

CERTIFICATE OF ANALYSIS

GENERAL INFORMATION

Report Date	9-Aug	Country of Origin	Solomon Islands
Sample Number	S2164	Country of Processing	USA
Product Name	Gold Basal Roots	Manufacture Date	Jun-24
Lot Number	SIK2406-GBR8	Best By Date	Jun-27

ITEM	SPECIFICATION	TEST RESULTS	METHOD
------	---------------	--------------	--------

PHYSICAL & CHEMICAL

Identification	Piper methysticum	Complies	HPLC
Appearance	Beige to Yellow Powder	Complies	Organoleptic
Kavalactone Standard	2-17 % Kavalactones	9.90%	HPLC
Kavalactone Profile	Noble	Pass	HPLC
Chemotype	If # 5 is in 1st or 2nd in Abundance	243516	HPLC
K/DHM	> 1.2 for Noble	4.0	Calculation

HEAVY METALS

		Results	
Arsenic (As)	NMT 1,000 (ppb)*	< 10 ppb	FDA EAM 4.7
Cadmium (Cd)	NMT 1,000 (ppb)*	190 ppb	FDA EAM 4.7
Lead (Pb)	NMT 1,000 (ppb)*	1,050 ppb	FDA EAM 4.7
Mercury (Hg)	NMT 1,000 (ppb)*	< 10 ppb	FDA EAM 4.7

*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	11,000 cfu / 10 g	USP 2021
E. COLI	ABSENT (cfu/10g)	Absent cfu / 10 g	USP 2022
PSEUDOMONAS AERUGINOSA	ABSENT (cfu/10g)	Absent cfu / 10 g	USP 2022
SALMONELLA	ABSENT (cfu/10g)	Absent cfu / 10 g	USP 2022
STAPHYLOCOCCUS AUREUS	ABSENT (cfu/10g)	Absent cfu / 10 g	USP 2022
YEAST	NMT 100,000 cfu (Combined)	8,000 cfu / 10 g	USP 2021
MOLD		240 cfu / 10 g	
TOTAL YEAST & MOLD	NMT 100,000 cfu (Combined)	8240 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.

Completed By:  Title: Manager Date: 8/14/2024