KCA Laboratories
232 North Plaza Drive
Nicholasville, KY 40356

+1-833-KCA-LABS
https://kcalabs.com
KDA Lic.# P_0058

Certificate of Analysis

0321CART

Sample ID: SA-10122021-4696
Batch: 0321CART
Type: Finished Products
Matrix: Concentrate - Vape

Received: 10/14/2021
Completed: 10/21/2021

Client
SunFlora Inc.
600 8th Ave W, STE 400
Palmetto, FL 34221
USA



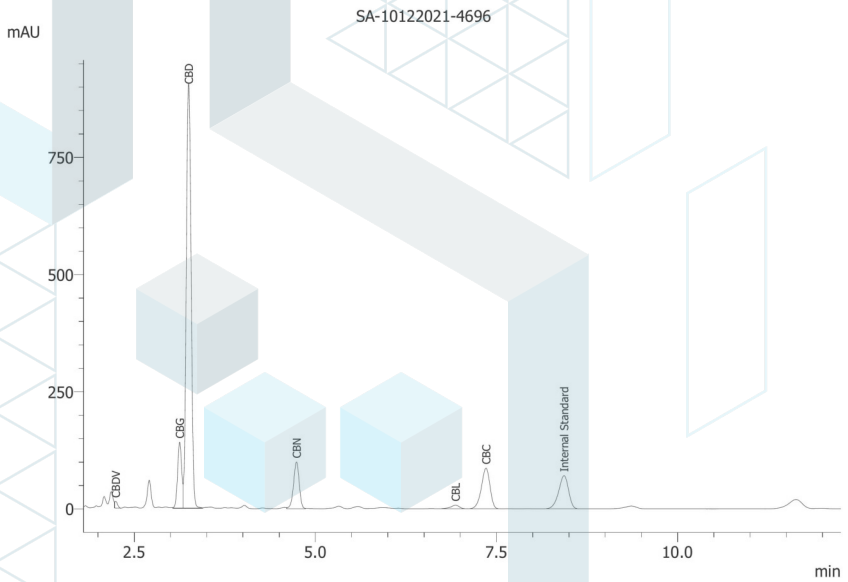
Summary

Test	Date Tested	Status
Cannabinoids	10/21/2021	Tested
Foreign Matter	10/20/2021	Not Detected
Heavy Metals	10/19/2021	Tested
Microbials	10/21/2021	Tested
Pesticides	10/20/2021	Tested
Residual Solvents	10/19/2021	Tested
Terpenes	10/21/2021	Tested

Cannabinoids by HPLC-PDA

ND	54.8 %	70.6 %	Not Tested	Not Detected	Yes
Total Δ9-THC	CBD	Total Cannabinoids	Moisture Content	Foreign Matter	Internal Marker Recovered

Analyte	LOD (%)	LOQ (%)	Result (%)	Result (mg/g)
CBC	0.0095	0.0284	5.97	59.7
CBCA	0.0181	0.0543	ND	ND
CBCV	0.006	0.018	ND	ND
CBD	0.0081	0.0242	54.8	548.0
CBDA	0.0043	0.013	ND	ND
CBDV	0.0061	0.0182	0.355	3.55
CBDVA	0.0021	0.0063	ND	ND
CBG	0.0057	0.0172	5.69	56.9
CBGA	0.0049	0.0147	ND	ND
CBL	0.0112	0.0335	0.593	5.93
CBLA	0.0124	0.0371	ND	ND
CBN	0.0056	0.0169	3.18	31.8
CBNA	0.006	0.0181	ND	ND
Δ8-THC	0.0104	0.0312	ND	ND
Δ9-THC	0.0076	0.0227	ND	ND
Δ9-THCA	0.0084	0.0251	ND	ND
Δ9-THCV	0.0069	0.0206	ND	ND
Δ9-THCVA	0.0062	0.0186	ND	ND
Total Δ9-THC			**ND**	**ND**
Total CBD			**54.8**	**548.0**
Total			**70.6**	**706.0**



