Botany Evolution LLC

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

Certificate Of Analysis

Sample Identification Information

Date of Analyis 5/11/2022

<u>Sample:</u> S1561

Country of Processing USA

Product Name BLACK LABEL

Manufacture Date

Country of Origin

04/20/22

VANUATU

Lot# VPS220420BL

Best By Date

04/20/25

General Product Specifications

Product Species Piper Methysticum

Part Used Root

Common Names

Kava kava, Awa, Yagona

Appearance

Yellow, beige powder

Analyzed Characteristics

Standardization

Identification

Specification

2-17% Kavalactones

Complies by HPLC

Beige to Yellow

Kavalactone Profile Noble

Mesh Size 60-30

Color

Odor

Taste

Chemotype

K/DHM

Result 10.55%

Conform

PASS 60

Pass

Pass

Pass

243165

3.5

Test Method

HPLC

HPLC

HPLC

Sieve

Visual

Organoleptic

Organoleptic

HPLC

Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	К			2280.221			
Methysticin	М	1	2.21	715.092	7.66%	0.905%	6
Dihydromethysticin	DHM	2	3.38	481.946	5.16%	0.900%	5
Kavain	К	3	1	5440.036	58.30%	3.14%	4
Dihydrokavain	DHK	4	3.08	1374.011	14.72%	3.34%	2
Desmethoxyyangonin	DMY	5	2.52	634.853	6.80%	1.01%	1
Yangonin	Υ	6	3.12	685.566	7.35%	1.25%	3
Kavalactones			Total:	9331.504	100.00%	10.55%	243165

^{*}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.

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 Mustl Youngs

Date 5/12/22

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

Kavalactone Analysis

SAMPLE S1561 Vial 11

.75589g/50mL

avelength 246 nm :\CHEM32\1\DATA\KAVA 05 11 2022 15MINSTDTESTMETHOD 2022-05-11 16-48-22\01-> EQUENCE C:\CHEM32\1\DATA\KAVA 05 11 2022 njection date 5/11/2022 njection time 9:23:22 PM .cq. operator KRISTL ethod C:\CHEM32\1\DATA\KAVA 05 11 202-> DAD1 C, Sig=246,10 Ref=500,60 (KAVA_05_11_2022_15MINSTDTESTMETHOD 2022-05-11 16-48-22\011-1401.D) mAU 6.556 - kavain 500 400 dihydrokavain 9.374 - desmethoxyyangonii 6.017 - dihydromethysticin 300 5.722 - methysticin 200 100 -0 COMPOUND RET. TIME AREA AREA THUOMA methysticin 715.092 .66 0.000 5.722 481.946 5.16 0.000 dihydromethysticin 6.017 5440.036 58.30 0.000 6.556 kavain

methysticin 5.722 715.092 7.66 0.000 dihydromethysticin 6.017 481.946 5.16 0.000 dihydrokavain 7.188 1374.011 14.72 0.000 desmethoxyyangonin 9.374 634.853 6.80 0.000 yangonin 9.775 685.566 7.35 0.000

5/12/22