

**GROWERS SECRET, INC
CHUCK SCHILLER
1541 S BERETANIA ST STE 101
HONOLULU HI 96826**

REPORT OF ANALYSIS

For: (40656) GROWERS SECRET, INC
GROWER'S SECRET NITROGEN 16-0-0

Analysis	Level Found		Reporting			Analyst- Date	Verified- Date
	As Received	Units	Limit	Method			
Sample ID: 1.29.20210223.1A Lab Number: 8871029 Date Sampled: 2021-02-21							
Aspartic acid	2.84	%	0.01	AOAC 994.12 (Alt. III)		arr3-2021/03/11	akj2-2021/03/11
Threonine	1.36	%	0.01	AOAC 994.12 (Alt. III)		arr3-2021/03/11	akj2-2021/03/11
Serine	0.60	%	0.01	AOAC 994.12 (Alt. III)		arr3-2021/03/11	akj2-2021/03/11
Glutamic acid	8.61	%	0.01	AOAC 994.12 (Alt. III)		arr3-2021/03/11	akj2-2021/03/11
Proline	10.7	%	0.01	AOAC 994.12 (Alt. III)		arr3-2021/03/11	akj2-2021/03/11
Glycine	15.8	%	0.01	AOAC 994.12 (Alt. III)		arr3-2021/03/11	akj2-2021/03/11
Alanine	7.74	%	0.01	AOAC 994.12 (Alt. III)		arr3-2021/03/11	akj2-2021/03/11
Cystine	0.03	%	0.01	AOAC 994.12 (Alt. I)		tds5-2021/03/11	akj2-2021/03/11
Valine	2.08	%	0.01	AOAC 994.12 (Alt. III)		arr3-2021/03/11	akj2-2021/03/11
Methionine	0.55	%	0.01	AOAC 994.12 (Alt. I)		tds5-2021/03/11	akj2-2021/03/11
Isoleucine	1.36	%	0.01	AOAC 994.12 (Alt. III)		arr3-2021/03/11	akj2-2021/03/11
Leucine	2.77	%	0.01	AOAC 994.12 (Alt. III)		arr3-2021/03/11	akj2-2021/03/11
Tyrosine	0.61	%	0.01	AOAC 994.12 (Alt. III)		arr3-2021/03/11	akj2-2021/03/11
Phenylalanine	1.84	%	0.01	AOAC 994.12 (Alt. III)		arr3-2021/03/11	akj2-2021/03/11
Lysine (total)	2.67	%	0.01	AOAC 994.12 (Alt. III)		arr3-2021/03/11	akj2-2021/03/11
Histidine	0.72	%	0.01	AOAC 994.12 (Alt. III)		arr3-2021/03/11	akj2-2021/03/11
Arginine	4.38	%	0.01	AOAC 994.12 (Alt. III)		arr3-2021/03/11	akj2-2021/03/11
Tryptophan	0.24	%	0.01	AOAC 988.15 (mod)		rwp6-2021/03/03	akj2-2021/03/03
Protein	101	%	0.1	Calculation		lkd8-2021/03/05	bch0-2021/03/05

The result(s) issued on this report only reflect the analysis of the sample(s) submitted.

Our reports and letters are for the exclusive and confidential use of our clients and may not be reproduced in whole or in part, nor may any reference be made to the work, the results, or the company in any advertising, news release, or other public announcements without obtaining our prior written authorization.

