



Back To Your Roots Soil Solutions High Brix Manufacturing

Organic Paperwork for Verification 2022

Diverse-A-Tea

March 1, 2022

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.

Diverse-A-Tea Brewing Services Inc.

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

No: 2000

Sold To:	Deliv	eliver To:			
	Date	Required:			
I,responsible fo containers acc	request Diverse-A-Tea Brewers Inc. to brewer the end use of the microbial tea. This will include proper disposording to any provincial and federal requirements.				
	vill supply the ingredients for the tea outlined below:				
Microb	vial Tea Starter - includes starter product, molasses and phosphor	ic acid			
	c Verified Microbial Tea Starter - ingredient list and organic sup- tarter products listed below:	oorting paperwork avail	able upon request		
Signature: _					
QUANTITY	DESCRIPTION	UNIT COST	AMOUNT		
1	#1 - 1,000 litre tote (264 US gallons) *(Organic Verified)	\$650.00	\$650.00		
1	Refundable deposit for tote	\$125.00	\$125.00		
1	Shipping and handling per tote	\$170.00	\$170.00		
	Subtotal		\$945.00		
	GST - 5%		\$47.25		
	TOTAL		\$992.25		
	Bulk shipments are available upon request				

Disclaimer: Buyer assumes all risk of use, storage and handling of this material. Neither seller nor its agent makes any warranty, expressed or implied, concerning this product, except in conformity with statements on the contract.

Date:

Salesperson Signature:	AtonDanburg
Customer Signature:	

Diverse-A-Tea Brewing Services

Date:	Contract Number 2000
Customer Name:	
Address:	
	ing service for the Microbial Tea. Please sign this document and ecords and return the top copies with your payment.
-	tely owned company that provides only the service of brewing ed process to aerate and brew tea and then stabilize the
remaining product or containers. Please	nts of the product, use of the product, nor for the disposal of any e refer to your local, municipal, and provincial guidelines for ents requested and provided by our customers.
included in the tea. Customers requiring ingredients prior to ordering the service	bial tea, our customers must identify what ingredients they want g organic tea must identify any protocols for cleaning or e. Use of Phosphoric acid is required to stabilize the tea after information about ingredients often used in microbial tea.
I have read and understand the above in	nformation:
Customer Signature:	Date:
Customer Printed Name:	
For more information about composite the following recovered	st 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





Back To Your Roots Soil Solutions High Brix Manufacturing

Organic Paperwork for Verification 2022

Verified Tea Starter Ingredient List:

Worm Casting
Molasses
Sugar
Humic Acid
Soft Rock Phosphate
Pacific Natural Fresh Fish Fertilizer
Citric Acid
Zumsil

Compost Detail

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

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

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

Assay Name	Result	Units	Desired Level	Commentary		
Organism Biomass Data						
Dry Weight	0.39	N/A	0.20 to 0.85	Within normal moisture levels.		
Active Fungi	0.00	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 $\mu m.$		
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			
			Organ	ism Biomass Ratios		
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	0.00		0.10 to 10.00	Fungal dominated, becoming more bacterial.		
			Pro	otozoa (Protists)		
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 $$		
				Nematodes		
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				
			Misc	rellaneous Testing		
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

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

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

Assay	Below Range	Desired Range	Above Range	Range	Result
Dry Weight				0.2 - 0.85	0.39
Active Fungi				> 3 µg/g	0.00 µg/g
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	0.00
Flagellates				> 10000 /g	71,978.66 /g
Amoebae				> 100000 /g	359,893.28 /g
Ciliates				< 4319/g	119.42 /g

INPUT VERIFICATION SERVICE



Earthly Matters

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

Client #: 219688

RESULT OF THE DOCUMENTARY EVALUATION

ISSUED: January 5, 2022 EXPIRES: March 24, 2023

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

INPUT VERIFICATION SERVICE



Earthly Matters

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

Client #: 219688

ANNEX

ISSUED: January 5, 2022 EXPIRES: March 24, 2023

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 **January 5, 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





Organic Certificate

Certified Operation: Buffalo Molasses, LLC

Mailing Address: PO Box 74

E Aurora, NY, 14052

Category: Handler

Certificate #: 2125801

Site Address: Buffalo Molasses, LLC: 1830 Perry Road, N. Java, NY, 14113,

USA

(See addendum for details)

Certified to the USDA organic regulations, 7 CFR Part 205. Once certified a production or handling operation's organic certification continues in effect until surrendered, suspended, or revoked.

