



CERTIFICATE OF ANALYSIS

STATUS: **RELEASED** REVISION: 00

DATE: 06/27/2022

Analysis ID No. 222673
 TDA License No. 2020002
 ISO/IEC No. 1055838
 Purchase Order: 20220756
 Page No. Page 1 of 3

CUSTOMER INFORMATION	SAMPLE INFORMATION
Company Name:	Submitted Sample Name:
Steding & Sons Mercantile	Kratom Leaf Powder
Address:	Submitted Sample Lot:
1501 Panther Loop #7A Plugerville, TX 78660	G151020B
Phone Number:	Submitted Sample Description:
512-704-3680	Kratom in Dark Container; Stored at Room Temp
Contact Name / Email:	Submitted Sample Product Type / Matrix:
Jeremy Steding / info@1863kratom.com	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	1.539 w/w% 15.390 mg/g	Results Reported
Paynantheine	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	0.321 w/w% 3.211 mg/g	Results Reported
Speciogynine	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	0.215 w/w% 2.153 mg/g	Results Reported
Speciociliatine	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	0.522 w/w% 5.217 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	0.011 w/w% 0.105 mg/g	Results Reported
Total Alkaloids	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	2.608 w/w% 26.076 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	110 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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HEAVY METALS ASSAY					
Analysis	Test Method	LOQ	Specifications	Test Results	Pass / Fail
Lead	USP <232> <233> by ICP-MS	10 ppb	NMT 1000 ppb	838.2 ppb	PASS
Mercury	USP <232> <233> by ICP-MS	5 ppb	NMT 500 ppb	32.9 ppb	PASS
Arsenic	USP <232> <233> by ICP-MS	10 ppb	NMT 1500 ppb	418.8 ppb	PASS
Cadmium	USP <232> <233> by ICP-MS	10 ppb	NMT 300 ppb	18.8 ppb	PASS
Nickel	USP <232> <233> by ICP-MS	50 ppb	NMT 200,000 ppb	2,353.4 ppb	PASS

PESTICIDES ASSAY					
Analysis	Test Method	LOQ	Specifications	Test Results	Pass / Fail
Acetamiprid	LC-MS/MS & GC-MS/MS	0.050 ppm	NMT 0.200 ppm	< LOQ	PASS
Aldicarb	LC-MS/MS & GC-MS/MS	0.050 ppm	NMT 0.400 ppm	< LOQ	PASS
Azoxystrobin	LC-MS/MS & GC-MS/MS	0.010 ppm	NMT 0.200 ppm	< LOQ	PASS
Bifenazate	LC-MS/MS & GC-MS/MS	0.005 ppm	NMT 0.200 ppm	< LOQ	PASS
Boscalid	LC-MS/MS & GC-MS/MS	0.050 ppm	NMT 0.200 ppm	< LOQ	PASS
Carbaryl (Sevin)	LC-MS/MS & GC-MS/MS	0.100 ppm	NMT 0.500 ppm	< LOQ	PASS
Carbofuran	LC-MS/MS & GC-MS/MS	0.050 ppm	NMT 0.200 ppm	< LOQ	PASS
Chlorantraniliprole	LC-MS/MS & GC-MS/MS	0.100 ppm	NMT 0.200 ppm	< LOQ	PASS
Chlorpyrifos	LC-MS/MS & GC-MS/MS	0.050 ppm	NMT 0.600 ppm	< LOQ	PASS
Cypermethrin	LC-MS/MS & GC-MS/MS	0.025 ppm	NMT 18.0 ppm	< LOQ	PASS
Diazinon	LC-MS/MS & GC-MS/MS	0.050 ppm	NMT 2.600 ppm	< LOQ	PASS
Dichlorvos	LC-MS/MS & GC-MS/MS	0.050 ppm	NMT 0.100 ppm	< LOQ	PASS
Ethoprophos (Prophos)	LC-MS/MS & GC-MS/MS	0.050 ppm	NMT 0.400 ppm	< LOQ	PASS
Etofenprox	LC-MS/MS & GC-MS/MS	0.050 ppm	NMT 0.400 ppm	< LOQ	PASS
Fipronil	LC-MS/MS & GC-MS/MS	0.050 ppm	NMT 1.000 ppm	< LOQ	PASS
Fonicamid	LC-MS/MS & GC-MS/MS	0.050 ppm	NMT 1.000 ppm	< LOQ	PASS
Imidacloprid	LC-MS/MS & GC-MS/MS	0.005 ppm	NMT 0.400 ppm	< LOQ	PASS
Metalaxyl	LC-MS/MS & GC-MS/MS	0.100 ppm	NMT 0.200 ppm	< LOQ	PASS
Methiocarb	LC-MS/MS & GC-MS/MS	0.050 ppm	NMT 0.400 ppm	< LOQ	PASS

Santé Laboratories, LLC - 8201 East Riverside Drive, STE 650, Austin, Texas 78744 USA
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PESTICIDES ASSAY					
Analysis	Test Method	LOQ	Specifications	Test Results	Pass / Fail
Methomyl	LC-MS/MS & GC-MS/MS	0.200 ppm	NMT 0.400 ppm	< LOQ	PASS
Methyl parathion	LC-MS/MS & GC-MS/MS	0.050 ppm	NMT 8.500 ppm	< LOQ	PASS
Myclobutanil	LC-MS/MS & GC-MS/MS	0.005 ppm	NMT 0.300 ppm	< LOQ	PASS
Oxamyl	LC-MS/MS & GC-MS/MS	0.250 ppm	NMT 1.000 ppm	< LOQ	PASS
Permethrin (mix of isomers)	LC-MS/MS & GC-MS/MS	0.020 ppm	NMT 1.100 ppm	< LOQ	PASS
Pyridaben	LC-MS/MS & GC-MS/MS	0.050 ppm	NMT 0.200 ppm	< LOQ	PASS
Spiroxamine	LC-MS/MS & GC-MS/MS	0.050 ppm	NMT 2.000 ppm	< LOQ	PASS
Tebuconazole	LC-MS/MS & GC-MS/MS	0.005 ppm	NMT 0.400 ppm	< LOQ	PASS
Thiacloprid	LC-MS/MS & GC-MS/MS	0.050 ppm	NMT 0.200 ppm	< LOQ	PASS
Thiamethoxam	LC-MS/MS & GC-MS/MS	0.025 ppm	NMT 0.200 ppm	< LOQ	PASS

TESTING FACILITY INFORMATION	SAMPLE INFORMATION
Santé Laboratories 8201 East Riverside Drive, STE 650 Austin, Texas 78744 USA	Santé Sample ID: 222673 Receipt Date: 06/20/2022/ 5:40 PM CST / C Ritchie Receipt Condition: Good Analysis Start Date: 06/22/2022

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). ©2020 Santé Laboratories, LLC – All Rights Reserved

VERSION HISTORY		
Version	Effective Date	Summary of Changes
00	06/27/2022	Initial Release

PRODUCT SAMPLE / IMAGE


REVIEWED AND APPROVED BY		
DocuSigned by:  Brian Sloat, Ph.D. Chief Scientific Officer / Quality Manager Santé Laboratories	27 June 2022 4:35:05 PM PDT Date	DD-MM-YY