	NOP allowed
<b>Diamond Grow® Humi[K] Liquid</b>	Soil conditioner	NOP allowed
<b>Diamond Grow® Ful-Grow Gold</b>	Soil conditioner	NOP allowed

Ecocert SA - CEO  
Philippe THOMAZO

**Issue date, in L'Isle Jourdain: 29/07/2021**  
**Expiry date: 31/03/2023**

**This document belongs to Ecocert. It has to be returned on request.  
Only the original is valid, until the expiry date of the attestation or the termination of the attestation  
contract.**



**RZBC(JUXIAN) CO., LTD.**  
NO. 209 LAIYANG ROAD, JUXIAN ECONOMIC DEVELOPMENT  
ZONE, RIZHAO SHANDONG CHINA  
TEL: 0086 633 2163519 FAX: 0086 633 2163500

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## NON GMO STATEMENT

Date: February 18, 2021

To whom it may concern,

We hereby confirm that our below listed product is non GMO.

Products list:

Citric Acid Anhydrous

RZBC(JUXIAN)CO.,LTD.  
RZBC(JUXIAN) CO., LTD.  
**厉成伟**  
.....  
GENERAL MANAGER

C-197495-2021

Certificate Number



03/22/2021

Certificate Issue Date  
(MM/DD/YYYY)

## CERTIFICATE OF VERIFICATION

**Participant Name** RZBC (JUXIAN) CO., LTD.

**Participant ID** 23357

**Product Name** Citric Acid Anhydrous

**Product ID** 1-23357-401615

**Brand Name** RZBC

**Scope of Verification** Human ingestion/app to skin

**Expiration Date** (MM/DD/YYYY) 03/20/2022

**Technical Administrator**



FoodChain ID

504 North Fourth St.  
Fairfield, Iowa 52556  
UNITED STATES

*The Technical Administrator listed above has confirmed that the product has achieved Non-GMO Project Verified status and is compliant with the Non-GMO Project Standard, which can be downloaded at [www.nongmoproject.org](http://www.nongmoproject.org). Verification is subject to annual renewal and valid until expired, surrendered, suspended or revoked. The Non-GMO Project reserves the right to revoke this certificate at any time. Please contact the Non-GMO Project if you have any questions concerning a verification status.*



# OMRI Listed®

The following product may be used in certified organic production or food processing and handling in accordance with the Canadian Organic Standards.

## Product

Pacific Natural Fresh Fish Emulsion Fertilizer 2-2-0

## Company

Great Pacific BioProducts, a Division of Jim Pattison Enterprises Ltd.

Steve Yip

13140 Rice Mill Road

Richmond BC V6W 1A1 CANADA

## Status

Allowed

## Category

COR: Fish Products

## Issue date

4-Sep-2019

## Product number

bcf-12182

## Class

Crop Fertilizers and Soil  
Amendments

## Expiration date

1-Jun-2023

## Restrictions

Not applicable.

Caution: This product was produced using GE substrate or growth media. If commercially available, a non-GE alternative shall be used in accordance with CAN/CGSB 32.311 subclause 4.1.3.b.

Executive Director/CEO

Product review is conducted according to the policies in the current *OMRI Policy Manual*® and based on the standards in the applicable *OMRI Standards Manual*®. To verify the current status of this or any OMRI Listed product, view the most current version of the *OMRI Canada Products List*® at OMRI.org. OMRI listing is not equivalent to organic certification and is not a product endorsement. It cannot be construed as such. Final decisions on the acceptability of a product for use in a certified organic system are the responsibility of a CFIA accredited Certification Body. It is the operator's responsibility to properly use the product, including following any restrictions.



Organic Materials Review Institute  
P.O. Box 11558, Eugene, OR 97440-3758, USA  
541.343.7600 · [info@omri.org](mailto:info@omri.org) · [OMRI.org](http://OMRI.org)



GREAT PACIFIC  
BIOPRODUCTS

A Division of Jim Pattison Enterprises Ltd.