ND = Not Detected; NT = Not Tested; LOD = Limit of Detection; LOQ = Limit of Quantitation; RL = Reporting Limit; Δ = Delta; Total Δ9-THC = Δ9-THCA * 0.877 + Δ9-THC; Total CBD = CBDA * 0.877 + CBD;

10/21/2021

ISO/IEC 17025:2017 Accredited
Accreditation #108651

This product or substance has been tested by KCA Laboratories using validated testing methodologies and an ISO/IEC 17025:2017 accredited quality system. Values reported relate only to the product or substance tested. The reported result is based on a sample weight. Unless otherwise stated, results of tests performed on all quality control samples met criteria for acceptance established by KCA Laboratories. KCA Laboratories makes no claims as to the efficacy, safety or other risks associated with any detected or non-detected amounts of any substances reported herein. This Certificate of Analysis shall not be reproduced except in full, without the written approval of KCA Laboratories. KCA Laboratories can provide measurement uncertainty upon request.

KCA Laboratories
232 North Plaza Drive
Nicholasville, KY 40356

+1-833-KCA-LABS
https://kcalabs.com
KDA Lic.# P_0058

0321CART

Sample ID: SA-10122021-4696
Batch: 0321CART
Type: Finished Products
Matrix: Concentrate - Vape

Received: 10/14/2021
Completed: 10/21/2021

Client
SunFlora Inc.
600 8th Ave W, STE 400
Palmetto, FL 34221
USA

Heavy Metals by ICP-MS

Analyte	LOD (ppb)	LOQ (ppb)	Result (ppb)
Arsenic	2	20	ND
Cadmium	1	20	ND
Lead	2	20	ND
Mercury	12	50	ND

ND = Not Detected; NT = Not Tested; LOD = Limit of Detection; LOQ = Limit of Quantitation; P = Pass; F = Fail; RL = Reporting Limit

10/21/2021

This product or substance has been tested by KCA Laboratories using validated testing methodologies and an ISO/IEC 17025:2017 accredited quality system. Values reported relate only to the product or substance tested. The reported result is based on a sample weight. Unless otherwise stated, results of tests performed on all quality control samples met criteria for acceptance established by KCA Laboratories. KCA Laboratories makes no claims as to the efficacy, safety or other risks associated with any detected or non-detected amounts of any substances reported herein. This Certificate of Analysis shall not be reproduced except in full, without the written approval of KCA Laboratories. KCA Laboratories can provide measurement uncertainty upon request.

KCA Laboratories
232 North Plaza Drive
Nicholasville, KY 40356

+1-833-KCA-LABS
https://kcalabs.com
KDA Lic.# P_0058

Certificate of Analysis

0321CART

Sample ID: SA-10122021-4696
Batch: 0321CART
Type: Finished Products
Matrix: Concentrate - Vape