Effective Date: 10/11/2021 Issue Date: 10/11/2021

Anniversary Date: 03/01/2022

Director of Organic Divisions



Certified Operation: Buffalo Molasses, LLC

Mailing Address: PO Box 74

E Aurora, NY, 14052

Category: Handler

PRODUCTS CERTIFIED

PRODUCTS	ID MARK	STANDARD	EFFECTIVE DATE
Organic:			
Molasses 72 DM	N/A	NOP	10/11/2021

Effective Date: 10/11/2021 Issue Date: 10/11/2021

Anniversary Date: 03/01/2022

Director of Organic Divisions



Scope Certificate

Certificate No. ORG/SC/1902/000585

CORELIFE WHOLEFOODS PRIVATE LIMITED Office No.2, 2nd Floor, Sr.no.21, Hissa No.4/1, Metropolitan Condominium, Wakdewadi, Pune, Pune, Maharashtra-411005

Accreditation No.under NPOP NPOP/NAB/006

This is to certify that the product(s) and area(s) of the mentioned organisation inspected by Lacon Quality Certification Pvt. Ltd. are in accordance with requirements of

India's National Programme for Organic Production Standards

(Considered equivalent to

Council regulation (EC)No. 834/2007(Category A & F) and Swiss Organic Farming Ordinance for unprocessed plant products originating in India)

> For the following process, **Trading** this Certificate is issued.

This certificate is valid from 16/03/2022 until 20/02/2023

This certificate is valid for those product(s) and area(s) that are specified in the annexe ORG/SC/1902/000585 A.

The validity of this certificate solely depends on the continued compliance with the required standards and is subject to annual surveillance inspections.

QUALITY CERTIFICATION A Authorised By. ACCORDING TO ISO 65 Manoshi T Samalesan

Certification Officer/Auditor Issued Date: 16/03/2022

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Certification Characteristics

ORG/SC/1902/000585 A

CORELIFE WHOLEFOODS PRIVATE LIMITED, Office No.2, 2nd Floor,

Sr.no.21,Hissa No.4/1,

Metropolitan Condominium,

Wakdewadi, Pune, Pune, Maharashtra-411005

Trader Product(s):

Product S. No.	Product(s)	Variety	Organic Status
1	Alcohol	Organic Alcohol/Organic ENA	Organic
2	Cane molasses	Organic cane molasses	Organic
3	Cane Sugar	Organic Cane Sugar-Extra Light, Organic Cane Sugar Brown, Organic Cane Sugar-Golden, Organic Cane Sugar- Demerara	Organic
4	Jaggery powder	Organic Jaggery Powder	Organic
5	White Cane Sugar	Organic cane sugar-White	Organic

Trader Warehouse Details:

Ware House	License No.	Address	Type & Capacity (in MT)
Lokmangal Agro	10014022002779	Godown no 04,Subhashnagar, A/P Bibi Darphal, Tal.	Contract, 7000.000000
Industries Ltd		North Solapur, Solapur, Maharashtra, Solapur,	
		Maharashtra	

OneCert International Private Limited

+91 141-2395481; +91-941-4046706 - sandeep@onecert.net www.onecertinternational.com H-8 Mansarovar Industrial Area

Jaipur, 302020, India

certifies that

Corelife Wholefoods Private Limited

t.yadav@lokmangal.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, 9540

NOP Operation ID: 4920003933 Effective Date: 08/26/2020 Anniversary Date: 02/20/2021 Issue Date: 05/28/2021 USDA ORGANIC

ORGANIC CERTIFIC

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-Spilt with Shell, Wheat, Wheat flour, White Cane Sugar



Contact Information

Name: Mr. Tukaram Yadav

Phone: N/A

Email: t.yadav@lokmangal.com

Website: N/A

Addresses: [Physical Address]

Warehouse-1, Godown no 04, A/P Bibi Darphal, Office No.2, 2nd Floor, Sr.no.21, Hissa No.4/1, Metropolitan

[Mailing Address]

Taluka –North Solapur Condominium, Wakdevadi

Solapur, Maharashtra 413222, India Pune, Maharashtra 411005, India





High Brix Manufacturing Inc. Attn: Greg Moline 25147 Township Road 490 Leduc County, AB T4X 2N4

March 21, 2022

Dear Mr. Moline,

Thank you for applying for organic input material approval with the Centre for Systems Integration (CSI). We have completed our review of the inspection report submitted for approval of your input material(s).

Please note that if you make any changes to your operation over the course of the year, you must amend your application and submit the changes to CSI for review.

Congratulations on achieving approval of your input. Your product list and attestation of compliance are enclosed.

Yours truly,

Dave Lockman

Certification Director

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Input Supplier: High Brix Manufacturing Inc.

Input Supplier Number: 8029-INP

Attestation Number: 8029-INP-22

Issue Date: 21-Mar-2022

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
Diamond Grow® Humi[K] WSP	Soil conditioner	NOP allowed
Diamond Grow® Humi[K] WSG	Soil conditioner	NOP allowed
Diamond Grow® Humi[K] Liquid	Soil conditioner	NOP allowed
Diamond Grow® Ful-Grow Gold	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.