## Material Safety Data Sheet (MSDS) - "Pacific Natural" Liquid Fresh Fish Fertilizer

Section One Identification of Product		
Manufacture Name:	Emergency Telephone Number(s)	
Great Pacific Bioproducts, A Division of Jim Pattison Enterprises Ltd. 13140 Rice Mill Road Richmond BC V6W 1A1	(604) 204-6990 - Tel (604) 272-5933 - Fax Contact Person: Sherry Dunn	
Trade Name and Synonyms:	Pacific Natural Fresh Fish Fertilizer	
Chemical Name and Synoymys:	Fish Protein	
Chemical Family:	Organic Fertilizers	
Ingredients:	Fish Byproducts	
Section Two Hazardous Ingredients of Mixtures		
Component:	% (ppm)	Threshold Limit
Phosphoric Acid (CAS 7664-38-2)	2-3%	Not Available
Substances Contained in Product Regulated Under SARA, Title III, Section 313:		
None	--	--
Section Three Physical & Chemical Characteristics		
Boiling Point:	100°C (212°F)	
Vapor Pressure (mm Hg):	N/A	
Solubility in Water:	80%	
Specific Gravity (H <sub>2</sub> O - 1)	1.03 - 1.06	
Vapor Density (Air=1)	N/A	
Reactivity in Water:	None	
Appearance & Odor:	Grey Brown Liquid, Fish odor	
Section Four Fire & Explosion Data		
Flash Point (°F): N/A	Flammable Limits (%Vol): N/A	
Fire Extinguishing Media: Water spray, dry chemical, foam or carbon dioxide.		
Special Fire Fighting Procedures: Eliminate ignition source. Wear self-contained breathing apparatus and complete personal protective equipment. Use water spray to cool fire, exposed structures and tanks, and to disperse vapor cloud if fire is not present. Use water spray, dry chemical, carbon dioxide or foam.		
Unusual Fire &Explosion Hazards: although this material is not flammable in aqueous state, it will burn in the presence of a strong ignition source after the water is removed.		
Section Five Reactivity Data		
Stability:	Stable	
Conditions to Avoid	Excessive Heat	
Incompatility (Materials to Avoid)	Strong oxidizers	
Hazardous Decomposition Products:	Ammonia, Oxides of Nitrogen and Oxides of Carbon	
Hazardous Polymerization:	Will not occur	
Section Six Special Precautions		
Precautions to be taken in Handling & Storing: Store in cool, dry place, away from children. Immediately clean up any spills, which may occur during storage		
Other Precautions: Do not contaminate water supplies by handling & storage, cleaning of equipment or disposal of wastes. Keep work & storage areas clean, read & follow precautionary measures on product label.		

Section Seven Health Hazard Data	
Effects of Over Exposure:	N/A
Routes of Entry:	Ingestion, Eyes, Skin and Inhalation.
Most Likely Routes of Entry:	Inhalation and skin contact.
Emergency & First Aid Procedures	
Ingestion:	May be harmful if swallowed. Call a physician immediately.
Eyes:	Flush with running water for at least 15 minutes while holding eyes open. In cases of contact lenses, remove immediately. If irritation persists, get medical attention.
Skin:	Remove all contaminated clothing. Wash skin and hair thoroughly with soap and water. Wash clothing before reuse. If skin irritation persists, get medical attention.
Inhalation:	Remove to fresh air. If irritation persists, get medical attention.
Medical Conditions Aggravated by Exposure: None Known. Pre-existing skin or respiratory conditions may be aggravated by excessive and/or prolonged exposure to this material.	
Potential Carcinogen Status: None Known. None of the components of this material are listed by IARC, NTP or OSHA as a carcinogen.	
Section Eight Spill or Leak Procedures	
Steps to be taken in case material is released or spilled: Contain spill; absorb liquids by covering with clay or other absorbent material; vacuum, scoop or sweep up wastes and place in approved container for disposal.	
Waste Disposal Method: Material which cannot be used at site should be disposed of in an approved waste disposal site, follow all applicable Federal, State and Local laws. Triple rinse containers and offer for recycling or reconditioning, or puncture and dispose of in approved sanitary landfill. Do not contaminate water supplies by disposal of wastes or containers.	
Section Nine: Special Protection Information	
Respiratory Protection: Not normally required. If vapors possibly could exceed acceptable levels, wear MSHA/NIOSH approved respirator or mask for protection against dusts, mists and vapors.	
Ventilation:	
Local Exhaust: Not normally required	Special: Not normally required
Mechanical: Use if ventilation is inadequate	Other: Work in well ventilated area
Protective Gloves:	Work gloves or impervious gloves recommended.
Eye Protection:	Chemical goggles or shielded safety glasses recommended.
Other Protective Equipment:	Wear clothing consistent with good practices for handling chemicals.
Section Ten D.O.T. Information & Date of Publication	
DOT Classification: Not Required	DOT Label: Not Required
Date of Issue: January 2, 2022	IATA: Not regulated for transport by IATA.

