



Certificate of Analysis for

Firefly Kratom
7920 52nd Way North
Pinellas Park, FL 33781
Phone: (727) 641-7611

Received: 8/2/2022
Report ID: 2208077

Sample ID	Analyzed	Sample Description	Analysis	Result	Units	Method Code
2208077-001	8/5/2022	Red MD Kratom	Arsenic (As)	0.174	mg/kg (ppm)	ICPMS.1
	8/5/2022		Cadmium (Cd)	0.027	mg/kg (ppm)	ICPMS.1
	8/5/2022		Lead (Pb)	0.413	mg/kg (ppm)	ICPMS.1
	8/5/2022		Mercury (Hg)	0.024	mg/kg (ppm)	ICPMS.1
	8/3/2022		7-Hydroxymitragynine	< 0.010	%	MIT.1
	8/3/2022		Mitragynine	1.16	%	MIT.1
	8/2/2022		Salmonella spp.	Negative	/25 g	Salm.1a
	8/2/2022		Shiga toxin-producing E. coli	Negative	/25 g	STEC.1.a
	8/2/2022		stx and eae genes	Negative	/25 g	STEC.1.a
	8/2/2022		Aerobic Plate Count	1,200,000	CFU/g	AC.1a
	8/2/2022		Total Coliform Bacteria	1,700	CFU/g	CC.1a
	8/2/2022		Escherichia coli	< 100	CFU/g	EC.1a
	8/2/2022		Staphylococcus aureus	< 100	CFU/g	STA.1a
	8/2/2022	Yeast and Mold	230,000	CFU/g	YM.1a	

Mitragynine concentration includes Paynantheine at approximately 0.2 - 0.4%.

RPC 8-4-22

Reported By: _____

Ryan Connelly, Chemistry Laboratory Manager, 8/5/2022

Methodology:

AC.1a : AC by mass via AOAC 990.12 (Petrifilm™) Prep: Initial Dilution

EC.1a : EC by mass via AOAC 991.14, 998.08 (Petrifilm™) Prep: Initial Dilution

MIT.1 : Mitragynine via AOAC 2017.14

STA.1a : S. aureus by mass via AOAC 2003.07, 2003.08, 2003.11 (Petrifilm™) Prep: Initial Dilution

YM.1a : YM by mass via AOAC RI 121301 (Petrifilm™) Prep: Initial Dilution

CC.1a : CC by mass via AOAC 991.14, 998.03 (Petrifilm™) Prep: Initial Dilution

ICPMS.1 : Metals via FDA - EAM:2008 (ICP/MS) Prep: Digestion, Microwave

Salm.1a : Salmonella via AOAC 081201, 2013.02 (BAX® PCR System)

STEC.1.a : Shiga toxin (stx) & Intimin (eae) genes via AOAC 091301 (BAX® PCR System, STEC Screen)



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2208077-002	8/5/2022	White MD Kratom	Arsenic (As)	0.379	mg/kg (ppm)	ICPMS.1
	8/5/2022		Cadmium (Cd)	0.022	mg/kg (ppm)	ICPMS.1
	8/5/2022		Lead (Pb)	0.497	mg/kg (ppm)	ICPMS.1
	8/5/2022		Mercury (Hg)	0.028	mg/kg (ppm)	ICPMS.1
	8/3/2022		7-Hydroxymitragynine	< 0.010	%	MIT.1
	8/3/2022		Mitragynine	1.43	%	MIT.1
	8/2/2022		Salmonella spp.	Negative	/25 g	Salm.1a
	8/2/2022		Shiga toxin-producing E. coli	Negative	/25 g	STEC.1.a
	8/2/2022		stx and eae genes	Negative	/25 g	STEC.1.a
	8/2/2022		Aerobic Plate Count	42,000	CFU/g	AC.1a
	8/2/2022		Total Coliform Bacteria	100	CFU/g	CC.1a
	8/2/2022		Escherichia coli	< 100	CFU/g	EC.1a
	8/2/2022		Staphylococcus aureus	< 100	CFU/g	STA.1a
	8/2/2022	Yeast and Mold	50,000	CFU/g	YM.1a	

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Ryan Connelly, Chemistry Laboratory Manager, 8/5/2022

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