Attestation Number: 8029-INP-22
Initial Effective Date: 21-Mar-2022
Attestation Expiry Date: 31-Mar-2023

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

21-Mar-2022

Signature of CSI Representative

Issue Date

Version Date: February 18, 2021

Certification Body:

The Centre for Systems Integration (CSI)* Catherine Street, Suite 200 Ottawa, Ontario, Canada K2P 2G8 1-800-516-3300



RZBC(JUXIAN) CO., LTD.

NO. 209 LAIYANG ROAD, JUXIAN ECONOMIC DEVELOPMENT ZONE, RIZHAO SHANDONG CHINA

TEL: 0086 633 2163519 FAX: 0086 633 2163500

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



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	Technical Administrator
Product Name	Citric Acid Anhydrous	
Product ID	1-23357-401615	FOODCHAIN (D)
Brand Name	RZBC	
Scope of Verification	Human ingestion/app to skin	FoodChain ID 504 North Fourth St. Fairfield, Iowa 52556
Expiration Date (MM/DD/YYYY)	03/20/2022	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. 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 Category Issue date

Allowed COR: Fish Products 4-Sep-2019

Product number Class Expiration date

bcf-12182 Crop Fertilizers and Soil 1-Jun-2023
Amendments

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 · OMRI.org



A Division of Jim Pattison Enterprises Ltd.

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

Material Sali	ection One	-	nouoj- rad	
	ation of Pi			
Manufacture Name:		y Telephone	Number(s)	
Great Pacific Bioproducts,		<i>y</i>		
A Division of Jim Pattison Enterprises Ltd.	(604) 204-69	990 - Tel		
13140 Rice Mill Road	(604) 272-5933 - Fax			
Richmond BC V6W 1A1	Contact Person: Sherry Dunn			
Trade Name and Synonyms:		al Fresh Fish I		
Chemical Name and Synoyms:	Fish Protein	ar ricon rion i	Citilizoi	
Chemical Family:	Organic Fert	ilizore		
Ingredients:	Fish Byprodu			
	ection Two			
Hazardous In			S.	
Component:		% (ppm)	Threshold Limit	
Phosphoric Acid	i	2-3%	Not Available	
(CAS 7664-38-2)				
Substances Contained in Product Re	qulated Under	SARA.		
Title III, Section 313:		,		
None				
Sec	ction Three	9		
Physical & Ch	emical Ch	aracteristi	CS	
Boiling Point:	100°C (212°F			
Vapor Pressure (mm Hg):	N/A	,		
Solubility in Water:	80%			
Specific Gravity (H₂0 - 1)	1.03 - 1.06			
Vapor Density (Air=1)	N/A			
Reactivity in Water:	None			
Appearance & Odor:	-	Liquid, Fish o	dor	
	ction Four		uOi	
	Explosion			
Flash Point (°F): N/A		mmable Limits	s (%Λ/οΙ)· Ν/Δ	
Fire Extinguishing Media: Water	snrav dry che	mical foam or	3 (70/ 401). 14// (
carbon dioxide.	Spray, dry cric	micai, icam ci		
Special Fire Fighting Procedure	s: Eliminate id	nition source		
Wear self-contained breathing appara				
protective equipment. Use water spra		•	uros	
and tanks, and to disperse vapor clo	•	•		
spray, dry chemical, carbon dioxide o		present. Ose v	valci	
Unusual Fire &Explosion Hazar		hie material ie		
not flammable in aqueous state, it wil			rong	
ignition source after the water is remo	•	esence or a su	iong	
<u> </u>	ction Five			
	ctivity Dat	а		
Stability:	Sta		anima and a management of the state of the s	
Conditions to Avoid		essive Heat		
Incompatility (Materials to		ong oxidizers		
Avoid)	5"	ong ondizora		
Hazardous Decomposition	l lAm	monia Ovidos	of Nitrogen and	
Hazardous Decomposition Ammonia, Oxides of Nitrogen a Products: Oxides of Carbon				
Hazardous Polymerization:		not occur		
	ection Six	i not occui		
	al Precauti	ons		
Precautions to be taken in Handling 8			ace away	
from children. Immediately clean up a				
Other Precautions: Do not contamina				
		•		
cleaning of equipment or disposal of v	•	_	वास्वर प्रस्था।,	
read & follow precautionary measure	•	_	•	

