

# CERTIFICATE OF ANALYSIS

**GENERAL INFORMATION**

Report Date	8/27/2024	Country of Origin	Vanuatu
Sample Number	S2172	Country of Processing	China
Product Name	30% Kavalactone Extract	Manufacture Date	4/24/2024
Lot Number	CJ2409KE30	Best By Date	4/24/2027

ITEM	SPECIFICATION	TEST RESULTS	METHOD
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**PHYSICAL & CHEMICAL**

Identification	Piper methysticum	Complies	HPLC
Appearance	Beige to Yellow Powder	Complies	Organoleptic
Kavalactone Standard	2-17 % Kavalactones	30.87%	HPLC
Kavalactone Profile	Noble	Pass	HPLC
Chemotype	If # 5 is in 1st or 2nd in Abundance	241356	HPLC
K/DHM	> 1.2 for Noble	2.6	Calculation

**HEAVY METALS**

		Results	
Arsenic (As)	NMT 1,000 (ppb)*	189	ppb
Cadmium (Cd)	NMT 1,000 (ppb)*	1	ppb
Lead (Pb)	NMT 1,000 (ppb)*	269	ppb
Mercury (Hg)	NMT 1,000 (ppb)*	1	ppb

\*Heavy Metals Action Limits Based on Maximum PDE at 5% Kavalactones. Results May Exceed 1,000 ppb action limit with higher kavalactone contents.

**MICROBIOLOGICAL**

		Results	
AEROBIC PLATE COUNT	NMT 10,000,000 cfu	10,000	cfu / 10 g
E. COLI	ABSENT (cfu/10g)	Absent	cfu / 10 g
PSEUDOMONAS AERUGINOSA	ABSENT (cfu/10g)	Absent	cfu / 10 g
SALMONELLA	ABSENT (cfu/10g)	Absent	cfu / 10 g
STAPHYLOCOCCUS AUREUS	ABSENT (cfu/10g)	Absent	cfu / 10 g
YEAST	NMT 100,000 cfu (Combined)	-	cfu / 10 g
MOLD	NMT 100,000 cfu (Combined)	-	cfu / 10 g
TOTAL YEAST & MOLD	NMT 100,000 cfu (Combined)	1,000	cfu / 10 g

cfu/g = Colony Forming Units Per Gram      NMT = No More Than      PDE = Permitted Daily Exposure      PPB = Parts Per Billion

*Analysis Performed by a Third-Party Laboratory*

*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.*

Authorized By (Name / Title ):         Tony Scheb                        Manager         Signature:         Tony Scheb

SAMPLE S2172 B  
Vial 12

0.55547g/50mL

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA\_08\_27\_2024\_15MINSTDTESTMETHOD 2024-08-27 15-37-16\01->  
SEQUENCE C:\CHEM32\1\DATA\KAVA\_08\_27\_2024\_ ->