Sherry Dunn



# SDS (Safety Data Sheet)



SDS Revision Date: 09/15/2015

## 1. Identification

### 1.1. Product identifier

**Product Identity**

Diamond Grow® - Humi[K] Liquid

**Alternate Names**

Organic Liquid Humic Concentrate, Organic Liquid  
Humic Acid/ Potassium Humate, Liquid soil amendment  
derived from high quality coal.

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Intended use**

See Technical Data Sheet.

**Application Method**

See Technical Data Sheet.

### 1.3. Details of the supplier of the safety data sheet

**Company Name**

Humic Growth Solutions  
709 Eastport Rd.  
Jacksonville, Florida 32218

**Emergency**

**24 hour Emergency Telephone No.**

904-329-1012

**Customer Service: Humic Growth Solutions**

## 2. Hazard(s) identification

### 2.1. Classification of the substance or mixture

No applicable GHS categories.

### 2.2. Label elements



## SDS (Safety Data Sheet)



SDS Revision Date: 09/15/2015

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.

No applicable GHS categories.

**[Prevention]:**

No GHS prevention statements

**[Response]:**

No GHS response statements

**[Storage]:**

No GHS storage statements

**[Disposal]:**

No GHS disposal statements

### 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Humic acids, potassium salts CAS Number: 0068514-28-3	12-14	Not Classified	[1]

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

\*The full texts of the phrases are shown in Section 16.

### 4. First aid measures





## SDS (Safety Data Sheet)



SDS Revision Date: 09/15/2015

### 4.1. Description of first aid measures

<b>General</b>	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
<b>Inhalation</b>	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
<b>Eyes</b>	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
<b>Skin</b>	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
<b>Ingestion</b>	Rinse mouth. Dilute the stomach contents by giving large amounts of water or milk.

### 4.2. Most important symptoms and effects, both acute and delayed

<b>Overview</b>	Ingestion and Eye contact may cause irritation. Skin contact and ingestion are not considered harmful or dangerous
-----------------	--

## 5. Fire-fighting measures

### 5.1. Extinguishing media

Use media appropriate for surrounding fire.

### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: No hazardous decomposition data available.

### 5.3. Advice for fire-fighters

Substance is not considered a fire or explosion hazard.

ERG Guide No. ----



## SDS (Safety Data Sheet)



SDS Revision Date: 09/15/2015

### 6. Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

#### 6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

#### 6.3. Methods and material for containment and cleaning up

Triple rinse containers before disposal. If recycling, replace cap and return clean container to collection point. Empty containers can be disposed of in accordance with local regulations.

**Personal Precautions:** The usual precautions for handling organic bio-stimulants should be observed.

**Environmental Precautions:** No environmental hazards are associated with this product. Prevent from entering sewers, waterways or low areas.

**Spill Procedure:** Take steps to control product discharge into the environment. Notify appropriate authorities if required and arrange for the recovery of spilled material.

