

# CERTIFICATE OF ANALYSIS

**GENERAL INFORMATION**

Report Date	11-Sep	Country of Origin	Solomon Islands
Sample Number	S2176	Country of Processing	USA
Product Name	Kastom Basal Roots	Manufacture Date	Jun-24
Lot Number	SIK2406-KBR	Best By Date	Jun-27

ITEM	SPECIFICATION	TEST RESULTS	METHOD
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**PHYSICAL & CHEMICAL**

Identification	Piper methysticum	Complies	HPLC
Appearance	Beige to Yellow Powder	Complies	Organoleptic
Kavalactone Standard	2-17 % Kavalactones	8.49%	HPLC
Kavalactone Profile	Noble	Pass	HPLC
Chemotype	If # 5 is in 1st or 2nd in Abundance	243516	HPLC
K/DHM	> 1.2 for Noble	3.3	Calculation

**HEAVY METALS**

		Results	
Arsenic (As)	NMT 1,000 (ppb)*	< 10	ppb
Cadmium (Cd)	NMT 1,000 (ppb)*	252	ppb
Lead (Pb)	NMT 1,000 (ppb)*	998	ppb
Mercury (Hg)	NMT 1,000 (ppb)*	< 10	ppb

\*Heavy Metals Action Limits Based on Maximum PDE at 5% Kavalactones. Results May Exceed 1,000 ppb action limit with higher kavalactone contents.

**MICROBIOLOGICAL**

		Results	
AEROBIC PLATE COUNT	NMT 10,000,000 cfu	340	cfu / 10 g
E. COLI	ABSENT (cfu/10g)	Absent	cfu / 10 g
PSEUDOMONAS AERUGINOSA	ABSENT (cfu/10g)	Absent	cfu / 10 g
SALMONELLA	ABSENT (cfu/10g)	Absent	cfu / 10 g
STAPHYLOCOCCUS AUREUS	ABSENT (cfu/10g)	Absent	cfu / 10 g
YEAST	NMT 100,000 cfu (Combined)	7,600	cfu / 10 g
MOLD		5,200	cfu / 10 g
TOTAL YEAST & MOLD	NMT 100,000 cfu (Combined)	12,800	cfu / 10 g

cfu/g = Colony Forming Units Per Gram      NMT = No More Than      PDE = Permitted Daily Exposure      PPB = Parts Per Billion

*Analysis Performed by a Third-Party Laboratory*

*We are dedicated to offer the best quality of botanical products on the market. We test and stand behind our products.*

*Disclaimer \* The test results are accurate to the best of our knowledge and are based upon reputable laboratory and industry standard testing methods.*

*These results should not be used as a final determination for use in a finished product. It is recommended that you verify these test results with an in-house quality control department or obtain an additional independent third-party lab to verify that this material meets specifications.*

*Botany Evolution, its board of directors, contract laboratories, employees, and affiliates are held harmless from any loss or damages resulting from the use or misuse of this document. The appropriate use of this product is the sole responsibility of the user of the purchasing party.*