Received: 10/14/2021
Completed: 10/21/2021

Client
SunFlora Inc.
600 8th Ave W, STE 400
Palmetto, FL 34221
USA

Pesticides by LC-MS/MS and GC-MS/MS

Analyte	LOD (ppb)	LOQ (ppb)	Result (ppb)	Analyte	LOD (ppb)	LOQ (ppb)	Result (ppb)
Abamectin	30	100	ND	Hexythiazox	30	100	ND
Acephate	30	100	ND	Imazalil	30	100	ND
Acetamiprid	30	100	ND	Imidacloprid	30	100	ND
Aldicarb	30	100	ND	Kresoxim methyl	30	100	ND
Azoxystrobin	30	100	ND	Malathion	30	100	ND
Bifenazate	30	100	ND	Metalaxyl	30	100	ND
Bifenthrin	30	100	ND	Methiocarb	30	100	ND
Boscalid	30	100	ND	Methomyl	30	100	ND
Carbaryl	30	100	ND	Mevinphos	30	100	ND
Carbofuran	30	100	ND	Myclobutanil	30	100	ND
Chloranthraniliprole	30	100	ND	Naled	30	100	ND
Chlorfenapyr	30	100	ND	Oxamyl	30	100	ND
Chlorpyrifos	30	100	ND	Paclobutrazol	30	100	ND
Clofentezine	30	100	ND	Permethrin	30	100	ND
Coumaphos	30	100	ND	Phosmet	30	100	ND
Daminozide	30	100	ND	Piperonyl Butoxide	30	100	ND
Diazinon	30	100	ND	Prallethrin	30	100	ND
Dichlorvos	30	100	ND	Propiconazole	30	100	ND
Dimethoate	30	100	ND	Propoxur	30	100	ND
Dimethomorph	30	100	ND	Pyrethrins	30	100	ND
Ethoprophos	30	100	ND	Pyridaben	30	100	ND
Etofenprox	30	100	ND	Spinetoram	30	100	ND
Etoxazole	30	100	ND	Spinosad	30	100	ND
Fenhexamid	30	100	ND	Spiromesifen	30	100	ND
Fenoxycarb	30	100	ND	Spirotetramat	30	100	ND
Fenpyroximate	30	100	ND	Spiroxamine	30	100	ND
Flonicamid	30	100	ND	Tebuconazole	30	100	ND
				Thiacloprid	30	100	ND
				Thiamethoxam	30	100	ND
				Trifloxystrobin	30	100	ND

ND = Not Detected; NT = Not Tested; LOD = Limit of Detection; LOQ = Limit of Quantitation; P = Pass; F = Fail; RL = Reporting Limit

10/21/2021

This product or substance has been tested by KCA Laboratories using validated testing methodologies and an ISO/IEC 17025:2017 accredited quality system. Values reported relate only to the product or substance tested. The reported result is based on a sample weight. Unless otherwise stated, results of tests performed on all quality control samples met criteria for acceptance established by KCA Laboratories. KCA Laboratories makes no claims as to the efficacy, safety or other risks associated with any detected or non-detected amounts of any substances reported herein. This Certificate of Analysis shall not be reproduced except in full, without the written approval of KCA Laboratories. KCA Laboratories can provide measurement uncertainty upon request.

KCA Laboratories
232 North Plaza Drive
Nicholasville, KY 40356

+1-833-KCA-LABS
https://kcalabs.com
KDA Lic.# P_0058

0321CART

Sample ID: SA-10122021-4696
Batch: 0321CART
Type: Finished Products
Matrix: Concentrate - Vape

Received: 10/14/2021
Completed: 10/21/2021

Client
SunFlora Inc.
600 8th Ave W, STE 400
Palmetto, FL 34221
USA

Microbials by qPCR and/or Plating

Analyte	LOD (CFU/g)	Result (CFU/g)	Result (Qualitative)
Coliforms	1	ND	
Aerobic Bacteria	1	ND	
Salmonella			Not Detected per 1 gram
Total Enterobacteriaceae			Not Detected per 1 gram

ND = Not Detected; NT = Not Tested; LOD = Limit of Detection; LOQ = Limit of Quantitation; CFU = Colony Forming Units; P = Pass; F = Fail; RL = Reporting Limit

10/21/2021

This product or substance has been tested by KCA Laboratories using validated testing methodologies and an ISO/IEC 17025:2017 accredited quality system. Values reported relate only to the product or substance tested. The reported result is based on a sample weight. Unless otherwise stated, results of tests performed on all quality control samples met criteria for acceptance established by KCA Laboratories. KCA Laboratories makes no claims as to the efficacy, safety or other risks associated with any detected or non-detected amounts of any substances reported herein. This Certificate of Analysis shall not be reproduced except in full, without the written approval of KCA Laboratories. KCA Laboratories can provide measurement uncertainty upon request.

