Steep Hill California

1005 PARKER STREET, BERKELEY, CA 94710 LICENSE #: C8-0000082-LIC

CERTIFICATE OF ANALYSIS

Sample Name: CBD Isolate 1.2
Steep Hill ID: BK81109
Batch ID:
Sample Type: Concentrate
Date Received: 2/4/2020
Date Reported: 2/8/2020

Customer: **Cultivated Minds Innovation**

Cannabinoids	Residual Pesticides	Microbial Impurities	Mycotoxins	Heavy Metals	Water Activity	Residual Solvents	Foreign Material
Tested	NT	NT	NT	NT	NT	NT	NT

Total THC
Not Detected
Not Detected
Not Detected

Total CBD
95.2 %
952 mg/g

Total Cannabinoids
95.2 %
952 mg/g

Leah Shaffer
Chief Science Officer
Date: 2/8/2020

The following results relate only to the samples tested and for the specific tests conducted. Steep Hill grants permission to reproduce this document in full only.

© 2020 STEEP HILL, INC. ALL RIGHTS RESERVED

CERTIFICATE #: BK81109
REVISION #: BK81109.1

CERTIFICATE OF ANALYSIS

Cannabinoid Results **2/8/2020**

Standard potency analysis utilizing High Performance Liquid Chromatography with Photo Diode Array Detector (HPLC-PDA; SOP-068) - **THC Limits: 1000 mg/pkg**

Analyte	%	mg/g	mg/pkg	LOD mg/g	LOQ mg/g
CBD	95.2	952		0.661	1.91
CBDA	ND	ND	ND	0.218	1.91
CBG	ND	ND	ND	0.283	1.91
CBN	ND	ND	ND	0.0725	1.91
THC	ND	ND	ND	0.294	1.91
THCA	ND	ND	ND	0.302	1.91
CBC	ND	ND	ND	0.149	1.91
CBCA	ND	ND	ND	0.0573	1.91
CBDV	< LOQ	< 1	< LOQ	0.645	3.82
CBDVA	ND	ND	ND	0.263	1.91
CBGA	ND	ND	ND	0.221	1.91
CBL	ND	ND	ND	0.565	3.82
CBLA	ND	ND	ND	0.229	1.91
CBNA	ND	ND	ND	0.0649	1.91
delta-8-THC	ND	ND	ND	0.584	3.82
THCV	ND	ND	ND	0.416	3.82
THCVA	ND	ND	ND	0.351	1.91
Total	95.2	952			

Terpenoid Results NT

Standard terpene analysis utilizing Gas Chromatography – Mass Spectrometry (GC-MS; SOP-069)

Analyte	%	mg/g	LOD mg/g	LOQ mg/g	Analyte	%	mg/g	LOD mg/g	LOQ mg/g
alpha-Bisabolol	NT	NT	NT	NT	Linalool	NT	NT	NT	NT
endo-Borneol	NT	NT	NT	NT	Menthol	NT	NT	NT	NT
Camphene	NT	NT	NT	NT	β-Myrcene	NT	NT	NT	NT
Camphor	NT	NT	NT	NT	Nerol	NT	NT	NT	NT
3-Carene	NT	NT	NT	NT	cis-Nerolidol	NT	NT	NT	NT
Caryophyllene Oxide	NT	NT	NT	NT	trans-Nerolidol	NT	NT	NT	NT
β-Caryophyllene	NT	NT	NT	NT	cis-beta-Ocimene	NT	NT	NT	NT
alpha-Cedrene	NT	NT	NT	NT	trans-beta-Ocimene	NT	NT	NT	NT
Cedrol	NT	NT	NT	NT	alpha-Phellandrene	NT	NT	NT	NT
Citronellol	NT	NT	NT	NT	Phytol 1	NT	NT	NT	NT
Eucalyptol	NT	NT	NT	NT	Phytol 2	NT	NT	NT	NT
alpha-Farnesene	NT	NT	NT	NT	α-Pinene	NT	NT	NT	NT
beta-Farnesene	NT	NT	NT	NT	β-Pinene	NT	NT	NT	NT
Fenchol	NT	NT	NT	NT	Pulegone	NT	NT	NT	NT
Fenchone	NT	NT	NT	NT	Sabinene	NT	NT	NT	NT
Geraniol	NT	NT	NT	NT	Sabinene Hydrate	NT	NT	NT	NT
Geranyl Acetate	NT	NT	NT	NT	alpha-Terpinene	NT	NT	NT	NT
Guaiol	NT	NT	NT	NT	gamma-Terpinene	NT	NT	NT	NT
α-Humulene	NT	NT	NT	NT	alpha-Terpineol	NT	NT	NT	NT
Isoborneol	NT	NT	NT	NT	Terpinolene	NT	NT	NT	NT
Isopulegol	NT	NT	NT	NT	Valencene	NT	NT	NT	NT
Limonene	NT	NT	NT	NT	Total	NT	NT	NT	NT

