

Botany Evolution LLC

2510 Kirby Circle NE

Palm Bay, FL 32945

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Certificate Of Analysis**Sample Identification Information**Date of Analysis 2/28/2019Sample: S0602Product Name KAVA EXTRACT LIQUID 80%Lot# CHKB180512KE80Country of Origin CHINACountry of Processing CHINAManufacture Date 05/12/18Best By Date 05/12/21**General Product Specifications**Product Species Piper MethysticumPart Used RootCommon Names Kava kava, Awa, YagonaAppearance BROWN LIQUID**Analyzed Characteristics****Specification****Result****Test Method**Standardization

20-90% Kavalactones

86.37%

HPLC

Identification

Complies by HPLC

Conform

HPLC

Kavalactone Profile

Noble

PASS

HPLC

Mesh Size

60-30

30

Sieve

Color

Beige to Yellow

Pass

Visual

Odor

Pass

Organoleptic

Taste

Pass

Organoleptic

Chemotype

245631

HPLC

K/DHM

1.43

Calculation

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2588.815			
Methysticin	M	1	2.21	8985.898	13.04%	11.03%	6
Dihydromethysticin	DHM	2	3.38	6561.688	9.52%	11.88%	5
Kavain	K	3	1	30379.4	44.07%	17.03%	4
Dihydrokavain	DHK	4	3.08	11812.079	17.14%	27.87%	2
Desmethoxyyangonin	DMY	5	2.52	5374.54	7.80%	8.25%	1
Yangonin	Y	6	3.12	5819.145	8.44%	10.31%	3
Kavalactones			Total:	68932.750	100.00%	86.37%	245631

*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.

*Muste Youngs**3/6/19*

SAMPLE ~~S0609~~ *S0602 RR*
 Vial 12

0.35079g/50mL

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA_2_28_2019_15MINSTDTESTMETHOD 2019-02-28 15-47-08\012->

SEQUENCE C:\CHEM32\1\DATA\KAVA_2_28_2019_ ->

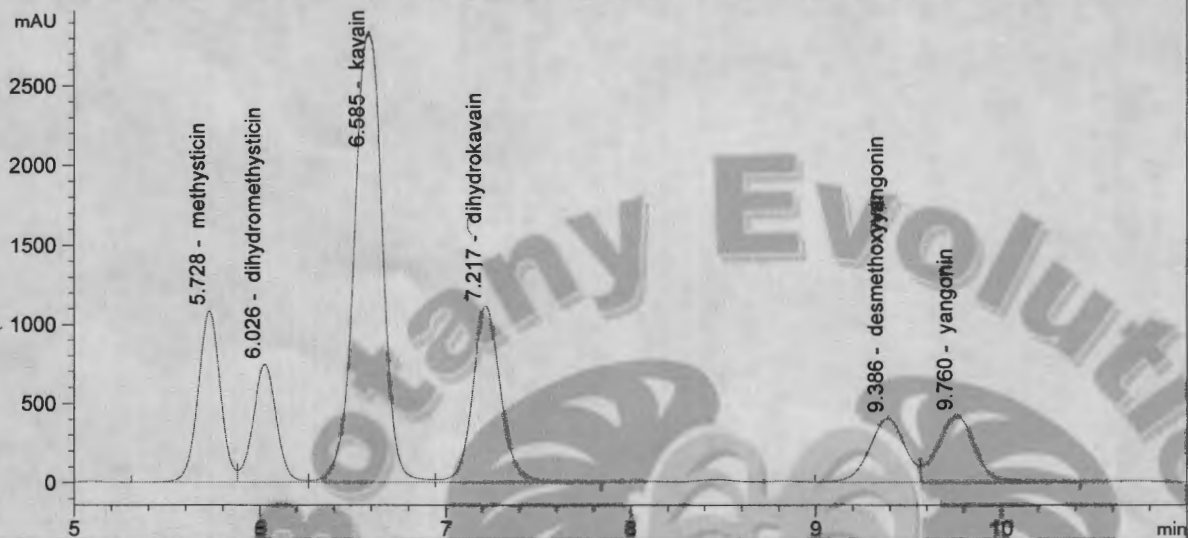
Injection date 2/28/2019

Injection time 6:28:57 PM

Acq. operator KRISTL

Method C:\CHEM32\1\DATA\KAVA_2_28_201->

DAD1 C, Sig=246,10 Ref=500,60 (KAVA_2_28_2019_15MINSTDTESTMETHOD 2019-02-28 15-47-08\012-0701.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.728	8985.898	13.04	0.001
2	dihydromethysticin	6.026	6561.688	9.52	0.001
3	kavain	6.585	30379.400	44.07	0.002
4	dihydrokavain	7.217	11812.079	17.14	0.005
5	desmethoxyyangonin	9.386	5374.540	7.80	0.001
6	yangonin	9.760	5819.145	8.44	0.001

3/4/19
KRISTL