



CERTIFICATE OF ANALYSIS

STATUS: **RELEASED** REVISION: 00

DATE: 10/19/2022

Analysis ID No. 224569
 TDA License No. 2020002
 ISO/IEC No. 1055838
 Purchase Order: 20221259
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CUSTOMER INFORMATION	SAMPLE INFORMATION
Client Name: ██████████	Submitted Sample Name: Kratom Leaf Powder
Address: ██	Submitted Sample Lot: 10052207
Phone Number: ██████████	Submitted Sample Description: Green Powder in Black Resealable Bag; Stored at RT
Contact Name / Email: ██	Submitted Sample Product Type / Matrix: Kratom Leaf Powder / Plant Matter

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	1.807 w/w% 18.074 mg/g	Results Reported
Paynantheine	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	0.325 w/w% 3.254 mg/g	Results Reported
Speciogynine	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	0.255 w/w% 2.552 mg/g	Results Reported
Speciociliatine	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	0.449 w/w% 4.486 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%	< 0.010 w/w%	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	< 0.010 w/w%	Results Reported
Corynoxine	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	< 0.010 w/w%	Results Reported
Total Alkaloids	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	2.837 w/w% 28.367 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	197,000 CFU/gm	PASS
Total Yeast & Mold (TYM)	Isolation Agar	20 CFU/gm	NMT 100,000 CFU/gm	18,500 CFU/gm	PASS
Coliforms	Isolation Agar	20 CFU/gm	NMT 10,000 CFU/gm	6,500 CFU/gm	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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HEAVY METALS ASSAY					
Analysis	Test Method	LOQ	Specifications	Test Results	Pass / Fail
Lead	USP <232> <233> by ICP-MS	10 ppb	NMT 1000 ppb	953.1 ppb	PASS
Mercury	USP <232> <233> by ICP-MS	5 ppb	NMT 500 ppb	< LOQ	PASS
Arsenic	USP <232> <233> by ICP-MS	10 ppb	NMT 1500 ppb	213.0 ppb	PASS
Cadmium	USP <232> <233> by ICP-MS	10 ppb	NMT 300 ppb	< LOQ	PASS
Nickel	USP <232> <233> by ICP-MS	50 ppb	NMT 200,000 ppb	2,559.5 ppb	PASS

TESTING FACILITY INFORMATION	SAMPLE INFORMATION
Santé Laboratories 8201 East Riverside Drive, STE 650 Austin, Texas 78744 USA	Santé Sample ID: 224569 Receipt Date: 10/10/2022 / 01:00 PM CST / C. Ritchie Receipt Condition: Good Analysis Start Date: 10/13/2022

ADDITIONAL REPORT NOTES
<p>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).</p> <p>©2020 Santé Laboratories, LLC – All Rights Reserved</p>

VERSION HISTORY		
Version	Effective Date	Summary of Changes
00	10/19/2022	Initial Release

PRODUCT SAMPLE / IMAGE


REVIEWED AND APPROVED BY
<p>DocuSigned by: <i>Brian R. Sloat</i> 89DC8DE7BF234E8...</p> <p>19 October 2022 10:37:58 PM CDT Date DD-MM-YY</p> <p>Brian Sloat, Ph.D. Chief Scientific Officer / Quality Manager Santé Laboratories</p>