Certificate of Analysis

ANALYZED BY:

Anresco Laboratories
1375 Van Dyke Avenue,
San Francisco, CA 94124
C8-0000052-LIC

CUSTOMER:

Happy Hippo
2145 E Pine
Meridian 83942

SAMPLE INFORMATION

Sample No.: 1271164
Product Name: Animal Farm - Happy Hippo - K2 - Tropical Orange
Lot #: 610

Date Collected: 01/14/2025
Date Received: 01/15/2025
Date Reported: 01/28/2025

TEST SUMMARY

Kavalactones:	Pass	**Microbiological Screen:**	Tested
Residual Solvent Screen:	Pass	**Heavy Metal Screen:**	Pass
Alkaloid Profile Limited:	Tested	**Overall:**	Pass

Kavalactones

01/28/2025

Method: Standard Solution Assay Parameters provided by Cerilliant

Instrument: HPLC-DAD

Analyte	LOD/LOQ	Findings	Units
Methysticin	0.001/0.006	0.89	mg/mL
Dihydromethysticin	0.001/0.006	0.64	mg/mL
Kavain	0.001/0.006	3.32	mg/mL
Dihydrokavain	0.001/0.006	2.23	mg/mL
Yangonin	0.001/0.006	1.09	mg/mL
Desmethoxyyangonin	0.001/0.006	0.73	mg/mL
Flavokawain C	0.001/0.006	None Detected	mg/mL
Flavokawain A	0.001/0.006	0.11	mg/mL
Flavokawain B	0.001/0.006	0.22	mg/mL
Total Kavalactones	-	9.23	mg/mL

Microbiological Screen

01/24/2025

Method: FDA BAM

Analyte	Findings	Units
Coliforms	<10	cfu/g
E. coli	<10	cfu/g
Yeast	<10	cfu/g
Mold	<10	cfu/g

Residual Solvent Screen Pass

01/21/2025

Method: USP <467>

Analyte	LOD/LOQ (ppm)	Findings (ppm)	Limit (ppm)	Status
1,2-Dichloroethane	0.2/0.5	ND	5	Pass
Acetone	67/200	ND	5000	Pass
Acetonitrile	67/200	ND	410	Pass
Benzene	0.2/0.5	ND	2	Pass
n-Butane	67/200	ND	-	-
Chloroform	0.2/0.5	ND	60	Pass
Ethanol	67/200	ND	5000	Pass
Ethyl acetate	67/200	ND	5000	Pass
Ethyl ether	67/200	ND	5000	Pass
Ethylene oxide	0.2/0.5	ND	10	Pass
n-Heptane	67/200	ND	5000	Pass
n-Hexane	67/200	ND	290	Pass
Isopropyl alcohol	67/200	ND	5000	Pass
Methanol	67/200	284.00	3000	Pass
Methylene chloride	0.2/0.5	ND	600	Pass
n-Pentane	67/200	ND	5000	Pass
Propane	67/200	ND	-	-
Toluene	67/200	ND	890	Pass
Total xylenes (ortho-, meta-, para-)	67/200	ND	2170	Pass
Trichloroethylene	0.2/0.5	ND	80	Pass

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Certificate of Analysis

Heavy Metal Screen ✔ Pass

01/23/2025

Method: MF-CHEM-16

Instrument: Inductively Coupled Plasma Mass Spectrometry (ICP-MS)

Analyte	LOD/LOQ (µg/g)	Findings (µg/g)	Intake (µg/day)	Limit (µg/day)	Status
Arsenic	0.02/0.05	ND	ND	10	Pass
Cadmium	0.02/0.05	ND	ND	4.1	Pass
Lead	0.02/0.05	ND	ND	10	Pass
Mercury	0.02/0.05	ND	ND	2	Pass

Alkaloid Profile Limited

01/21/2025

Method: MF 12D030

Instrument: Liquid Chromatography Diode Array Detector (LC-DAD)

Limit of Quantitation Alkaloid Profile Limited (LC-DAD) 0.1 mg/g

Limit of Detection 0.04 mg/g

Limit of Quantitation 0.1 mg/g

Alkaloid	mg/g	%	mg/ml
Mitragynine	0.89	0.089	0.92
7-Hydroxymitragynine	ND	0.0	ND
Total Alkaloids	0.89	0.089	0.92

Comments Density: 1.02441 g/mL

ND = None Detected
LOD = Limit of Detection
LOQ = Limit of Quantitation

Reported by

Vu Lam
Lab Co Director
January 28, 2025

Scan to verify