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CERTIFICATE OF ANALYSIS

STATUS: RELEASED **REVISION:** 00
DATE: 07/21/2022

Analysis ID No. 222932
TDA License No. 2020002
ISO/IEC No. 1055838
Purchase Order: 20220843
Page No. Page 1 of 2

CUSTOMER INFORMATION	SAMPLE INFORMATION
Client Name:	**Submitted Sample Name:**
Kat's Botanicals	Kratom Leaf Powder
Address:	**Submitted Sample Lot:**
619 Old Hickory Blvd, Old Hickory TN 37138	120227CDP
Phone Number:	**Submitted Sample Description:**
877-301-9923	Green Powder in Plastic Bag w/ Zip Tie; Stored at Rm Temp
Contact Name / Email:	**Submitted Sample Product Type / Matrix:**
N/A	Kratom Leaf / Powder

ALKALOIDS ASSAY

Analysis	Test Method	LOQ	Specifications	Test Results	Pass / Fail
Mitragynine	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	1.459 w/w% 14.595 mg/g	Results Reported
Paynantheine	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	0.316 w/w% 3.160 mg/g	Results Reported
Speciogynine	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	0.205 w/w% 2.051 mg/g	Results Reported
Speciociliatine	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	0.515 w/w% 5.153 mg/g	Results Reported
7-OH-Mitragynine	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only % Total Alkaloids: NMT 2%	0.003 w/w% 0.032 mg/g 0.13% of Total	PASS
Mitraphylline	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	< 0.010 w/w%	Results Reported
Isorhynchophylline	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	0.009 w/w% 0.087 mg/g	Results Reported
Corynoxine	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	0.014 w/w% 0.141 mg/g	Results Reported
Total Alkaloids	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	2.522 w/w% 25.220 mg/g	Results Reported

MICROBIOLOGICAL ASSAY

Analysis	Test Method	LOQ	Specifications	Test Results	Pass / Fail
Total Aerobic Plate Count (TAPC)	Isolation Agar	20 CFU/gm	NMT 10,000,000 CFU/gm	70 CFU/gm	PASS
Total Yeast & Mold (TYM)	Isolation Agar	20 CFU/gm	NMT 100,000 CFU/gm	< LOQ	PASS
Coliforms	Isolation Agar	20 CFU/gm	NMT 10,000 CFU/gm	< LOQ	PASS
Escherichia coli (E.coli)	Isolation Agar	1 CFU/10 gm	Absent in 10 gm	Absent	PASS
Salmonella	Isolation Agar	1 CFU/25 gm	Absent in 25 gm	Absent	PASS

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STATUS: RELEASED **REVISION:** 00
DATE: 07/21/2022

HEAVY METALS ASSAY

Analysis	Test Method	LOQ	Specifications	Test Results	Pass / Fail
Lead	USP <232> <233> by ICP-MS	10 ppb	NMT 1000 ppb	805.6 ppb	PASS
Mercury	USP <232> <233> by ICP-MS	5 ppb	NMT 500 ppb	23.6 ppb	PASS
Arsenic	USP <232> <233> by ICP-MS	10 ppb	NMT 1500 ppb	441.9 ppb	PASS
Cadmium	USP <232> <233> by ICP-MS	10 ppb	NMT 300 ppb	16.4 ppb	PASS
Nickel	USP <232> <233> by ICP-MS	50 ppb	NMT 200,000 ppb	1,350.4 ppb	PASS

TESTING FACILITY INFORMATION	SAMPLE INFORMATION
Santé Laboratories 8201 East Riverside Drive, STE 650 Austin, Texas 78744 USA	**Santé Sample ID:** 222932 **Receipt Date:** 13 July 2022 / 13:30 PM CST / PS **Receipt Condition:** Good **Analysis Start Date:** 13 July 2022

ADDITIONAL REPORT NOTES

The reported results presented in this document is only applicable to samples submitted to Santé Laboratories for testing and may not represent the entire lot and/or batch produced by the manufacturer. **Heavy metal specifications according to limits defined by Texas DSHS for consumable hemp. Nickel specification according to oral drug products per USP <232>. Microbiological specifications follow AHPA guidelines for botanical ingredients (non-extract).**
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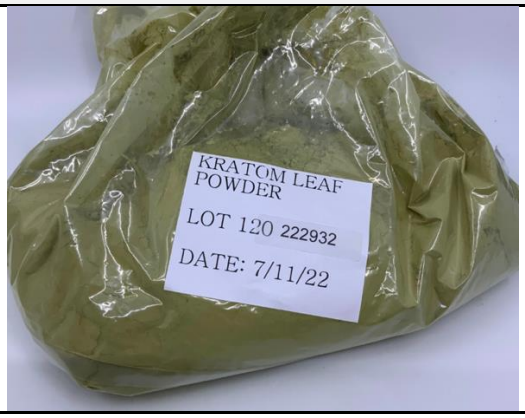
VERSION HISTORY

Version	Effective Date	Summary of Changes
00	07/21/2022	Initial Release

PRODUCT SAMPLE / IMAGE



REVIEWED AND APPROVED BY

DocuSigned by:
Brian Sloat
1DA7685D65C740B...

Brian Sloat, Ph.D.
Chief Scientific Officer / Quality Manager
Santé Laboratories

21 July 2022 | 4:16:48 PM PDT
Date *DD-MM-YY*

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