FOOD & ENVIRONMENT SAFETY ANALYTICAL LAB

Date Issued: 8/27/26

Certificate of Analysis

Analysis Summary	Percent (%)	mg/serving
Mitragynine	20.973	110.341
7-OH Mitragynine	ND	ND
Paynantheine	0.844	4.438
Speciogynine	0.505	2.655
Speciociliatine	ND	ND
Corynantheidine	ND	ND
Mitraphylline	ND	ND
9-O-desmethyl Mitragynine	ND	ND
Corynoxine B	ND	ND
Ajmalicine	ND	ND
Isomitraphylline	ND	ND
Mitraciliatine	ND	ND
Mitragynine pseudoindoxyl	ND	ND
MGM-15	ND	ND
Total Quantified Alkaloids	22.321	117.433

Analysis Overview

Residual Solvents & Processing Chemicals	Pass

Matrix:
Other

Unit Mass:
0.5261 g per unit

Date Received:
8/27/26

Approved By:
Marie True, M.S.
Laboratory Manager

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References: limit of quantitation (LOQ), not detected (ND), not tested (NT)

FOOD & ENVIRONMENT SAFETY ANALYTICAL LAB

Date Issued: 8/27/26

Certificate of Analysis

Kratom Alkaloid Analysis

Complete

Analyte	LOD (%)	LOQ (%)	Percent (%)	mg/serving
Mitragynine	**0.016**	**0.049**	**20.973**	**110.34**
7-OH Mitragynine	0.019	0.058	ND	ND
Paynantheine	**0.022**	**0.066**	**0.844**	**4.44**
Speciogynine	**0.019**	**0.056**	**0.505**	**2.65**
Speciociliatine	0.018	0.054	ND	ND
Corynantheidine	0.024	0.073	ND	ND
Mitraphylline	0.017	0.052	ND	ND
9-O-desmethyl Mitragynine	0.017	0.050	ND	ND
Corynoxine B	0.022	0.066	ND	ND
Ajmalicine	0.024	0.071	ND	ND
Isomitraphylline	0.019	0.057	ND	ND
Mitraciliatine	0.020	0.060	ND	ND
Mitragynine pseudoindoxyl	0.033	0.098	ND	ND
MGM-15	0.011	0.03	ND	ND
Total Quantified Alkaloids			**22.321**	**117.43**

Residual Solvents Analysis

Pass

Analyte	LOQ (µg/g)	Limit (mg/g)	Mass (mg/g)	Status
Acetone	0.490	5.00	ND	Pass
Acetonitrile	0.460	0.41	ND	Pass
Benzene	0.590	0.00	ND	Pass
Butane	0.560	N/A	ND	N/A
Chloroform	0.510	0.06	ND	Pass
1,2-Dichloroethane	0.570	0.01	ND	Pass
Ethanol	0.470	5.00	ND	Pass
Ethyl Acetate	0.520	5.00	ND	Pass
Ethyl Ether	0.480	5.00	ND	Pass
Ethylene Oxide	0.460	0.01	ND	Pass
Heptane	0.520	5.00	ND	Pass
n-Hexane	0.540	0.29	ND	Pass
Isopropanol	0.580	5.00	ND	Pass
Methanol	0.460	3.00	ND	Pass
Methylene Chloride	0.560	0.60	ND	Pass
Pentane	0.520	5.00	ND	Pass
Propane	0.510	N/A	ND	N/A
Toluene	0.480	0.89	ND	Pass
Trichloroethylene	0.520	0.08	ND	Pass
Xylenes	0.580	2.17	ND	Pass

Method References:

HPLC SOP K5316L - Diode Array Detector, Liquid Chromatography.

HSGCMS02 - Headspace Gas Chromatography with Mass Spectrometric Detection for Residual Solvents Panel

FOOD & ENVIRONMENT SAFETY ANALYTICAL LAB

Date Issued: 11/3/26

Certificate of Analysis

R&D
Report

Analysis Summary	Percent (%)	mg/serving
Mitragynine	19.589	172.889
7-OH Mitragynine	ND	ND
Paynantheine	2.504	22.099
Speciogynine	1.697	14.975
Speciociliatine	0.551	4.863
Corynantheidine	0.337	2.976
Mitraphylline	ND	ND
9-O-desmethyl Mitragynine	ND	ND
Corynoxine B	ND	ND
Ajmalicine	ND	ND
Isomitraphylline	ND	ND
Mitraciliatine	ND	ND
Mitragynine pseudoindoxyl	ND	ND
MGM-16	ND	ND
MGM-15	ND	ND
Total Quantified Alkaloids	24.677	217.802

Analysis Overview

Residual Solvents & Processing Chemicals	Pass

Matrix:
Other

Unit Mass:
0.8826 g per unit

Date Received:
10/30/26

Approved By:
Marie True, M.S.
Laboratory Manager

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References: limit of quantitation (LOQ), not detected (ND), not tested (NT)

Certificate of Analysis

R&D
Report

Kratom Alkaloid Analysis

Complete

Analyte	LOD (%)	LOQ (%)	Percent (%)	mg/serving
Mitragynine	**0.016**	**0.049**	**19.589**	**172.89**
7-OH Mitragynine	0.019	0.058	ND	ND
Paynantheine	**0.022**	**0.066**	**2.504**	**22.10**
Speciogynine	**0.019**	**0.056**	**1.697**	**14.98**
Speciociliatine	**0.018**	**0.054**	**0.551**	**4.86**
Corynantheidine	**0.024**	**0.073**	**0.337**	**2.98**
Mitraphylline	0.017	0.052	ND	ND
9-O-desmethyl Mitragynine	0.017	0.050	ND	ND
Corynoxine B	0.022	0.066	ND	ND
Ajmalicine	0.024	0.071	ND	ND
Isomitraphylline	0.019	0.057	ND	ND
Mitraciliatine	0.020	0.060	ND	ND
Mitragynine pseudoindoxyl	0.632	1.916	ND	ND
MGM-16	0.006	0.02	ND	ND
MGM-15	0.011	0.03	ND	ND
Total Quantified Alkaloids			**24.677**	**217.80**