Completed By:  Title: Manager Date: 9/12/2024

# Botany Evolution LLC

2510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

## Certificate Of Analysis

### Sample Identification Information

Date of Analysis 9/11/2024

Sample: S2176

Product Name KASTOM BASAL

Lot# SIK2406-KBR9

Country of Origin SOLOMON ISLANDS

Country of Processing USA

Manufacture Date Jun-24

Best By Date Jun-27

### General Product Specifications

Product Species Piper Methysticum

Part Used Root

Common Names Kava kava, Awa, Yagona

Appearance Yellow, Brown, beige powder

### Analyzed Characteristics

#### Specification

#### Result

#### Test Method

Standardization

2-17% Kavalactones

8.49%

HPLC

Identification

Complies by HPLC

Conform

HPLC

Kavalactone Profile

Noble

PASS

HPLC

Mesh Size

60-30

60

Sieve

Color

Beige to Yellow

Pass

Visual

Odor

Pass

Organoleptic

Taste

Pass

Organoleptic

Chemotype

243516

HPLC

K/DHM

3.3

Calculation

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2443.514			
Methysticin	M	1	2.21	400.843	5.10%	0.50%	6
Dihydromethysticin	DHM	2	3.38	406.827	5.18%	0.78%	5
Kavain	K	3	1	4524.573	57.57%	2.58%	4
Dihydrokavain	DHK	4	3.48	1339.893	17.05%	2.65%	2
Desmethoxyyangonin	DMY	5	2.52	411.412	5.23%	0.59%	1
Yangonin	Y	6	3.12	776.343	9.88%	1.38%	3
Kavalactones			<b>Total:</b>	<b>7859.891</b>	<b>100.00%</b>	<b>8.49%</b>	<b>243516</b>

\*See data in attachment HPLC1100 Agilent Certificate with Chromatogram graph.

This result are in house tested and the best of our knowledge and experience. Using calibrated equipment.

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Chemist

*Hustle Youngs*

Date

9/12/24

SAMPLE S2176  
Vial 12

0.75325g/50mL

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA\_09\_11\_2024\_15MINSTDTESTMETHOD 2024-09-11 14-06-29\01->

SEQUENCE C:\CHEM32\1\DATA\KAVA\_09\_11\_2024\_ ->

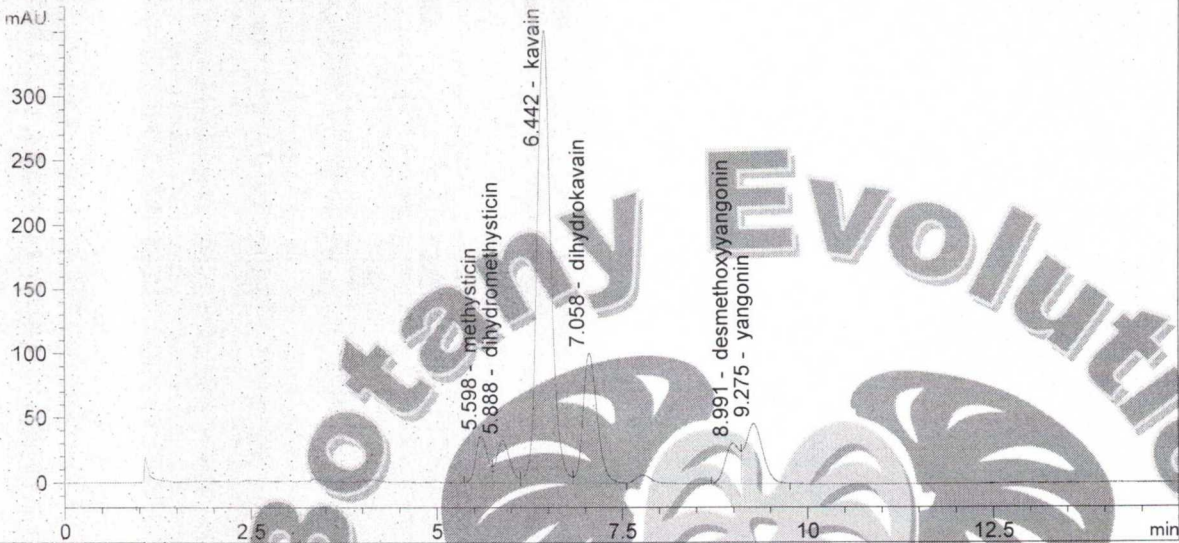
Injection date 9/11/2024

Injection time 6:09:29 PM

Acq. operator KRISTL

Method C:\CHEM32\1\DATA\KAVA\_09\_11\_202->

DAD1 C, Sig=246.10 Ref=500.60 (KAVA\_09\_11\_2024\_15MINSTDTESTMETHOD 2024-09-11 14-06-29\012-1201.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.598	400.843	5.10	0.000
2	dihydromethysticin	5.888	406.827	5.18	0.000
3	kavain	6.442	4524.573	57.57	0.000
4	dihydrokavain	7.058	1339.893	17.05	0.000
5	desmethoxyyangonin	8.991	411.412	5.23	0.000
6	yangonin	9.275	776.343	9.88	0.000

9/12/24  
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