# CERTIFICATE OF ANALYSIS

**SAMPLE NAME:** KB-598-TPS

**SAMPLE CODE:** DTS-240705-005

**CLIENT:** KATS BOTANICALS

**BATCH RESULT:** PASS

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**MATRIX NAME:** Botanical Powder - Plant
**SAMPLE TYPE:** Quality Assurance
**RECEIVED DATE:** Mon, Jul 8, 2024
**PUBLISHED DATE:** Thu, Jul 11, 2024
**BATCH CODE:** 598200GMDP
**BATCH SIZE:** 1oz
**SAMPLE SIZE:** 1oz

| | |
|---|---|
| TOTAL MAJOR ALKALOIDS | 2.095% |
| TOTAL MINOR ALKALOIDS | 0.0013% |
| MITRAGYNINE | 1.275% |

ALKU ✓
Kratom Alkaloids
High Level

ALKL ✓
Kratom Alkaloids
Low Level

ECOLI ✓
Total E. Coli & Coliforms
Plate

TAMC ✓
Total Aerobic Bacteria
Plate

SS ✓
Salmonella & STEC
qPCR

TYMFD ✓
Total Yeast & Mold
Plate

HPMET ✓
Heavy Metals
7

**RESULTS REVIEWED BY:** Leslie Varela
Laboratory Director
Cambium Analytica
Thursday, Jul 11, 2024

**RESULTS CERTIFIED BY:** Douglas Smith
VP - Scientific Operations
Cambium Analytica
Thursday, Jul 11, 2024

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ALKU

## KRATOM ALKALOIDS - HIGH LEVEL

LAB-TM-052 - DETERMINATION OF KRATOM ALKALOID CONTENT BY UPLC-DAD
ALKU-DTS-240705-005-01 - FRI, JUL 5, 2024

| ANALYTE | VALUE | ACTION LIMIT | LOD | LOQ | STATUS |
|---|---|---|---|---|---|
| Mitragynine | 1.275 % | N/A | 0.3 ug/g | 0.5 ug/g | N/A |
| Speciociliatine | 0.388 % | N/A | 0.3 ug/g | 0.5 ug/g | N/A |
| Paynantheine | 0.270 % | N/A | 0.3 ug/g | 0.5 ug/g | N/A |
| Speciogynine | 0.160 % | N/A | 0.3 ug/g | 0.5 ug/g | N/A |
| **Total Major Alkaloids** | **2.095 %** | N/A | | | N/A |

ALKL

## KRATOM ALKALOIDS - LOW LEVEL

LAB-TM-047 - DETERMINATION OF KRATOM ALKALOID CONTENT BY LC-TQ
ALKL-DTS-240705-005-01 - TUE, JUL 9, 2024

| ANALYTE | VALUE | ACTION LIMIT | LOD | LOQ | STATUS |
|---|---|---|---|---|---|
| 7-Hydroxymitragynine | 0.0013 % | N/A | 0.01 ug/kg | 0.1 ug/kg | N/A |
| Mitraphylline | ND | N/A | 0.01 ug/kg | 0.1 ug/kg | N/A |
| **Total Minor Alkaloids** | **0.0013 %** | N/A | 0.01 ug/kg | 0.1 ug/kg | N/A |

ECOLI

## TOTAL E. COLI & COLIFORMS - PLATE

LAB-TM-059 - ENUMERATION OF ESCHERICHIA COLI AND TOTAL COLIFORM IN FOODS AND DIETARY SUPPLEMENTS
ECOLI-DTS-240705-005-01 - FRI, JUL 5, 2024

| ANALYTE | VALUE | ACTION LIMIT | LOD | LOQ | STATUS |
|---|---|---|---|---|---|
| E. coli | ND | 20 CFU/g | 10 CFU/g | 10 CFU/g | PASS |
| **Total Coliforms** | **ND** | 10000 CFU/g | 10 CFU/g | 10 CFU/g | PASS |

TAMC

## TOTAL AEROBIC BACTERIA - PLATE

LAB-TM-060 - ENUMERATION OF TOTAL AEROBIC COUNT IN FOODS AND DIETARY SUPPLEMENTS
TAMC-DTS-240705-005-01 - FRI, JUL 5, 2024

| ANALYTE | VALUE | ACTION LIMIT | LOD | LOQ | STATUS |
|---|---|---|---|---|---|
| **Total Aerobic Count** | **1000 CFU/g** | 10000000 CFU/g | 1000 CFU/g | 1000 CFU/g | PASS |

SS

## SALMONELLA & STEC- QPCR

LAB-TM-006 - MICROBIAL ANALYSIS BY QPCR
SS-DTS-240705-005-01 - FRI, JUL 5, 2024

| ANALYTE | VALUE | ACTION LIMIT | LOD | LOQ | STATUS |
|---|---|---|---|---|---|
| Salmonella Spp | ND | Detection | | | PASS |
| Shiga Toxin Producing E. coli | ND | N/A | | | N/A |

TYMFD

## TOTAL YEAST & MOLD - PLATE

LAB-TM-061 - ENUMERATION OF YEAST AND MOLD IN FOODS AND DIETARY SUPPLEMENTS
TYMFD-DTS-240705-005-01 - FRI, JUL 5, 2024

| ANALYTE | VALUE | ACTION LIMIT | LOD | LOQ | STATUS |
|---|---|---|---|---|---|
| **Total Yeast and Mold** | **10 CFU/g** | 100000 CFU/g | 10 CFU/g | 10 CFU/g | PASS |

HPMET

## HEAVY METALS - 7

LAB-TM-044 - DETERMINATION OF HEAVY METALS BY ICP-MS
HPMET-DTS-240705-005-01 - FRI, JUL 5, 2024

| ANALYTE | VALUE | ACTION LIMIT | LOD | LOQ | STATUS |
|---|---|---|---|---|---|
| Arsenic | 0.165 ug/g | 1000 ug/g | 0.198 ug/kg | 0.662 ug/kg | PASS |
| Cadmium | 0.027 ug/g | 0.4 ug/g | 0.082 ug/kg | 0.272 ug/kg | PASS |
| Chromium | 1.474 ug/g | N/A | 0.627 ug/kg | 2.091 ug/kg | N/A |
| Copper | 16.294 ug/g | N/A | 0.155 ug/kg | 0.515 ug/kg | N/A |
| Lead | 0.594 ug/g | 1.25 ug/g | 0.282 ug/kg | 0.282 ug/kg | PASS |
| Mercury | 0.014 ug/g | 0.2 ug/g | 0.017 ug/kg | 0.057 ug/kg | PASS |
| Nickel | 2.154 ug/g | 20 ug/g | 0.321 ug/kg | 1.071 ug/kg | PASS |