Leah Shaffer
Chief Science Officer
Date: 2/8/2020

The following results relate only to the samples tested and for the specific tests conducted. Steep Hill grants permission to reproduce this document in full only.

© 2020 STEEP HILL, INC. ALL RIGHTS RESERVED

CERTIFICATE #: BK81109
REVISION #: BK81109.1

CERTIFICATE OF ANALYSIS

Residual Pesticides Results NT

Residual pesticide analysis utilizing Liquid and Gas Chromatography – Mass Spectrometry (LC-MSMS + GC-MSMS; SOP-070 + SOP-080) - **Limit units: µg/g**

Analyte	µg/g	Limit	LOD µg/g	LOQ µg/g	Analyte	µg/g	Limit	LOD µg/g	LOQ µg/g
Abamectin	NT	NT	NT	NT	Fludioxonil	NT	NT	NT	NT
Acephate	NT	NT	NT	NT	Hexythiazox	NT	NT	NT	NT
Acequinocyl	NT	NT	NT	NT	Imazalil	NT	NT	NT	NT
Acetamiprid	NT	NT	NT	NT	Imidacloprid	NT	NT	NT	NT
Aldicarb	NT	NT	NT	NT	Kresoxim-methyl	NT	NT	NT	NT
Azoxystrobin	NT	NT	NT	NT	Malathion	NT	NT	NT	NT
Bifenazate	NT	NT	NT	NT	Metalaxyl	NT	NT	NT	NT
Bifenthrin	NT	NT	NT	NT	Methiocarb	NT	NT	NT	NT
Boscalid	NT	NT	NT	NT	Methomyl	NT	NT	NT	NT
Captan	NT	NT	NT	NT	Methyl Parathion	NT	NT	NT	NT
Carbaryl	NT	NT	NT	NT	Mevinphos	NT	NT	NT	NT
Carbofuran	NT	NT	NT	NT	Myclobutanil	NT	NT	NT	NT
Chlorantraniliprole	NT	NT	NT	NT	Naled	NT	NT	NT	NT
Chlordane	NT	NT	NT	NT	Oxamyl	NT	NT	NT	NT
Chlorfenapyr	NT	NT	NT	NT	Paclobutrazol	NT	NT	NT	NT
Chlorpyrifos	NT	NT	NT	NT	Pentachloronitrobenzene	NT	NT	NT	NT
Clofentezine	NT	NT	NT	NT	Permethrin	NT	NT	NT	NT
Coumaphos	NT	NT	NT	NT	Phosmet	NT	NT	NT	NT
Cyfluthrin	NT	NT	NT	NT	Piperonyl Butoxide	NT	NT	NT	NT
Cypermethrin	NT	NT	NT	NT	Prallethrin	NT	NT	NT	NT
Daminozide	NT	NT	NT	NT	Propiconazole	NT	NT	NT	NT
Diazinon	NT	NT	NT	NT	Propoxur	NT	NT	NT	NT
Dichlorvos	NT	NT	NT	NT	Pyrethrins	NT	NT	NT	NT
Dimethoate	NT	NT	NT	NT	Pyridaben	NT	NT	NT	NT
Dimethomorph	NT	NT	NT	NT	Spinetoram	NT	NT	NT	NT
Ethoprophos	NT	NT	NT	NT	Spinosad	NT	NT	NT	NT
Etofenprox	NT	NT	NT	NT	Spiromesifen	NT	NT	NT	NT
Etoxazole	NT	NT	NT	NT	Spirotetramat	NT	NT	NT	NT
Fenhexamid	NT	NT	NT	NT	Spiroxamine	NT	NT	NT	NT
Fenoxycarb	NT	NT	NT	NT	Tebuconazole	NT	NT	NT	NT
Fenpyroximate	NT	NT	NT	NT	Thiacloprid	NT	NT	NT	NT
Fipronil	NT	NT	NT	NT	Thiamethoxam	NT	NT	NT	NT
Flonicamid	NT	NT	NT	NT	Trifloxystrobin	NT	NT	NT	NT

