

Botany Evolution LLC

2510 Kirby Circle NE
Palm Bay, FL 32945
321-802-4583

Certificate Of Analysis

Sample Identification Information

Date of Analysis 5/26/2022
Sample: S1583
Product Name CEREMONIAL
Lot# VPS220520C

Country of Origin VANUATU
Country of Processing USA
Manufacture Date 05/20/22
Best By Date 05/20/25

General Product Specifications

Product Species Piper Methysticum
Part Used Root

Common Names Kava kava, Awa, Yagona
Appearance Yellow, beige powder

Analyzed Characteristics

Specification

Result

Test Method

<u>Standardization</u>	2-17% Kavalactones	9.45%	HPLC
<u>Identification</u>	Complies by HPLC	Conform	HPLC
<u>Kavalactone Profile</u>	Noble	PASS	HPLC
<u>Mesh Size</u>	60-30	60	Sieve
<u>Color</u>	Beige to Yellow	Pass	Visual
<u>Odor</u>		Pass	Organoleptic
<u>Taste</u>		Pass	Organoleptic
<u>Chemotype</u>		241516	HPLC
<u>K/DHM</u>		2.7	Calculation

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2266.647			
Methysticin	M	1	2.21	554.952	7.17%	0.71%	6
Dihydromethysticin	DHM	2	3.38	467.889	6.05%	0.88%	5
Kavain	K	3	1	4134.915	53.46%	2.41%	4
Dihydrokavain	DHK	4	3.08	1399.869	18.10%	3.43%	2
Desmethoxyyangonin	DMY	5	2.52	542.725	7.02%	0.87%	1
Yangonin	Y	6	3.12	634.685	8.21%	1.17%	3
Kavalactones			Total:	7735.035	100.00%	9.45%	241516

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

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

Chemist Musil Youngs Date 5/27/22

SAMPLE S1583
Vial 12

0.75512g/50mL

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA_05_26_2022_15MINSTDTESTMETHOD 2022-05-26 21-11-45\01->

SEQUENCE C:\CHEM32\1\DATA\KAVA_05_26_2022_ ->

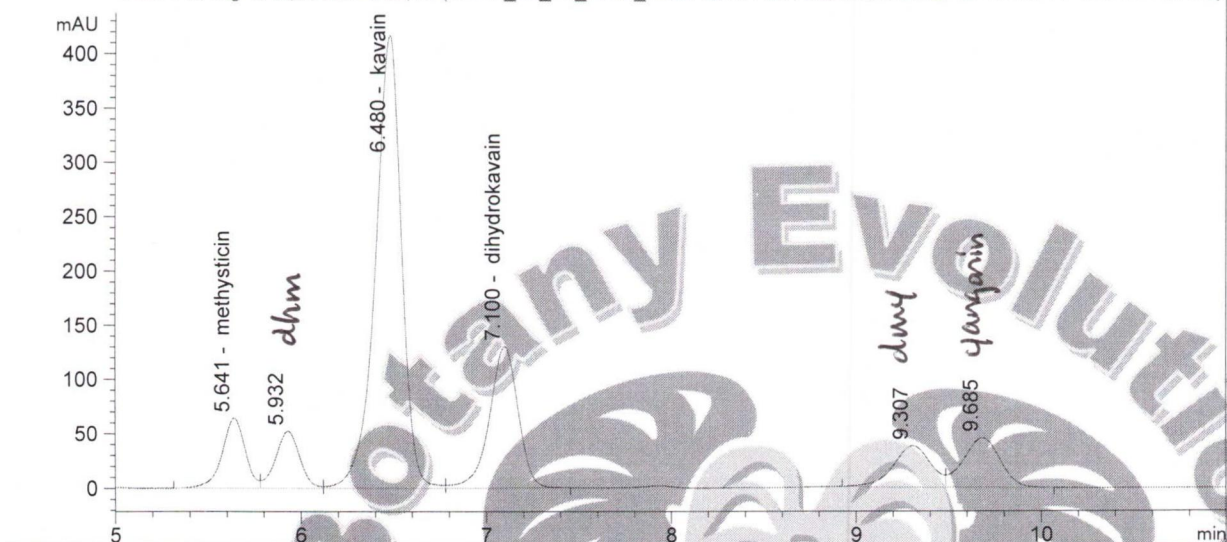
Injection date 5/27/2022

Injection time 2:03:22 AM

Acq. operator KRISTL

Method C:\CHEM32\1\DATA\KAVA_05_26_202->

DAD1 C, Sig=246,10 Ref=500,60 (KAVA_05_26_2022_15MINSTDTESTMETHOD 2022-05-26 21-11-45\012-1501.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.641	554.952	7.17	0.000
2		5.932	467.889	6.05	0.000
3	dihydromethysticin	0.000	0.000	0.00	0.000
4	kavain	6.480	4134.915	53.46	0.000
5	dihydrokavain	7.100	1399.869	18.10	0.000
6		9.307	542.725	7.02	0.000
7	desmethoxyyangonin	0.000	0.000	0.00	0.000
8	yangonin	0.000	0.000	0.00	0.000
9		9.685	634.685	8.21	0.000

* chemstation didn't label peaks
on ✓
by
5/27/22

5/27/22
✓