**Methods for Clean-up:** Dilute and wash away with large amounts of water.

**Additional Advice:** Dispose of in accordance with local regulations.

### 7. Handling and storage

#### 7.1. Precautions for safe handling

None

#### 7.2. Conditions for safe storage, including any incompatibilities

Store out of sunlight. Suitable for general storage areas. Keep product container closed and avoid high temperatures.

Incompatible materials: Incompatible with strong acids. Powerful oxidizing compounds may cause gassing. Aqua



## SDS (Safety Data Sheet)



SDS Revision Date: 09/15/2015

ammonia, Carbonate-based pesticides calcium nitrate, zinc sulphate and solutions with pH < 6.

### 7.3. Specific end use(s)

No data available.

## 8. Exposure controls and personal protection

### 8.1. Control parameters

#### Exposure

CAS No.	Ingredient	Source	Value
0068514-28-3	Humic acids, potassium salts	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

#### Carcinogen Data

CAS No.	Ingredient	Source	Value
0068514-28-3	Humic acids, potassium salts	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

### 8.2. Exposure controls

#### Respiratory

Not required if using the product outside in the fresh air. If using in an enclosed area, make sure there is good ventilation.

#### Eyes

It is recommended that eye protection be worn when spraying.

#### Skin

Safety goggles, coveralls and protective footwear are recommended when handling bulk



## SDS (Safety Data Sheet)



SDS Revision Date: 09/15/2015

quantities of the product. Gloves may be worn but not required.

**Engineering Controls** The usual precautionary measures for handling chemicals should be observed.

**Other Work Practices** Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

### 9. Physical and chemical properties

Appearance	Blackish/Brown Liquid
Odor	Wet Soil-Like
Odor threshold	Not determined
pH	~9.45
Melting point / freezing point	Not Measured
Initial boiling point and boiling range	212°F / 100°C
Flash Point	Not Measured
Evaporation rate (Ether = 1)	Not Measured
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	<b>Lower Explosive Limit:</b> Not Measured <b>Upper Explosive Limit:</b> Not Measured
Vapor pressure (Pa)	Not Measured
Vapor Density	Not Measured
Specific Gravity	1.05
Solubility in Water	Soluble
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured



## SDS (Safety Data Sheet)



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Density 8.76

### 9.2. Other information

No other relevant information.

## 10. Stability and reactivity

### 10.1. Reactivity

Hazardous Polymerization will not occur.

### 10.2. Chemical stability

Stable under normal circumstances.

### 10.3. Possibility of hazardous reactions

No data available.

### 10.4. Conditions to avoid

No data available.

### 10.5. Incompatible materials

Incompatible with strong acids. Powerful oxidizing compounds may cause gassing. Aqua ammonia, Carbonate-based pesticides calcium nitrate, zinc sulphate and solutions with pH < 6.

### 10.6. Hazardous decomposition products

No hazardous decomposition data available.

## 11. Toxicological information

### Acute toxicity

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50,	Inhalation Dust/Mist LC50,	Inhalation Gas LC50,



## SDS (Safety Data Sheet)



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			mg/L/4hr	mg/L/4hr	ppm
Humic acids, potassium salts - (68514-28-3)	No data available	No data available	No data available	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	---	Not Applicable
Serious eye damage/irritation	---	Not Applicable
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

### 12. Ecological information

#### 12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.



## SDS (Safety Data Sheet)



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### Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Humic acids, potassium salts - (68514-28-3)	Not Available	Not Available	Not Available

### 12.2. Persistence and degradability

There is no data available on the preparation itself.

### 12.3. Bioaccumulative potential

Not Measured

### 12.4. Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

### 12.6. Other adverse effects

No data available.

## 13. Disposal considerations

### 13.1. Waste treatment methods

Dispose of in accordance with applicable environmental regulations, including local requirements. Avoid contamination of ponds, waterways or ditches.



