

Botany Evolution LLC

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

Certificate Of Analysis

Sample Identification Information

Date of Analysis 1/8/2018
Sample: S0308
Product Name CEREMONIAL
Lot# VBE180105C

Country of Origin VANUATU
Country of Processing USA
Manufacture Date 01/05/18
Expiration Date 01/05/21

General Product Specifications

Product Species Piper Methysticum
Part Used Root

Common Names Kava kava, Awa, Yagona
Appearance Beige powder

Analyzed Characteristics

Specification

Result

Test Method

<u>Standardization</u>	2-15% Kavalactones	7.89%	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>		243156	HPLC
<u>K/DHM</u>		3.22	Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2896.159			
Methysticin	M	1	2.19	590.416	7.28%	0.63%	6
Dihydromethysticin	DHM	2	3.23	442.243	5.45%	0.695%	5
Kavain	K	3	1	4598.842	56.72%	2.24%	4
Dihydrokavain	DHK	4	4.21	1227.906	15.14%	2.52%	2
Desmethoxyyangonin	DMY	5	2.74	525.409	6.48%	0.701%	1
Yangonin	Y	6	3.16	723.484	8.92%	1.11%	3
Kavalactones			Total:	8108.300	100.00%	7.89%	243156

*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.
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.

Mustel Yonnes 1/10/18

SAMPLE S0308
Vial 15

0.75891g/50ml

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA_1_8_2018_15MINSTDTESTMETHOD 2018-01-08 15-05-22\015-->

SEQUENCE C:\CHEM32\1\DATA\KAVA_1_8_2018_ ->

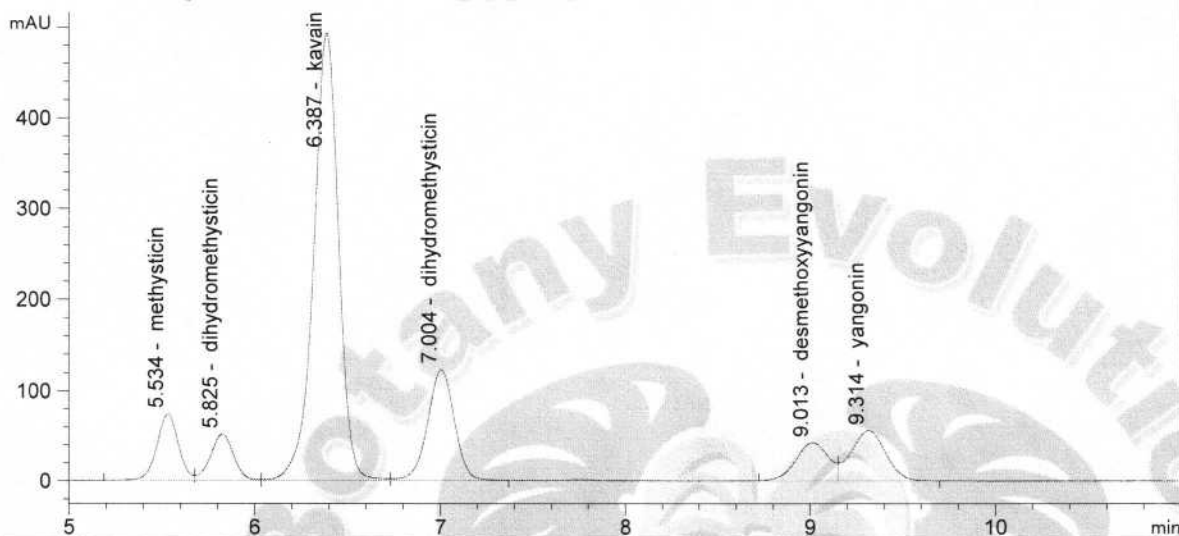
Injection date 1/8/2018

Injection time 8:12:02 PM

Acq. operator KRISTL

Method C:\CHEM32\1\METHODS\KAVA15MIN STD TEST.M

DAD1 C, Sig=246,10 Ref=500.60 (KAVA_1_8_2018_15MINSTDTESTMETHOD 2018-01-08 15-05-22\015-1601.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.534	590.416	7.28	0.000
2	dihydromethysticin	5.825	442.243	5.45	0.000
3	kavain	6.387	4598.842	56.72	0.000
4	dihydromethysticin	7.004	1227.906	15.14	0.001
5	desmethoxyyangonin	9.013	525.409	6.48	0.000
6	yangonin	9.314	723.484	8.92	0.000

Handwritten signature
1/10/18