Residual Solvents Analysis

Pass

Analyte	LOQ (µg/g)	Limit (mg/g)	Mass (mg/g)	Status
Acetone	0.490	5.00	ND	Pass
Acetonitrile	0.460	0.41	ND	Pass
Benzene	0.590	0.00	ND	Pass
Butane	0.560	N/A	ND	N/A
Chloroform	0.510	0.06	ND	Pass
1,2-Dichloroethane	0.570	0.01	ND	Pass
Ethanol	0.470	5.00	ND	Pass
Ethyl Acetate	0.520	5.00	ND	Pass
Ethyl Ether	0.480	5.00	ND	Pass
Ethylene Oxide	0.460	0.01	ND	Pass
Heptane	0.520	5.00	ND	Pass
n-Hexane	0.540	0.29	ND	Pass
Isopropanol	0.580	5.00	ND	Pass
Methanol	0.460	3.00	ND	Pass
Methylene Chloride	0.560	0.60	0.1520	Pass
Pentane	0.520	5.00	ND	Pass
Propane	0.510	N/A	ND	N/A
Toluene	0.480	0.89	ND	Pass
Trichloroethylene	0.520	0.08	ND	Pass
Xylenes	0.580	2.17	ND	Pass

Method References:

HPLC SOP K5316L - Diode Array Detector, Liquid Chromatography.

HSGCMS02 - Headspace Gas Chromatography with Mass Spectrometric Detection for Residual Solvents Panel

FOOD & ENVIRONMENT SAFETY ANALYTICAL LAB

Date Issued: 5/1/26

Certificate of Analysis

Analysis Summary

	mg/serving
Mitragynine	85.285
7-OH Mitragynine	ND
Paynantheine	11.891
Speciogynine	8.244
Speciociliatine	5.558
Corynantheidine	ND
Mitraphylline	ND
9-O-desmethyl Mitragynine	ND
Corynoxine B	ND
Ajmalicine	ND
Isomitraphylline	ND
Mitraciliatine	0.097
Mitragynine pseudoindoxyl	ND
MGM-15 (CAS No. 1158901-38-2)	ND
Total Quantified Alkaloids	111.08

Analysis Overview

Residual Solvents & Processing Chemicals	**Pass**

Matrix:
Other

Serving Mass:
0.6278 g per serving

Date Received:
5/1/26

Approved By:
Marie True, M.S.
Laboratory Manager

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References: limit of quantitation (LOQ), not detected (ND), not tested (NT)

Certificate of Analysis

Kratom Alkaloid Analysis

Complete

Analyte	LOD (%)	LOQ (%)	Mass (%)	Mass (mg/g)	Mass (mg/serving)
Mitragynine	**0.016**	**0.049**	**13.5848**	**135.848**	**85.29**
7-OH Mitragynine	0.019	0.058	ND	ND	ND
Paynantheine	**0.022**	**0.066**	**1.8941**	**18.941**	**11.89**
Speciogynine	**0.019**	**0.056**	**1.3132**	**13.132**	**8.24**
Speciociliatine	**0.018**	**0.054**	**0.8853**	**8.853**	**5.56**
Corynantheidine	0.024	0.073	ND	ND	ND
Mitraphylline	0.017	0.052	ND	ND	ND
9-O-desmethyl Mitragynine	0.017	0.050	ND	ND	ND
Corynoxine B	0.022	0.066	ND	ND	ND
Ajmalicine	0.024	0.071	ND	ND	ND
Isomitraphylline	0.019	0.057	ND	ND	ND
Mitraciliatine	**0.020**	**0.060**	**0.0154**	**0.154**	**0.10**
Mitragynine pseudoindoxyl	0.033	0.098	ND	ND	ND
MGM-15 (CAS No. 1158901-38-2)	0.011	0.03	ND	ND	ND
Total Quantified Alkaloids			**17.6928**	**176.928**	**111.08**

Residual Solvents Analysis

Pass

Analyte	LOQ (µg/g)	Limit (mg/g)	Mass (mg/g)	Status
Acetone	0.490	5.00	ND	Pass
Acetonitrile	0.460	0.41	ND	Pass
Benzene	0.590	0.00	ND	Pass
Butane	0.560	N/A	ND	N/A
Chloroform	0.510	0.06	0.0006	Pass
1,2-Dichloroethane	0.570	0.01	ND	Pass
Ethanol	0.470	5.00	ND	Pass
Ethyl Acetate	0.520	5.00	0.25	Pass
Ethyl Ether	0.480	5.00	ND	Pass
Ethylene Oxide	0.460	0.01	ND	Pass
Heptane	0.520	5.00	ND	Pass
n-Hexane	0.540	0.29	ND	Pass
Isopropanol	0.580	5.00	ND	Pass
Methanol	0.460	3.00	ND	Pass
Methylene Chloride	0.560	0.60	ND	Pass
Pentane	0.520	5.00	ND	Pass
Propane	0.510	N/A	ND	N/A
Toluene	0.480	0.89	ND	Pass
Trichloroethylene	0.520	0.08	ND	Pass
Xylenes	0.580	2.17	ND	Pass

Method References:

HPLC SOP K5316L - Diode Array Detector, Liquid Chromatography.

HSGCMS02 - Headspace Gas Chromatography with Mass Spectrometric Detection for Residual Solvents Panel