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# CERTIFICATE OF ANALYSIS

**STATUS:** RELEASED **REVISION:** 00
**DATE:** 10/14/2022

**Analysis ID No.** 224539
**TDA License No.** 2020002
**ISO/IEC No.** 1055838
**Purchase Order:** 20221251
**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:** |
| 6300 N. Andrews Ave #297, Ft. Lauderdale, FL 33309 | 182305GEP |
| **Phone Number:** | **Submitted Sample Description:** |
| 203-671-0370 | Green Powder in Clear Plastic Bag w/ Zip Tie; Stored at RT |
| **Contact Name / Email:** | **Submitted Sample Product Type / Matrix:** |
| Mike Greenberg / mike@katsbotanicals.com | Kratom 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<br>mg/g: Report Only | 1.769 w/w%<br>17.695 mg/g | Results Reported |
| Paynantheine | UHPLC-DAD | 0.01 w/w% | w/w%: Report Only<br>mg/g: Report Only | 0.326 w/w%<br>3.263 mg/g | Results Reported |
| Speciogynine | UHPLC-DAD | 0.01 w/w% | w/w%: Report Only<br>mg/g: Report Only | 0.246 w/w%<br>2.457 mg/g | Results Reported |
| Speciociliatine | UHPLC-DAD | 0.01 w/w% | w/w%: Report Only<br>mg/g: Report Only | 0.442 w/w%<br>4.418 mg/g | Results Reported |
| 7-OH-Mitragynine | UHPLC-DAD | 0.01 w/w% | w/w%: Report Only<br>mg/g: Report Only<br>% Total Alkaloids: NMT 2% | < 0.010 w/w% | PASS |
| Mitraphylline | UHPLC-DAD | 0.01 w/w% | w/w%: Report Only<br>mg/g: Report Only | < 0.010 w/w% | Results Reported |
| Isorhynchophylline | UHPLC-DAD | 0.01 w/w% | w/w%: Report Only<br>mg/g: Report Only | < 0.010 w/w% | Results Reported |
| Corynoxine | UHPLC-DAD | 0.01 w/w% | w/w%: Report Only<br>mg/g: Report Only | 0.076 w/w%<br>0.755 mg/g | Results Reported |
| Total Alkaloids | UHPLC-DAD | 0.01 w/w% | w/w%: Report Only<br>mg/g: Report Only | 2.859 w/w%<br>28.588 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 | 160 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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# CERTIFICATE OF ANALYSIS

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**ISO/IEC No.** 1055838
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**Page No.** Page 2 of 2

| HEAVY METALS ASSAY | | | | | |
|---|---|---|---|---|---|
| **Analysis** | **Test Method** | **LOQ** | **Specifications** | **Test Results** | **Pass / Fail** |
| Lead | USP <232> <233> by ICP-MS | 10 ppb | NMT 1000 ppb | 641.7 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 | 305.1 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 | 2,569.3 ppb | PASS |

| TESTING FACILITY INFORMATION | SAMPLE INFORMATION |
|---|---|
| **Santé Laboratories**<br>8201 East Riverside Drive, STE 650<br>Austin, Texas 78744 USA | **Santé Sample ID:** 224539<br>**Receipt Date:** 10/07/2022 / 11:00 AM CST / C. Ritchie<br>**Receipt Condition:** Good **Analysis Start Date:** 10/11/2022 |

**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 | 10/14/2022 | Initial Release |

**PRODUCT SAMPLE / IMAGE**




**REVIEWED AND APPROVED BY**

DocuSigned by:
Brian R. Sloat
89DC8DE7BF234E8...

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

14 October 2022 | 4:48:50 PM CDT
Date *DD-MM-YY*


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