**GROWERS SECRET, INC
CHUCK SCHILLER
1541 S BERETANIA ST STE 101
HONOLULU HI 96826**

REPORT OF ANALYSIS

For: (40656) GROWERS SECRET, INC
GROWER'S SECRET NITROGEN 16-0-0

Analysis	Level Found	Units	Reporting	Method	Analyst- Date	Verified- Date
	As Received		Limit			
Sample ID: 1.29.20210223.1A	Lab Number: 8871029 (con't)					
Nitrogen (total)	16.11	%	0.01	MWL WC PROC 55	cmc0-2021/03/09	asl4-2021/03/09
Nitrate-nitrogen	< 0.01	%	0.01	WC PROC 32	may8-2021/03/02	asl4-2021/03/04
Ammonium nitrogen (total)	0.26	%	0.01	AOAC 920.03 (mod)	krq0-2021/03/01	asl4-2021/03/04
Urea nitrogen (N)	< 0.1	%	0.1	AOAC 941.04	krq0-2021/03/01	asl4-2021/03/04
Water soluble nitrogen	15.8	%	0.01	Calculation	Auto-2021/03/09	Auto-2021/03/11
Phosphate (P2O5)	< 0.10	%	0.10	MWL ME PROC 26	Auto-2021/03/02	asl4-2021/03/04
Potash (K2O)	< 0.05	%	0.05	MWL ME PROC 26	Auto-2021/03/02	asl4-2021/03/04
Potassium (soluble, as K2O/Potash)	< 0.10	%	0.10	AOAC 2015.18 *	gmb3-2021/03/04	asl4-2021/03/04
Boron (total)	< 100	ppm	100	MWL ME PROC 26	jdq9-2021/03/01	asl4-2021/03/04
Sulfur (total)	0.67	%	0.05	MWL ME PROC 26	jdq9-2021/03/01	asl4-2021/03/04
Magnesium (total)	0.01	%	0.01	MWL ME PROC 26	jdq9-2021/03/01	asl4-2021/03/04
Sodium (total)	0.84	%	0.01	MWL ME PROC 26	jdq9-2021/03/01	asl4-2021/03/04
Iron (total)	64.5	ppm	50.0	MWL ME PROC 26	jdq9-2021/03/01	asl4-2021/03/04
Calcium (total)	0.86	%	0.01	MWL ME PROC 26	jdq9-2021/03/01	asl4-2021/03/04
Manganese (total)	< 20.0	ppm	20.0	MWL ME PROC 26	jdq9-2021/03/01	asl4-2021/03/04
Arsenic (total)	< 5.0	mg/kg	5.0	EPA 6010	ery3-2021/03/02	trh1-2021/03/04
Cadmium (total)	< 0.50	mg/kg	0.50	EPA 6010	ery3-2021/03/02	trh1-2021/03/04
Chromium (total)	69.8	mg/kg	1.00	EPA 6010	ery3-2021/03/02	trh1-2021/03/04
Cobalt (total)	< 1.00	mg/kg	1.00	EPA 6010	ery3-2021/03/02	trh1-2021/03/04

The result(s) issued on this report only reflect the analysis of the sample(s) submitted.

Our reports and letters are for the exclusive and confidential use of our clients and may not be reproduced in whole or in part, nor may any reference be made to the work, the results, or the company in any advertising, news release, or other public announcements without obtaining our prior written authorization.