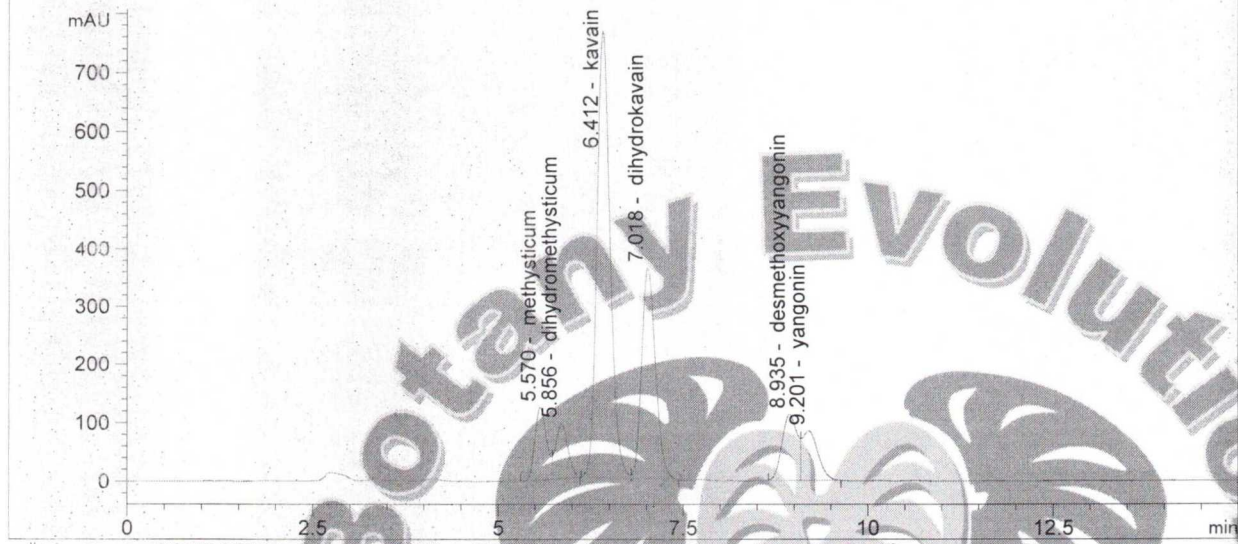
Injection date 8/27/2024

Injection time 7:40:09 PM

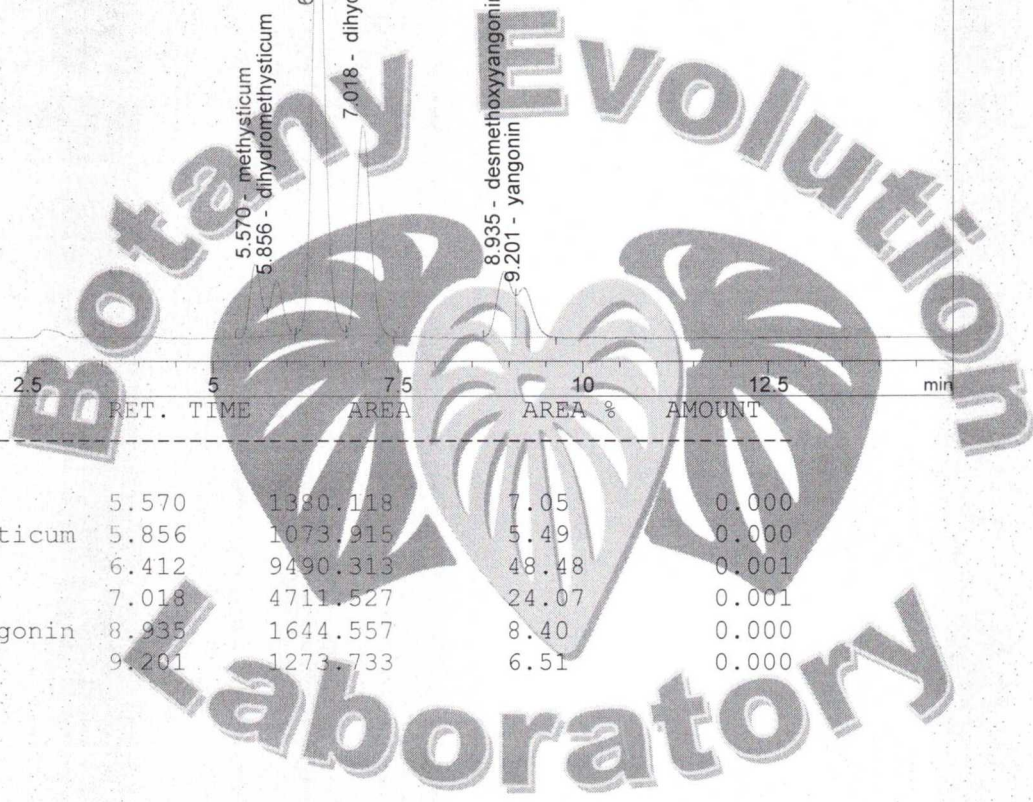
Acq. operator KRISTL

Method C:\CHEM32\1\DATA\KAVA\_08\_27\_202->

DAD1 C, Sig=246,10 Ref=500,60 (KAVA\_08\_27\_2024\_15MINSTDTESTMETHOD 2024-08-27 15-37-16\012-1201.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticum	5.570	1380.118	7.05	0.000
2	dihydromethysticum	5.856	1073.915	5.49	0.000
3	kavain	6.412	9490.313	48.48	0.001
4	dihydrokavain	7.018	4711.527	24.07	0.001
5	desmethoxyyangonin	8.935	1644.557	8.40	0.000
6	yangonin	9.201	1273.733	6.51	0.000



8/28/24  
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