Natural" Liquid					
1.1		on Seven			
		Hazard Data			
Effects of Over Exposur	e:	N/A			
Routes of Entry:		Ingestion, Eyes, Skin and Inhalation.			
Most Likely Routes of Ent		Inhalation and skin contact.			
	•	First Aid Procedures			
Ingestion:	1 '	harmful if swallowed. Call a			
		n immediately.			
		th running water for at least 15			
Eyes:	i .	while holding eyes open. In cases			
	of contact lenses, remove immediately. If				
	!	persists, get medical attention.			
		e all contaminated clothing. Wash			
Skin:		hair thoroughly with soap and			
		Vash clothing before reuse. If skin			
		persists, get medical attention.			
Inhalaton:	1	to fresh air. If irritation persists,			
Madiaal Canditiana Ass		ical attention.			
		by Exposure: None Known. Pre-existing			
	•	oe aggravated by excessive and/or			
prolonged exposure to this					
		e Known. None of the components of			
this material are listed by		P or OSHA as a carcinogen.			
Chill		ion Eight			
		ak Procedures			
•		erial is released or spilled:			
		ering with clay or other absorbent			
	or sweep	up wastes and place in approved			
container for disposal.	Nd: 11-1	:- -:- -4 -:4-			
		ial which cannot be used at site			
		ed wase disosal site, follow all			
• •		laws. Triple rinse containers and offer			
		incture and dispose of in approved			
	mammat	e water supplies by disposal of wastes			
or containers.	Spool	al Protection Information			
		al Protection Information			
		y required. If vapors possibly could			
exceed acceptable levels, for protection against dust		HA/NIOSH approved respirator or mask			
Ventilation;	s, misis a	nu vapors.			
Local Exhaust:		<u> </u>			
		Special: Not normally required			
Not normally required Mechanical:					
	4-	Other: Work in well ventilated area			
Use if ventilation is inadeq					
Protective Gloves:		oves or impervious gloves			
	recommo				
Eye Protection:		al goggles or shielded safety			
		recommended.			
Other Protective Equipmen		othing consistent with good			
		for handling chemicals.			
DOT 1		ion Ten			
		& Date of Publication			
DOT Classification: Not Re		DOT Label: Not Required			
Date of Issue: January 2,		IATA: Not regulated for transport			
Sherry Dun	n	by IATA.			



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







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	12-14	Not Classified	[1]
CAS Number: 0068514-28-3	PARTITION	, , , , , , , , , , , , , , , , , , ,	

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







4.1. Description of first aid measures

General In all cases of doubt, or when symptoms persist, seek medical attention.

Never give anything by mouth to an unconscious person.

Inhalation 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.

Eyes Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and

seek medical attention.

Skin Remove contaminated clothing. Wash skin thoroughly with soap and water or use a

recognized skin cleanser.

Ingestion 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

Overview 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.







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







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
	1	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 Lower Explosive Limit: Not Measured

Upper Explosive Limit: 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)



SDS Revision Date: 09/15/2015

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

	the state of the s					
-	Ingredient	Oral LD50,	Skin LD50,	Inhalation	Inhalation	Inhalation
		mg/kg	mg/kg	Vapor LC50,	Dust/Mist LC50,	Gas LC50,







			mg/L/4hr	mg/L/4hr	ppm
Humic acids, potassium salts - (68514-28-3)	No data				
	available	available	available	available	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)	P-1 V- P-1	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	4	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.







Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish,	48 hr EC50 crustacea,	ErC50 algae,
	mg/l	mg/l	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

IMO / IMDG (Ocean

ICAO/IATA

Transportation)

Transportation)

14.1. UN number

Not Applicable

Not Regulated

Not Regulated

14.2. UN proper shipping

Not Regulated

Not Regulated

Not Regulated

name

14.3. Transport hazard

DOT Hazard Class: Not

IMDG: Not Applicable

Air Class: Not Applicable

class(es)

Applicable

Sub 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

All components of this material are either listed or exempt from listing on the TSCA

Control Act (TSCA)

Inventory.

WHMIS Classification

Not Regulated

US EPA Tier II Hazards

Fire: No

Sudden Release of Pressure: No



SDS (Safety Data Sheet)



SDS Revision Date: 09/15/2015

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







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

REPORT NO. C20323-70014

A & L Canada Laboratories Inc.

ACCOUNT NUMBER 95000 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 P205)	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

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

-Boiling Point: N/A

-Vapour Pressure: N/A

-Freezing Point: Decomposes

3. Physical Data

-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

upper):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 ${\sf C}.$

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

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

MSDS	Material Safety Data Sheet	24 Hour Emergency Telephone: (305) 441-2202 CHEMTREC: 1-800-424-9300	
		National Response in Canada CANUTEC: 613-996-6666	
From: Terra Tech Int. Inc 12969 N.W. 9th Te	errace	Outside U.S. and Canada Chemtrec: 703-527-3887	
Miami,Florida,331	82-USA	NOTE: 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.	
All non-emergency questions should be directed to our Customer Service (1-305- 441-2202) for assistance.		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 irratant.

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: $> 230^{\circ}F$

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, CO2, 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

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:

Vapor Pressure:

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:** $> 230^{\circ}$ F. **Melting Point:** No information found.

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.

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