**GROWERS SECRET, INC
CHUCK SCHILLER
1541 S BERETANIA ST STE 101
HONOLULU HI 96826**

REPORT OF ANALYSIS

For: (40656) GROWERS SECRET, INC
GROWER'S SECRET NITROGEN 16-0-0

Analysis	Level Found	Units	Reporting		Analyst- Date	Verified- Date
	As Received		Limit	Method		
Sample ID: 1.29.20210223.1A	Lab Number: 8871029 (con't)					
Copper (total)	< 1.0	mg/kg	1.0	EPA 6010	ery3-2021/03/02	trh1-2021/03/04
Mercury (total)	< 0.05	mg/kg	0.05	EPA 7471	pjd8-2021/03/04	trh1-2021/03/04
Molybdenum (total)	1.7	mg/kg	1.0	EPA 6010	ery3-2021/03/02	trh1-2021/03/04
Nickel (total)	1.3	mg/kg	1.0	EPA 6010	ery3-2021/03/02	trh1-2021/03/04
Lead (total)	< 5.0	mg/kg	5.0	EPA 6010	ery3-2021/03/02	trh1-2021/03/04
Selenium (total)	< 10.0	mg/kg	10.0	EPA 6010	ery3-2021/03/02	trh1-2021/03/04
Zinc (total)	< 2.0	mg/kg	2.0	EPA 6010	ery3-2021/03/02	trh1-2021/03/04
Chloride	1.17	%	0.01	Soil Sci. & Plant Anal. 1970	alm2-2021/03/05	asl4-2021/03/08
pH	5.43	S.U.	0.01	EPA 9045	wib1-2021/03/02	asl4-2021/03/04
Salt index	9		1	SOIL CH ANLY JACKSON P.245 *	eas2-2021/03/02	asl4-2021/03/04
Carbon (total)	44.87	%	0.05	ASTM D 5373 (mod)	cmc0-2021/03/02	asl4-2021/03/04
Carbon nitrogen ratio C/N	3 : 1		0.1	Calculation	Auto-2021/03/09	Auto-2021/03/11
Moisture	5.1	%	0.1	SM 2540 G-(1997)	akn1-2021/03/03	asl4-2021/03/04
Water solubility	97.9	%	0.1	MWL *	eas2-2021/03/03	slg7-2021/03/04
Bulk density (packed)	0.41	g/cm ³	0.01	MWL Developed	may8-2021/03/01	asl4-2021/03/04
Phosphate (available, direct extraction)	< 0.1	%	0.1	AOAC 2015.18	eas2-2021/03/03	asl4-2021/03/04
Total organic carbon (TOC)	44.11	%	0.01	ASTM D 5373 (mod)	jmr5-2021/03/09	asl4-2021/03/09

The result(s) issued on this report only reflect the analysis of the sample(s) submitted.

Our reports and letters are for the exclusive and confidential use of our clients and may not be reproduced in whole or in part, nor may any reference be made to the work, the results, or the company in any advertising, news release, or other public announcements without obtaining our prior written authorization.

21-070-4242REPORT DATE
Mar 11, 2021RECEIVED DATE
Feb 26, 2021SEND TO
40656

13611 B Street • Omaha, Nebraska 68144-3693 • (402) 334-7770

www.midwestlabs.com

PAGE 4/8ISSUE DATE
Mar 11, 2021

**GROWERS SECRET, INC
CHUCK SCHILLER
1541 S BERETANIA ST STE 101
HONOLULU HI 96826**

REPORT OF ANALYSIS

For: (40656) GROWERS SECRET, INC
GROWER'S SECRET NITROGEN 16-0-0

Analysis	Level Found	Reporting			Analyst- Date	Verified- Date
	As Received	Units	Limit	Method		

Sample(s) was prepared for EPA 6010 analysis by EPA 3050b.

All results are reported on an AS RECEIVED basis., ppm = parts per million, ppm = mg/kg

For questions please contact:

Rob Ferris
Account Manager
rferris@midwestlabs.com (402)829-9871

The result(s) issued on this report only reflect the analysis of the sample(s) submitted.

Our reports and letters are for the exclusive and confidential use of our clients and may not be reproduced in whole or in part, nor may any reference be made to the work, the results, or the company in any advertising, news release, or other public announcements without obtaining our prior written authorization.

**GROWERS SECRET, INC
CHUCK SCHILLER
1541 S BERETANIA ST STE 101
HONOLULU HI 96826**

REPORT OF ANALYSIS

For: (40656) GROWERS SECRET, INC
GROWER'S SECRET NITROGEN 16-0-0

Detailed Method Description(s)

AOAC 994.12 (Alt. III) total amino acids-hydrolysis

A small amount of a homogenous sample is digested using a combination of heat and hydrochloric acid to break down the peptide bonds between the amino acids. The extract is treated to clean it up and then an aliquot is injected into the LC/MS/MS. This method cannot determine tryptophan. The amino acids cystine and methionine must undergo special treatment before they can be analyzed by this procedure.