## SDS (Safety Data Sheet)



SDS Revision Date: 09/15/2015

### 14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	Not Applicable	Not Regulated	Not Regulated
14.2. UN proper shipping name	Not Regulated	Not Regulated	Not Regulated
14.3. Transport hazard class(es)	DOT Hazard Class: Not Applicable	IMDG: Not Applicable Sub Class: Not Applicable	Air Class: Not Applicable
14.4. Packing group	Not Applicable	Not Applicable	Not Applicable
14.5. Environmental hazards			
IMDG	Marine Pollutant: No		
14.6. Special precautions for user	No further information		

### 15. Regulatory information

Regulatory Overview	The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.
Toxic Substance Control Act ( TSCA)	All components of this material are either listed or exempt from listing on the TSCA Inventory.
WHMIS Classification	Not Regulated
US EPA Tier II Hazards	Fire: No Sudden Release of Pressure: No





## SDS (Safety Data Sheet)



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**Reactive:** No

**Immediate (Acute):** No

**Delayed (Chronic):** No

**EPCRA 311/312 Chemicals and RQs:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**EPCRA 302 Extremely Hazardous:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**EPCRA 313 Toxic Chemicals:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Carcinogens (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Developmental Toxins (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Female Repro Toxins (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Male Repro Toxins (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**New Jersey RTK Substances (>1%) :**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Pennsylvania RTK Substances (>1%) :**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

### 16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our



## SDS (Safety Data Sheet)



SDS Revision Date: 09/15/2015

products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is: Not applicable

**This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.**

End of Document

# **MATERIAL SAFETY DATA SHEET**

## **Micronized Soft Rock Phosphate**

**EMERGENCY CALL 911 or CANUTEC: 1-(613) 996-6666 or \* 666 on cell phones**

### **Section 1: Product Information**

Manufacturers name and Address:  
High Brix Manufacturing  
Box 5211  
Leduc, Alberta, T9E6L6

Trade Name: Micronized Soft Rock Phosphate

Synonyms: Phosphate Rock (minerals rock); apatite rock deposit; soft rock phosphate; organic rock phosphate.

**In case of emergency call 911 or Canutec: 1 (613) 996-6666 or \*666 on your cell phone**

### **2. Hazardous Ingredients**

Component	CAS No.	%	Exposure Limits	Hazard
Not Applicable				

### **3. Physical Data**

-Boiling Point: N/A  
-Freezing Point: Decomposes  
-Vapour Pressure: N/A

-Vapour Density: N/A  
-Evaporation Rate: N/A  
-Appearance and Odour: Brown powdered rock

### **4. Fire and Explosion Hazard Data**

Flammable Limits in air(upper):No Data  
Flammable Limits in air(lower):No Data

Flash Point (Degrees F):  
Means of extinction: Use water, CO2, dry chemical foam

Unusual Fire and Explosion Hazards: Avoid production in a dusty area where there is electrical or local burning.

### **5. Reactivity Data**

Stability: Very Stable when dry

Conditions of reactivity: Temperatures in excess of 150 degrees C.

Materials to avoid: Bases and Hypochlorite's

Hazardous Decomposition Products: Ammonia, Carbon Monoxide, Cyanuric Acid and sulphur dioxide.

### **6. Toxicology Properties**

Avoid contact with eyes, mouth or excess dust in ear cavities. May also cause irritation to skin upon contact. Also can cause lung damage, if dust is consumed on a regular basis due to the silica content.

Carcinogenicity: None of the materials are carcinogens.

### **7. Preventive Measures**

**Control measures:** Ventilate to control dust.

**Respiratory Protection:** A NIOSH or MSHA approved respirator should be worn when dust levels exceed 15 mg/m3

**Protective Clothing:** Normal clothing or coveralls, rubber gloves.

**Eye Protection:** Wear Safety glasses or goggles to avoid eye contact.

**Spill or Leak Precautions:** Sweep, shovel or vacuum into sealable waste containers. Flush area with plenty of water. Prevent contamination of sewers, streams, lakes, ponds and domestic waterways.

**Waste Disposal:** Dispose of in accordance with local, provincial and federal regulations. Return recovered material to manufacturer for recycling or reprocessing.

