

CERTIFICATE OF ANALYSIS



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SAMPLE NAME: RAW CAPSULE
SAMPLE CODE: DTS-250401-016
CLIENT: KR8OM
BATCH RESULT: PASS

MATRIX NAME: Pill - Capsule
SAMPLE TYPE: Quality Assurance
RECEIVED DATE: Wed, Apr 2, 2025
PUBLISHED DATE: Mon, Apr 7, 2025
BATCH/LOT CODE: 25RM0325BA1x-8
BATCH SIZE: 50000g
SAMPLE SIZE: 50g
AVERAGE UNIT WEIGHT: 1.0534g (1 capsule)

MITRAGYNINE	10.96 mg / serv
TOTAL MAJOR ALKALOIDS	18.07 mg / serv
TOTAL MINOR ALKALOIDS	0.04 mg / serv



ALKU Kratom Alkaloids High Level	ALKL Kratom Alkaloids Low Level	ECOLI Total E. Coli & Coliforms Plate	MOS Moisture Content Loss on Drying	AFLA Aflatoxins USP <561>
PGUSP Pesticides USP <561>m	PLUSP Pesticides USP <561>m	TAMC Total Aerobic Bacteria Plate	SS Salmonella & STEC qPCR	AWA Water Activity
HVMET Heavy Metals 4	TYMFD Total Yeast & Mold Plate	PSEUD Pseudomonas aeruginosa Plate	FTIRR Identification by FTIR Report	

APPROVALS

RESULTS REVIEWED BY:

Leslie Varela
Laboratory Director

Cambium Analytica
Monday, Apr 7, 2025

RESULTS CERTIFIED BY:

Douglas Smith
VP - Scientific Operations

Cambium Analytica
Monday, Apr 7, 2025

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ALKU KRATOM ALKALOIDS - HIGH LEVEL LAB-TM-052 - DETERMINATION OF KRATOM ALKALOID CONTENT BY UPLC-DAD ALKU-DTS-250401-016-01 - MON, APR 7, 2025								
ANALYTE	VALUE	VALUE (MG/G)	PER SERVING	PER PACKAGE	ACTION LIMIT	LOD	LOQ	STATUS
Mitragynine	1.0404 %	10.404 mg/g	10.96 mg	10.96 mg	N/A	0.3 ug/g	0.5 ug/g	N/A
Speciociliatine	0.3210 %	3.210 mg/g	3.38 mg	3.38 mg	N/A	0.3 ug/g	0.5 ug/g	N/A
Paynantheine	0.2225 %	2.225 mg/g	2.34 mg	2.34 mg	N/A	0.3 ug/g	0.5 ug/g	N/A
Speciogyneine	0.1317 %	1.317 mg/g	1.39 mg	1.39 mg	N/A	0.3 ug/g	0.5 ug/g	N/A
Total Major Alkaloids	1.7156 %	17.156 mg/g	18.07 mg	18.07 mg	N/A	N/A	N/A	N/A

ALKL KRATOM ALKALOIDS - LOW LEVEL LAB-TM-047 - DETERMINATION OF KRATOM ALKALOID CONTENT BY LC-TQ ALKL-DTS-250401-016-01 - MON, APR 7, 2025								
ANALYTE	VALUE	VALUE (MG/G)	PER SERVING	PER PACKAGE	ACTION LIMIT	LOD	LOQ	STATUS
7-Hydroxymitragynine	0.00421 %	0.042 mg/g	0.04 mg	0.04 mg	N/A	0.002 ug/g	0.011 ug/g	N/A
Mitraphylline	0.00001 %	0.000 mg/g	0.00 mg	0.00 mg	N/A	0.004 ug/g	0.019 ug/g	N/A
Total Minor Alkaloids	0.00422 %	0.042 mg/g	0.04 mg	0.04 mg	N/A	0.006 ug/g	0.03 ug/g	N/A



ECOLI TOTAL E. COLI & COLIFORMS - PLATE LAB-TM-059 - ENUMERATION OF ESCHERICHIA COLI AND TOTAL COLIFORM IN FOODS AND DIETARY SUPPLEMENTS ECOLI-DTS-250401-016-01 - FRI, APR 4, 2025								
ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS			
E. coli	ND	N/A	10 CFU/g	10 CFU/g	N/A			
Total Coliforms	ND	N/A	10 CFU/g	10 CFU/g	N/A			