Elemental combustion Nitrogen, Carbon, Hydrogen

Analysis follows MWL WC 055 which is based on AOAC 993.13. Samples are ground to a fine, homogenous consistency and a small amount weighed and introduced into the instrument. The sample is burned in the presence of oxygen to release gases such as carbon dioxide, nitrogen, and hydrogen and the levels of a specific gas determined and reported.

WC PROC 32

The extraction phase is based on ASA (American Society of Agronomy) chapter 38 and uses potassium chloride as the extracting solution. The extract is analyzed by automated cadmium reduction based on EPA 353.2

Ammonia (fertilizer/compost)

Analysis follows WC 015 which is based on AOAC 920.03. A sample is placed in a distillation tube and a standard base added to convert ammonium to ammonia. The ammonia is distilled into an acid solution. The acid solution is titrated with a standard acid.

AOAC 941.04 urea

Sample analysis follows MWL WC 016 which is based on a calculation of Ammonia by WC 015 and non-protein nitrogen by WC 035. The urea is determined by subtracting the ammonia result from the non-protein nitrogen.

Calculation

Analytical results are entered into applicable formulas to provide a calculated result which is reported.

The result(s) issued on this report only reflect the analysis of the sample(s) submitted.

Our reports and letters are for the exclusive and confidential use of our clients and may not be reproduced in whole or in part, nor may any reference be made to the work, the results, or the company in any advertising, news release, or other public announcements without obtaining our prior written authorization.

**GROWERS SECRET, INC
CHUCK SCHILLER
1541 S BERETANIA ST STE 101
HONOLULU HI 96826**

REPORT OF ANALYSIS

For: (40656) GROWERS SECRET, INC
GROWER'S SECRET NITROGEN 16-0-0

ICP Analysis Fertilizers AOAC 985.01 (mod)

Analysis follows MWL ME 026 which is based on AOAC 985.01. Samples have been prepared using MWL WC 056. Total minerals in fertilizers have been prepared by AOAC 957.02 using mineral acids and heat. Water soluble manganese is prepared by AOAC 972.03 and the other water soluble by AOAC 977.01. Sample analysis involves moving the sample extract into the ICP where it is nebulized and introduced into the high temperature plasma which energizes the electrons of the dissolved minerals/metals. As the energized electrons of the minerals/metals return to ground state, energy is released as light. The emitted wavelength(s) and light intensities are used to identify and quantitate the minerals/metals in the sample.

AOAC 994.12 (Alt. I) - cystine & methionine

Sample analysis follows MWL HPLC 019 which is based on AOAC 994.12 (Alt I). A small amount of a homogenous sample initiall treated with performic acid to prevent oxidation of cystine and methionine and then this extract is digested using a combination of heat and hydrochloric acid to break down the peptide bonds between the amino acids. The extract is treated to clean it up and then an aliquot is injected into the HPLC using a post-column derivatization apparatus and ninhydrin as the chromophore.

AOAC 988.15 - tryptophan

Sample analysis follows MWL HPLC 025 which is based on AOAC 988.15. A small amount of a homogenous sample is hydrolyzed using a base (sodium hydroxide) and nitrogen blanketed extraction and heat. After the hydrolysis, the extract is cleaned-up and injected into the liquid chromatogram (LC) using a mass selective detector (LC/MS).

AOAC 992.15 protein

Protein analysis is carried out using MWL FO 014 which is based on AOAC 992.15 and USDA/FSIS CLG-PRO04.03. Samples are weighed and placed in an instrument that combusts the sample and releases nitrogen. The amount of nitrogen is determined and then multiplied by a factor to convert the nitrogen value to a protein value. The standard reporting level is 0.1%

ME 042

Analysis follows MWL ME 042 which is based on EPA 6010b, Inductively Coupled Plasma (ICP). A light emission technique where prepared samples are injected into a high energy plasma that forces the elements in the injected sample to emit light energies which are proportional to the level of minerals and metals present. The light is then detected and correlated to the levels of minerals and metals in the original sample.