**Storage and Handling Precautions:** Keep out of reach of children. Store in a dry place. Do not store with seeds or foodstuffs. Avoid direct and prolonged contact with skin.

### **8. First Aid Measures**

**Primary Route of Exposure:** Skin or eye contact, inhalation.

If inhaled: Move victim to fresh air.

**In case of eye contact:** Flush immediately with large amounts of water for 15 minutes. Seek attention if irradiation persists.

**In case of skin contact:** Wash with soap and water. Flush affected areas with large amount of cold water. Contaminated clothing should be washed.

**If Swallowed:** Signs and symptoms: Excess ingestions must occur before any health hazard results.

Effects of overexposure may include nausea, vomiting, diarrhea, weakness or convulsions. Treatment:

For large amounts, seek medical attention.

### **9. Preparation Date**

Cindy Moline, High Brix Manufacturing 1-306-747-4744 2021-01-25

REPORT NO.  
C20323-70014

ACCOUNT NUMBER  
95000

# A & L Canada Laboratories Inc.

2136 Jetstream Road, London, ON, N5V 3P5 Tel: (519) 457-2575 Fax: (519) 457-2664



TO: BACK TO YOUR ROOTS SOLUTIONS  
BOX 1236  
SHELLBROOK, SK S0J 2E0

Phone: 519-457-2575

## CERTIFICATE OF ANALYSIS

PAGE: 1 / 2

PROJECT NO:  
PO#:  
LAB NUMBER: 3237026  
SAMPLE ID: ROCK PHOSPHATE

SAMPLE MATRIX: SOLID  
DATE SAMPLED: NONE GIVEN  
DATE RECEIVED: 2020-11-18  
DATE REPORTED:  
DATE PRINTED: 2020-11-25

PARAMETER	RESULT	UNIT	DETECTION LIMIT	METHOD REFERENCE
Arsenic	21	ug/g	1	EPA 3050B/6010B(mod) *
Total Phosphorus (as P2O5)	22.49	%	0.05	ICP
Cadmium	1.20	ug/g	0.50	EPA 3050B/6010B(mod) *
Chromium	86.40	ug/g	1.00	EPA 3050B/6010 (mod) *
Cobalt	2.92	ug/g	1.00	EPA 3050B/6010 (mod) *
Copper	42.30	ug/g	1.00	EPA 3050B/6010 (mod)*
Lead	7	ug/g	1	EPA 3050B/6010B(mod) *
Mercury	0.1	ug/g	0.1	EPA 7471 *
Molybdenum	19.1	ug/g	1.0	EPA 3050B/6010 (mod)*
Nickel	64.20	ug/g	1.00	EPA 3050B/6010 (mod) *
Selenium	BDL	ug/g	1.00	EPA 3050B/6010 (mod) *
Vanadium	38.67	ug/g	1.00	EPA 3050/6010 (mod)*
Zinc	111.40	ug/g	1.00	EPA 3050B/6010 (mod)*

Comment:

Results reported on a dry weight basis

\* - accredited test

BDL - Below detectable levels

The results of this report relate to the sample submitted and analyzed.



C20323-70014

Results Authorized By:

Haifeng Song, Ph.D., C.Chem. Lab Director

A&L Canada Laboratories Inc. is accredited by the Standards Council of Canada for specific tests as listed on [www.scc.ca](http://www.scc.ca) and by the Canadian Association for Laboratory Accreditation as listed on [www.cala.ca](http://www.cala.ca)

Additional information available upon request

This Certificate of Analysis has been prepared for use by the Recipient only. Possession of this Certificate of Analysis, does not carry with it the right to reproduction or publication in whole or in part, nor may it be used by anyone other than the Recipient without the prior written consent and approval of A & L Canada Laboratories Inc. ("A&L Canada"). Upon receipt of this Certificate of Analysis by the Recipient from A&L Canada, A&L Canada shall not be responsible for and no claim shall be advanced against A&L Canada as a result of the unauthorized reproduction, use or distribution of this Certificate of Analysis.