MOS MOISTURE CONTENT - LOSS ON DRYING LAB-TM-008 - LOSS ON DRYING MOS-DTS-250401-016-01 - FRI, APR 4, 2025								
ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS			
Moisture	6.50 %	N/A	N/A	N/A	N/A			



AFLA AFLATOXINS - USP <561> LAB-TM-043 - USP 561 AFLATOXINS ANALYSIS IN ARTICLES OF BOTANICAL ORIGIN BY LC-TQ AFLA-DTS-250401-016-01 - FRI, APR 4, 2025								
ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS			
Aflatoxin B1	ND	N/A	0.001 ug/g	0.002 ug/g	N/A			
Aflatoxin B2	ND	N/A	0.001 ug/g	0.002 ug/g	N/A			
Aflatoxin G1	ND	N/A	0.001 ug/g	0.002 ug/g	N/A			
Aflatoxin G2	ND	N/A	0.001 ug/g	0.002 ug/g	N/A			
Ochratoxin A	ND	N/A	0.001 ug/g	0.002 ug/g	N/A			
Aflatoxins (Sum of B1, B2, G1, and G2)	0.000 ug/g	N/A	N/A	N/A	N/A			





ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
Aldrin + Dieldrin	ND	0.05 ug/g	0.1 ng/g	0.2 ng/g	PASS
Bromophos Ethyl	ND	0.05 ug/g	0.1 ng/g	0.2 ng/g	PASS
Bromophos Methyl	ND	0.05 ug/g	0.1 ng/g	0.2 ng/g	PASS
Bromopropylate	ND	3.00 ug/g	6 ng/g	12 ng/g	PASS
Chlordane (Sum of -Cis, -Trans, Oxychlordane)	ND	0.05 ug/g	0.1 ng/g	0.2 ng/g	PASS
Chlorthal-Dimethyl	ND	0.01 ug/g	0.02 ng/g	0.04 ng/g	PASS
DDT (Sum of O,P-DDE, P,P-DDE, O,P-DDT, P,P-DDT, O,P-TDE, and P,P-TDE)	ND	1.00 ug/g	2 ng/g	4 ng/g	PASS
Dicofol	ND	0.50 ug/g	1 ng/g	2 ng/g	PASS
Endosulfan (Sum of Isomers and Sulphate)	ND	3.00 ug/g	6 ng/g	12 ng/g	PASS
Endrin	ND	0.05 ug/g	0.1 ng/g	0.2 ng/g	PASS
Fenchlorophos (Sum of Fenchlorophos and Fenchlorophos-Oxon)	ND	0.10 ug/g	0.2 ng/g	0.4 ng/g	PASS
Fenitrothion	ND	0.50 ug/g	1 ng/g	2 ng/g	PASS
Fenvalerate	ND	1.50 ug/g	3 ng/g	6 ng/g	PASS
Fluvalinate-Tau	ND	0.05 ug/g	0.1 ng/g	0.2 ng/g	PASS
Heptachlor (Sum of Heptachlor, Cis-Heptachlorepoxyde, and Trans-Heptachlorepoxyde)	ND	0.05 ug/g	0.1 ng/g	0.2 ng/g	PASS
Hexachlorobenzene	ND	0.10 ug/g	0.2 ng/g	0.4 ng/g	PASS
Hexachlorocyclohexane (Sum of Isomers Alpha-, Beta-, Delta-, and Epsilon-)	ND	0.30 ug/g	0.6 ng/g	1.2 ng/g	PASS
Lindane (Gamma-Hexachlorocyclohexane)	ND	0.60 ug/g	1.2 ng/g	2.4 ng/g	PASS
Methacriphos	ND	0.05 ug/g	0.1 ng/g	0.2 ng/g	PASS
Methoxychlor	ND	0.05 ug/g	0.1 ng/g	0.2 ng/g	PASS
Mirex	ND	0.01 ug/g	0.02 ng/g	0.04 ng/g	PASS
Parathion Ethyl + Paraoxon Ethyl	ND	0.50 ug/g	1 ng/g	2 ng/g	PASS
Pentachloroanisole	ND	0.01 ug/g	0.02 ng/g	0.04 ng/g	PASS
Procymidone	ND	0.10 ug/g	0.2 ng/g	0.4 ng/g	PASS
Quintozene (Sum of Quintozene, Pentachloroaniline, and Methyl-Pentachlorophenyl Sulfide)	ND	1.00 ug/g	2 ng/g	4 ng/g	PASS