Residual Solvents Results NT

Residual solvents and processing chemicals analysis utilizing Headspace Gas Chromatography – Mass Spectrometry (HS-GC-MS; SOP-010) - **Limit units: µg/g**

Analyte	µg/g	Limit	LOD µg/g	LOQ µg/g	Analyte	µg/g	Limit	LOD µg/g	LOQ µg/g
1,2 Dichloroethane	NT	NT	NT	NT	n-Heptane	NT	NT	NT	NT
Acetone	NT	NT	NT	NT	n-Hexane	NT	NT	NT	NT
Acetonitrile	NT	NT	NT	NT	Isopropanol	NT	NT	NT	NT
Benzene	NT	NT	NT	NT	Methanol	NT	NT	NT	NT
n-Butane	NT	NT	NT	NT	Methylene Chloride	NT	NT	NT	NT
Chloroform	NT	NT	NT	NT	n-Pentane	NT	NT	NT	NT
Ethanol	NT	NT	NT	NT	Propane	NT	NT	NT	NT
Ethyl Acetate	NT	NT	NT	NT	Toluene	NT	NT	NT	NT
Ethyl Ether	NT	NT	NT	NT	Total Xylenes	NT	NT	NT	NT
Ethylene Oxide	NT	NT	NT	NT	Trichloroethylene	NT	NT	NT	NT

Leah Shaffer
Chief Science Officer
Date: 2/8/2020

The following results relate only to the samples tested and for the specific tests conducted. Steep Hill grants permission to reproduce this document in full only.

© 2020 STEEP HILL, INC. ALL RIGHTS RESERVED

CERTIFICATE OF ANALYSIS

Microbial Impurities Results NT

Microbiological screening utilizing Pathogen Dx. (PDX; SOP-076)

Analyte	Result	Limit	LOQ
Aspergillus flavus	NT	NT	NT
Aspergillus fumigatus	NT	NT	NT
Aspergillus niger	NT	NT	NT
Aspergillus terreus	NT	NT	NT
E. coli (STEC)	NT	NT	NT
Salmonella	NT	NT	NT

Mycotoxin Results NT

Mycotoxin analysis utilizing Liquid Chromatography – Mass Spectrometry (LC-MSMS; SOP-070) - **Limit units: µg/kg**

Analyte	µg/kg	Limit	LOD µg/kg	LOQ µg/kg
Aflatoxin B1	NT	NT	NT	NT
Aflatoxin B2	NT	NT	NT	NT
Aflatoxin G1	NT	NT	NT	NT
Aflatoxin G2	NT	NT	NT	NT
Ochratoxin A	NT	NT	NT	NT
Total Aflatoxins	NT	NT	NT	NT

Heavy Metals Results NT

Heavy metals analysis utilizing Inductively Coupled Plasma Mass Spectrometry (ICP-MS; SOP-072) - **Limit units: µg/g**

Analyte	µg/g	Limit	LOD µg/g	LOQ µg/g
Arsenic	NT	NT	NT	NT
Cadmium	NT	NT	NT	NT
Lead	NT	NT	NT	NT
Mercury	NT	NT	NT	NT

Foreign Material Results NT

Foreign material analysis utilizing visual inspection (SOP-057)

Analyte	Pass/Fail
Visual Inspection	NT

Moisture Results NT

Moisture content analysis utilizing Moisture Balance (MB; SOP-055)

Analyte	%
Moisture	NT

Water Activity Results NT

Water Activity analysis utilizing Water Activity Meter (WAM; SOP-090) - **Limit units: Aw**

Analyte	Aw	Limit
Water Activity	NT	NT

LOD: Limit of Detection
LOQ: Limit of Quantitation
NT: Not Tested
ND: Not Detected

Leah Shaffer
Chief Science Officer
Date: 2/8/2020

The following results relate only to the samples tested and for the specific tests conducted. Steep Hill grants permission to reproduce this document in full only.

© 2020 STEEP HILL, INC. ALL RIGHTS RESERVED

CERTIFICATE OF ANALYSIS

Photos

Leah Shaffer
Chief Science Officer
Date: 2/8/2020

The following results relate only to the samples tested and for the specific tests conducted. Steep Hill grants permission to reproduce this document in full only.

© 2020 STEEP HILL, INC. ALL RIGHTS RESERVED