

CERTIFICATE OF ANALYSIS

STATUS: **RELEASED** REVISION: 00

DATE: 06/30/2020

Analysis ID No. 20A585
TDA License No. 2020002
ISO/IEC No. 1055838
Customer No. N/A

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| CUSTOMER INFORMATION | CUSTOMER SAMPLE INFORMATION |
|--|---|
| Company Name: Steding & Sons Mercantile, LLC - FKA Quantum Botanicals, LLC | Submitted Sample Name: 6220HE-7 |
| Address: 13200 Pond Springs Rd. #E39 Austin, TX 78729 | Submitted Sample Lot: 200901 |
| Phone Number: (833) 757-2966 | Submitted Sample Description: Kratom Powder |
| Contact Name / Email: Jeremy - info@1836kratom.com | Submitted Sample Product Type / Matrix: Kratom / Powder |

| KRATOM ALKALOIDS | | | | | |
|------------------|-------------|-----------|--|---|------------------|
| Analysis | Test Method | LOQ | Specifications | Test Results | Pass / No Pass |
| Mitaphylline | UHPLC-DAD | 0.01 w/w% | w/w%: Report Only mg/g: Report Only % Total Alkaloids: Report Only | ND | Results Reported |
| 7-OH-Mitragynine | UHPLC-DAD | 0.01 w/w% | w/w%: Report Only mg/g: Report Only % Total Alkaloids: NMT 2% | ND | PASS |
| Paynantheine | UHPLC-DAD | 0.01 w/w% | w/w%: Report Only mg/g: Report Only % Total Alkaloids: Report Only | 0.189 w/w% 1.89 mg/g 12.90% of Total | Results Reported |
| Speciogynine | UHPLC-DAD | 0.01 w/w% | w/w%: Report Only mg/g: Report Only % Total Alkaloids: Report Only | 0.172 w/w% 1.72 mg/g 11.73% of Total | Results Reported |
| Mitragynine | UHPLC-DAD | 0.01 w/w% | w/w%: Report Only mg/g: Report Only % Total Alkaloids: Report Only | 1.10 w/w% 11.04 mg/g 75.37 % of Total | Results Reported |
| Total Alkaloids | UHPLC-DAD | 0.01 w/w% | w/w%: Report Only mg/g: Report Only | 1.46 w/w% 14.64 mg/g | Results Reported |

| HEAVY METALS | | | | | |
|--------------|---------------------------|--------|----------------|---------------|----------------|
| Analysis | Test Method | LOQ | Specifications | Test Results | Pass / No Pass |
| Arsenic | ICP-MS by USP<232/233> | 10 ppb | 15 mcg/day | 0.158 mcg/day | PASS |
| Cadmium | ICP-MS by USP<232/233> | 5 ppb | 5 mcg/day | 0.129 mcg/day | PASS |
| Mercury | ICP-MS by USP<232/233> | 10 ppb | 30 mcg/day | 0.047 mcg/day | PASS |
| Lead | ICP-MS by USP<232/233> | 10 ppb | 5 mcg/day | 1.125 mcg/day | PASS |
| Nickel | ICP-MS by USP<232/233> | 10 ppb | 200 mcg/day | 5.542 mcg/day | PASS |

Permitted Daily Exposure (PDE) Based on Serving Size of 3 grams / Day (Oral)

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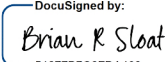
| MICROBIOLOGICAL | | | | | |
|---------------------------|--------------------|-----------|-----------------------|------------------|----------------|
| Analysis | Test Method | LOQ | Specifications | Test Results | Pass / No Pass |
| Total Aerobic Plate Count | Chromogenic Plates | 10 CFU/gm | NMT 10,000,000 CFU/gm | < 100,000 CFU/gm | PASS |
| Yeast | Chromogenic Plates | 10 CFU/gm | NMT 10,000 CFU/gm | 10 CFU/gm | PASS |
| Mold | Chromogenic Plates | 10 CFU/gm | NMT 10,000 CFU/gm | 290 CFU/gm | PASS |
| Escherichia coli (E.coli) | Chromogenic Plates | 10 CFU/gm | Absent | Absent | PASS |
| Salmonella | Chromogenic Plates | 10 CFU/gm | Absent | Absent | PASS |

| TESTING FACILITY INFORMATION | SAMPLE INFORMATION |
|--|--|
| Santé Laboratories 8201 East Riverside Drive, STE 650 Austin, Texas 78744 USA | Santé Sample ID: 20A585 Receipt Date: 06/23/2020 / 2:45 PM CST / S. ORTEGA Receipt Condition: Good Analysis Start Date: 06/24/2020 |

| ADDITIONAL REPORT NOTES |
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| 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. Microbial limits per AHPA for Botanical Products. ©2020 Santé Laboratories, LLC – All Rights Reserved |

| VERSION HISTORY | | |
|-----------------|----------------|--------------------|
| Version | Effective Date | Summary of Changes |
| 00 | 06/30/2020 | Initial Release |

| PRODUCT SAMPLE / IMAGE |
|---|
|  |

| REVIEWED AND APPROVED BY | | |
|---|-------------------|----------|
| DocuSigned by:  Brian Sloat, Ph.D. Chief Scientific Officer / Quality Manager Santé Laboratories | 6/30/2020 Date | DD-MM-YY |