Modified Test Method does not include the following analytes:
Bromide, inorganic (calculated as bromide ion)
Chlorpyrifos-methyl
Dichlofluanid
Dithiocarbamates (as CS2)
Parathion-methyl and Paraoxon-methyl (sum of)





ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
S-421	ND	0.02 ug/g	0.04 ng/g	0.08 ng/g	PASS
Tecnazene	ND	0.05 ug/g	0.1 ng/g	0.2 ng/g	PASS
Tetradifon	ND	0.30 ug/g	0.6 ng/g	1.2 ng/g	PASS
Vinclozolin	ND	0.40 ug/g	0.8 ng/g	1.6 ng/g	PASS

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Bromide, inorganic (calculated as bromide ion)
Chlorpyrifos-methyl
Dichlofluanid
Dithiocarbamates (as CS2)
Parathion-methyl and Paraoxon-methyl (sum of)





ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
Acephate	ND	0.40 ug/g	12.5 ng/g	25 ng/g	PASS
Alachlor	ND	N/A	12.5 ng/g	25 ng/g	N/A
Azinphos Ethyl	ND	N/A	12.5 ng/g	25 ng/g	N/A
Azinphos Methyl	ND	N/A	12.5 ng/g	25 ng/g	N/A
Chlorfenvinphos	ND	N/A	12.5 ng/g	25 ng/g	N/A
Chlorpyrifos Ethyl	ND	N/A	12.5 ng/g	25 ng/g	N/A
Cyfluthrin	ND	1.00 ug/g	12.5 ng/g	25 ng/g	PASS
Cypermethrin	0.424 ug/g	1.00 ug/g	12.5 ng/g	25 ng/g	PASS
Deltamethrin	ND	N/A	12.5 ng/g	25 ng/g	N/A
Diazinon	ND	0.20 ug/g	12.5 ng/g	25 ng/g	PASS
Dichlorvos	ND	N/A	12.5 ng/g	25 ng/g	N/A
Dimethoate + Omethoate	ND	N/A	12.5 ng/g	25 ng/g	N/A
Ethion	ND	N/A	12.5 ng/g	25 ng/g	N/A
Etrimphos	ND	N/A	12.5 ng/g	25 ng/g	N/A
Fenpropathrin	ND	N/A	12.5 ng/g	25 ng/g	N/A
Fensulfothion (Sum of Fensulfothion, Fensulfothion-Oxon, Fensulfothion-Oxon-Sulfone, and Fensulfothion-Sulfone)	ND	N/A	12.5 ng/g	25 ng/g	N/A
Fenthion (Sum of Fenthion, Fenthion-Oxon, Fenthion-Oxon-Sulfone, Fenthion-Oxon-Sulfoxide, Fenthion-Sulfone, and Fenthion-Sulfoxide)	ND	N/A	12.5 ng/g	25 ng/g	N/A
Flucythrinate	ND	N/A	12.5 ng/g	25 ng/g	N/A
Fonophos	ND	N/A	12.5 ng/g	25 ng/g	N/A
Lambda-Cyhalothrin	ND	N/A	12.5 ng/g	25 ng/g	N/A
Malathion + Malaaxon	ND	N/A	12.5 ng/g	25 ng/g	N/A
Mecarbam	ND	N/A	12.5 ng/g	25 ng/g	N/A
Methamidophos	ND	N/A	12.5 ng/g	25 ng/g	N/A
Methidathion	ND	N/A	12.5 ng/g	25 ng/g	N/A
Monocrotophos	ND	N/A	12.5 ng/g	25 ng/g	N/A
Pendimethalin	ND	N/A	12.5 ng/g	25 ng/g	N/A
Permethrins (Sum of Cis- and Trans-Permethrin)	ND	N/A	12.5 ng/g	25 ng/g	N/A
Phosalone	ND	N/A	12.5 ng/g	25 ng/g	N/A
Phosmet	ND	N/A	12.5 ng/g	25 ng/g	N/A

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Bromide, inorganic (calculated as bromide ion)
Chlorpyrifos-methyl
Dichlofluanid
Dithiocarbamates (as CS2)
Parathion-methyl and Paraoxon-methyl (sum of)





ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
Piperonyl Butoxide	ND	N/A	12.5 ng/g	25 ng/g	N/A
Pirimiphos Ethyl	ND	N/A	12.5 ng/g	25 ng/g	N/A
Pirimiphos Methyl (Sum of Pirimiphos-Methyl and n- Desethyl-Pirimiphos-Methyl)	ND	N/A	12.5 ng/g	25 ng/g	N/A
Profenophos	ND	N/A	12.5 ng/g	25 ng/g	N/A
Prothiophos	ND	N/A	12.5 ng/g	25 ng/g	N/A
Pyrethrins (Sum of Cinerin 1, Jasmolin 1, and Pyrethrin 1)	ND	N/A	12.5 ng/g	25 ng/g	N/A
Quinalphos	ND	N/A	12.5 ng/g	25 ng/g	N/A

Modified Test Method does not include the following analytes:
Bromide, inorganic (calculated as bromide ion)
Chlorpyrifos-methyl
Dichlofluanid
Dithiocarbamates (as CS2)
Parathion-methyl and Paraoxon-methyl (sum of)



TAMC

TOTAL AEROBIC BACTERIA - PLATE

LAB-TM-060 - ENUMERATION OF TOTAL AEROBIC COUNT IN FOODS AND DIETARY SUPPLEMENTS

TAMC-DTS-250401-016-01 - FRI, APR 4, 2025



ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
Total Aerobic Count	1200 CFU/g	N/A	100 CFU/g	100 CFU/g	N/A

SS

SALMONELLA & STEC- QPCR

LAB-TM-006 - MICROBIAL ANALYSIS BY QPCR

SS-DTS-250401-016-01 - MON, APR 7, 2025



ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
Salmonella Spp	ND	N/A	N/A	N/A	N/A
Shiga Toxin Producing E. coli	ND	N/A	N/A	N/A	N/A

AWA

WATER ACTIVITY

LAB-TM-009 - DETERMINATION OF WATER ACTIVITY

AWA-DTS-250401-016-01 - FRI, APR 4, 2025



ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
Water Activity	0.379 aw	N/A	N/A	N/A	N/A

HVMET

HEAVY METALS - 4

LAB-TM-044 - DETERMINATION OF HEAVY METALS BY ICP-MS

HVMET-DTS-250401-016-01 - MON, APR 7, 2025



ANALYTE	VALUE	VALUE (MG/G)	PER SERVING	PER PACKAGE	ACTION LIMIT	LOD	LOQ	STATUS
Arsenic	0.158 ug/g	0.000 mg/g	0.17 ug	0.17 ug	N/A	0.198 ug/kg	0.662 ug/kg	N/A
Cadmium	0.015 ug/g	0.000 mg/g	0.02 ug	0.02 ug	N/A	0.082 ug/kg	0.272 ug/kg	N/A
Lead	0.334 ug/g	0.000 mg/g	0.35 ug	0.35 ug	N/A	0.155 ug/kg	0.515 ug/kg	N/A
Mercury	0.012 ug/g	0.000 mg/g	0.01 ug	0.01 ug	N/A	0.017 ug/kg	0.057 ug/kg	N/A

TYMFD

TOTAL YEAST & MOLD - PLATE

LAB-TM-061 - ENUMERATION OF YEAST AND MOLD IN FOODS AND DIETARY SUPPLEMENTS

TYMFD-DTS-250401-016-01 - MON, APR 7, 2025

ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
Total Yeast and Mold	ND	N/A	10 CFU/g	10 CFU/g	N/A

PSEUD

PSEUDOMONAS AERUGINOSA - PLATE

LAB-TM-088 - DETECTION OF PRESUMPTIVE PSEUDOMONAS AERUGINOSA

PSEUD-DTS-250401-016-01 - MON, APR 7, 2025



ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
Pseudomonas aeruginosa	ND	N/A	100 CFU/g	100 CFU/g	N/A

FTIRR

IDENTIFICATION BY FTIR - REPORT

NULL IDENTIFICATION BY FTIR

FTIRR-DTS-250401-016-01 - FRI, APR 4, 2025

ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
Quality Index Score	97.54 %	N/A	N/A	N/A	N/A

Matched Library Item: Raw Capsule

