Botany Evolution LLC

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

Certificate Of Analysis

Sample Identification Information

Date of Analysis 5/12/2023

Sample: S1892

Product Name CEREMONIAL

Lot# VPS2304-C5

Country of Origin

VANUATU

Country of Processing

Manufacture Date

Apr-23

USA

Best By Date

Apr-26

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

60-30

Kavalactone Profile Noble

Mesh Size Color

Odor

Taste

Chemotype

K/DHM

Result 9.93%

Conform

PASS

60

Pass

Pass

Pass

243156

4.5

Test Method

HPLC

HPLC

HPLC

Sieve

Visual

Organoleptic

Organoleptic

HPLC

Calculation

						7.	
Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2342.344			
Methysticin	М	1	2.21	526.775	5.83%	0.65%	6
Dihydromethysticin	DHM	2	3.38	374.359	4.14%	0.68%	5
Kavain	К	3	1	5456.712	60.40%	3.08%	4
Dihydrokavain	DHK	4	3.08	1497.515	16.57%	3.56%	2
Desmethoxyyangonin	DMY	5	2.52	602.013	6.66%	0.93%	1
Yangonin	Υ	6	3.12	577.473	6.39%	1.03%	3
Kavalactones			Total:	9034.847	100.00%	9.93%	243156

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

Chemist Must House

Date 5/12/23

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.

Kavalactone Analysis

SAMPLE S1892 Vial 11

.75349g/50mL

avelength 246 nm :\CHEM32\1\DATA\KAVA_05_11_2023_15MINSTDTESTMETHOD_2023-05-11_18-21-18\01-> EQUENCE C:\CHEM32\1\DATA\KAVA 05 11 2023 njection date 5/11/2023 ajection time 11:12:44 PM cq. operator KRISTL ethod C:\CHEM32\1\DATA\KAVA 05 11 202-> DAD1 C, Sig=246,10 Ref=500,60 (KAVA_05_11_2023_15MINSTDTESTMETHOD 2023-05-11 18-21-18\011-1201.D) mAU 6.332 - kavain 500 400 6.930 - dihydrokavain 9.000 - desmethoxyyangonin 5.806 - dihydromethysticin 300 5.527 - methysticin yangonin 200 100 0 5 AREA THUUNA COMPOUND RET. TIME AREA 0.000 526.775 5.83 methysticin 5.527 374.359 4.14 0.000 dihydromethysticin 5.806 0.000 5456.712 60.40 kavain 6.332 0.000 16.57 1497.515 6.930 dihydrokavain 0.000 9.000 602.013 6.66 desmethoxyyangonin 6.39 0.000 9.359 577.473 yangonin

5/12/23