The result(s) issued on this report only reflect the analysis of the sample(s) submitted.

Our reports and letters are for the exclusive and confidential use of our clients and may not be reproduced in whole or in part, nor may any reference be made to the work, the results, or the company in any advertising, news release, or other public announcements without obtaining our prior written authorization.

**GROWERS SECRET, INC
CHUCK SCHILLER
1541 S BERETANIA ST STE 101
HONOLULU HI 96826**

REPORT OF ANALYSIS

For: (40656) GROWERS SECRET, INC
GROWER'S SECRET NITROGEN 16-0-0

ME 067

Samples are analyzed for mercury using MWL ME 067 which is based upon EPA 7471, cold vapor atomic absorption (CVAA).

Samples are prepared via MWL ME 037 that uses a series of digestion steps involving hot mineral acids and oxidizers so as to destroy organic matter and solubilize mercury. The mercury is reduced by use of stannous chloride to elemental mercury that is then aerated to the light path of a mercury light of an atomic absorption spectrometer (AAS). The absorption of the mercury light at 253.7 nm is then correlated to the level of mercury present in the original sample.

Chloride by Soil Sci. & Plant Anal. 1970

Sample analysis follows MWL WC 054 which is based on a method published in the 1970 volume of Soil Science and Plant Analysis pp 1-6. The sample is extracted with dilute sodium hydroxide and a silver nitrate solution is used to titrate the extract to a potentiometric end point.

pH METER

Analysis follows MWL WC 061 which is based on EPA 9045. The sample is mixed with water and the pH of the resulting aqueous solution is measured.

Carbon/nitrogen in coal ASTM D 5373 (mod)

Sample analysis follows MWL PR 263 which references ASTM D 5373 (modified). Samples are placed in a combustion instrument where carbon is oxidized in oxygen to produce carbon dioxide and nitrogen compounds are converted to elemental nitrogen and the levels determined. The modification indicated is the matrix analyzed is not part of the ASTM scope.

SM 2540 G

Analysis follows MWL WC 060 which is based on SM 2540 G. A sample is weighed placed in a vacuum drying oven to drive off the moisture and re-weighed. The sample is then placed in a muffle furnace at 550°C, cooled, and re-weighed. The residue remaining is the ash and the mass lost is the volatile matter.

Bulk Density

Method modified from USP <616> Method I

The result(s) issued on this report only reflect the analysis of the sample(s) submitted.

Our reports and letters are for the exclusive and confidential use of our clients and may not be reproduced in whole or in part, nor may any reference be made to the work, the results, or the company in any advertising, news release, or other public announcements without obtaining our prior written authorization.

REPORT NUMBER

21-070-4242

REPORT DATE
Mar 11, 2021

SEND TO
40656

RECEIVED DATE
Feb 26, 2021



PAGE 8/8

ISSUE DATE
Mar 11, 2021

**GROWERS SECRET, INC
CHUCK SCHILLER
1541 S BERETANIA ST STE 101
HONOLULU HI 96826**

REPORT OF ANALYSIS

For: (40656) GROWERS SECRET, INC
GROWER'S SECRET NITROGEN 16-0-0

Available Phosphorous - Direct Method

Samples are treated with a neutral ammonium citrate solution. The sample is heated and shaken in a water bath. The sample is then filtered and the soluble portion is analyzed on an ICP.

AOAC 957.02 (P2O5 preparation)

Samples are treated with hydrochloric acid and nitric acid on a hot plate to destroy organic material and dissolve phosphate.

Fertilizer Prep AOAC 957.02

Samples are prepared using a combination of nitric acid and heat. The heating takes place in a block digester

The result(s) issued on this report only reflect the analysis of the sample(s) submitted.

Our reports and letters are for the exclusive and confidential use of our clients and may not be reproduced in whole or in part, nor may any reference be made to the work, the results, or the company in any advertising, news release, or other public announcements without obtaining our prior written authorization.