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MSDS Number: **A0002** \* \* \* \* *Effective Date: 5/23/13* \* \* \* \* *Supercedes: N/A*

---

<b>MSDS</b>	<b>Material Safety Data Sheet</b>		24 Hour Emergency Telephone: (305) 441-2202 <b>CHEMTREC: 1-800-424-9300</b>
			National Response in Canada <b>CANUTEC: 613-996-6666</b>
From: Terra Tech Int. Inc. 12969 N.W. 9th Terrace Miami, Florida, 33182-USA			<b>Outside U.S. and Canada</b> Chemtrec: 703-527-3887
All non-emergency questions should be directed to our Customer Service (1-305- 441-2202) for assistance. -		<b>NOTE:</b> CHEMTREC, CANUTEC, and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals.	

---

**Terra Tech International, Inc.**

**ZumSil Standard Solution**

---

**1. Product Identification**

**Synonyms:** Silicilic acid, Silicon dioxide, Alkali soils

**CAS No.:** Not applicable to mixtures.

**Molecular Weight:** Not applicable to mixtures.

**Chemical Formula:** Not applicable to mixtures.

**Product Codes:** Not applicable to mixtures

---

**2. Composition/Information on Ingredients**

Ingredients	CAS Number	Percentage	Hazardous
Water	7732-18-5	80 - 85%	No
Silicilic Acid in alkali soil	7699-41-4/ 7732-18-5	15 - 20%	No

---

## 3. Hazards Identification

### Emergency Overview

-----  
**HAZARDOUS in case of eye contact, ingestion or inhalation.**

**Terra Tech International SAFETY-** Ratings (Provided here for your convenience)

-----  
Health Rating: 1 – Slightly hazardous, Irritant

Flammability Rating: 0 – nonflammable

Reactivity Rating: 0 - Nonreactive

Contact Rating: 0 – Non-hazardous

Lab Protective Equip: EYE PROTECTION (GOGGLES); LAB COAT or APRON;  
PROPER GLOVES

Storage Color Code: White  
-----

### Potential Health Effects

-----  
**Inhalation:**

May cause respiratory tract irritation.

**Ingestion:**

Ingestion is unlikely to have any toxic effects, but the product may act as an intestinal irritant.

**Skin Contact:**

Harmful effects are not expected from short periods of exposure. Prolonged or repeated exposure may cause irritation.

**Eye Contact:**

May cause eye irritation. Symptoms may include discomfort or pain, excessive blinking, and tear production.

**Chronic Exposure:**

Prolonged lung contact to the respiratory tract may cause irritation. Prolonged skin contact may lead to irritation. No target organ chronic effects under normal conditions of use.

**Aggravation of Pre-existing Conditions:**

Because of its irritating properties, dust and allergens may aggravate pre-existing eye, skin, and respiratory conditions.

---

## 4. First Aid Measures

**Inhalation:**

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician. Exposed persons should be kept under medical observation for 24 hours. Inhalation is not a normal route of exposure.

**Ingestion:**

Treat systematically. Not expected to be toxic by ingestion.

**Skin Contact:**

No emergency care is anticipated. Wash skin with soap and water. Remove contaminated clothing. Wash clothing before reuse. Obtain medical attention if irritation persists.

**Eye Contact:**

No emergency care is anticipated. Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Cold water may be used. Get medical attention if discomfort persists.

---

## 5. Fire Fighting Measures

**Fire:**

Flash point: > 230°F

**Special Fire Fighting Instructions:**

Use water spray to cool fire exposed containers and structures. Do not direct solid water stream into burning molten material, thus causing splattering and spreading of the fire.

**Fire Extinguishing Media:**

Powder, CO<sub>2</sub>, dry chemical, water spray, foam.

**Products of Combustion:**

Small amounts of silicon oxides may be released.

**Special Information:**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

---

## 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Prevent entry to sewers, basements, or confined areas; dike if needed. Floors may be slippery and use care to avoid falling. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The

toll free number for the US Coast Guard National Response Center is (800) 424-8802.

---

## 7. Handling and Storage

Never use pressure to empty containers. Protect against physical damage. Store in a cool, dry well-ventilated location. Outside or detached storage is preferred. Separate from incompatibles. Containers should be bonded and grounded for transfers to avoid static sparks. Containers of this material are non-hazardous when empty.

---

## 8. Exposure Controls/Personal Protection

### **Airborne Exposure Limits:**

Not normally needed. Ventilation is not normally required. If there is a large spill, wear an appropriate organic filter mask to reduce lung irritation.

### **Skin Protection:**

Not normally needed. Wear appropriate protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to minimize skin contact when handling large quantities.

### **Eye Protection:**

Not normally needed. Wear appropriate chemical safety glasses or goggles and/or a full face shield where splashing is possible.

---

## 9. Physical and Chemical Properties

### **Appearance:**

Amber liquid.

### **Odor:**

None.

### **Solubility:**

Soluble in water. .

### **Specific Gravity:**

1.225

### **pH:**

12.5.

### **% Volatiles by volume @ 21°C (70°F):**

Not available

### **Boiling Point:**

> 230°F.

### **Melting Point:**

No information found.

### **Vapor Pressure :**



N/A .

**Vapor Density:**

N/A

---

## 10. Stability and Reactivity

**Stability:**

Stable under ordinary conditions of use and storage.

**Hazardous Decomposition Products:**

Silicon oxides may form when burned.

**Hazardous Polymerization:**

Will not occur.

**Incompatibilities:**

Select water reactant metals.

**Conditions to Avoid:**

N/A.

---

## 11. Toxicological Information

**Toxicological Data:**

This product may cause eye irritation. This product is non-hazardous under normal conditions of use. OSHA/HMIS has listed silicon dioxide as non-hazardous under normal conditions of use.

---

## 12. Ecological Information

**Environmental Fate:**

This product under normal dilution to drains, sewers, and treatment plants is not considered environmentally harmful.

**Environmental Toxicity:**

This product under normal dilution to drains, sewers, and treatment plants is not considered environmentally harmful.

---

## 13. Disposal Considerations

This product is considered a non-hazardous waste under RCRA, as supplied. Whatever cannot be saved for recovery or recycling should be handled as non-hazardous waste and can be sent to a RCRA approved incinerator or disposed in a RCRA approved waste facility. Processing, use or contamination of this product may change the waste

management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

---

## 14. Transport Information

### Domestic (Land, D.O.T.)

-----

**Proper Shipping Name:** Non-hazardous

**Hazard Class:** Non-hazardous

**UN/NA:** Non-hazardous

**Packing Group:** N/A

**Information reported for product/size:** 55 gal drum

### International (I.M.D.G.)

-----

Product is not regulated by IMDG.

### International (Air, I.C.A.O.)

-----

**Proper Shipping Name:** Non-hazardous

**Hazard Class:** Non-hazardous

**UN/NA:** N/A

**Packing Group:** N/A

**Information reported for product/size:** 5 Gallon drum

---

## 15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----

Ingredients	CAS Number
Water	7732-18-5
Silicilic Acid in alkali soils	7699-41-4/ 7732-18-5

This product is regulated by the Environmental Protection Administration, under the U.S. Environmental Protection Act as a non-hazardous fertilizer. The MSDS is prepared to the OSHA Hazard Communication Standard, 29CFR 1910:1200

-----

---

## 16. Other Information

**NFPA Ratings:** Health: **1** Flammability: **0** Reactivity: **0**

**Label Hazard Warning:**

Non-hazardous.

**Label Precautions:**

None.

**Label First Aid:**

If swallowed, do not induce vomiting unless directed by medical personnel. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. In all cases call a physician.

**Product Use:**

Fertilizer.

**Revision Information:**

MSDS Section(s) changed since last revision of document include: 0.

**Disclaimer:**

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