KCA Laboratories
232 North Plaza Drive
Nicholasville, KY 40356

+1-833-KCA-LABS
https://kcalabs.com
KDA Lic.# P_0058

Certificate of Analysis

0321CART

Sample ID: SA-10122021-4696
Batch: 0321CART
Type: Finished Products
Matrix: Concentrate - Vape

Received: 10/14/2021
Completed: 10/21/2021

Client
SunFlora Inc.
600 8th Ave W, STE 400
Palmetto, FL 34221
USA

Residual Solvents by HS-GC-MS/MS

Analyte	LOD (ppm)	LOQ (ppm)	Result (ppm)	Analyte	LOD (ppm)	LOQ (ppm)	Result (ppm)
Acetone	167	500	ND	Ethylene Oxide	0.5	1	ND
Acetonitrile	14	41	ND	Heptane	167	500	ND
Benzene	0.5	1	ND	n-Hexane	10	29	ND
Butane	167	500	ND	Isobutane	167	500	ND
1-Butanol	167	500	ND	Isopropyl Acetate	167	500	ND
2-Butanol	167	500	ND	Isopropyl Alcohol	167	500	ND
2-Butanone	167	500	ND	Isopropylbenzene	167	500	ND
Chloroform	2	6	ND	Methanol	100	300	ND
Cyclohexane	130	388	ND	2-Methylbutane	167	500	ND
1,2-Dichloroethane	0.5	1	ND	Methylene Chloride	20	60	ND
1,2-Dimethoxyethane	4	10	ND	2-Methylpentane	10	29	ND
Dimethyl Sulfoxide	167	500	ND	3-Methylpentane	10	29	ND
N,N-Dimethylacetamide	37	109	ND	n-Pentane	167	500	ND
2,2-Dimethylbutane	10	29	ND	1-Pentanol	167	500	ND
N,N-Dimethylformamide	30	88	ND	n-Propane	167	500	ND
2,2-Dimethylpropane	167	500	ND	1-Propanol	167	500	ND
1,4-Dioxane	13	38	ND	Pyridine	7	20	ND
Ethanol	167	500	ND	Tetrahydrofuran	24	72	ND
2-Ethoxyethanol	6	16	ND	Toluene	30	89	ND
Ethyl Acetate	167	500	ND	Trichloroethylene	3	8	ND
Ethyl Ether	167	500	ND	Tetramethylene Sulfone	6	16	ND
Ethylbenzene	3	7	ND	Xylenes (o-, m-, and p-)	73	217	ND
Ethylene Glycol	21	62	ND				

ND = Not Detected; NT = Not Tested; LOD = Limit of Detection; LOQ = Limit of Quantitation; P = Pass; F = Fail; RL = Reporting Limit

10/21/2021

This product or substance has been tested by KCA Laboratories using validated testing methodologies and an ISO/IEC 17025:2017 accredited quality system. Values reported relate only to the product or substance tested. The reported result is based on a sample weight. Unless otherwise stated, results of tests performed on all quality control samples met criteria for acceptance established by KCA Laboratories. KCA Laboratories makes no claims as to the efficacy, safety or other risks associated with any detected or non-detected amounts of any substances reported herein. This Certificate of Analysis shall not be reproduced except in full, without the written approval of KCA Laboratories. KCA Laboratories can provide measurement uncertainty upon request.

KCA Laboratories
232 North Plaza Drive
Nicholasville, KY 40356

+1-833-KCA-LABS
https://kcalabs.com
KDA Lic.# P_0058

Certificate of Analysis

0321CART

Sample ID: SA-10122021-4696
Batch: 0321CART
Type: Finished Products
Matrix: Concentrate - Vape

Received: 10/14/2021
Completed: 10/21/2021

Client
SunFlora Inc.
600 8th Ave W, STE 400
Palmetto, FL 34221
USA

Terpenes by HS-GC-MS/MS

Analyte	LOD (%)	LOQ (%)	Result (%)	Analyte	LOD (%)	LOQ (%)	Result (%)
α-Bisabolol	0.00001	0.00005	0.821	Limonene	0.00001	0.00001	0.218274
(+)-Borneol	0.00001	0.00005	ND	Linalool	0.00001	0.00001	0.142148
Camphene	0.00001	0.00005	0.000257	β-myrcene	0.00001	0.00001	0.116908
Camphor	0.00001	0.00005	ND	Nerol	0.00001	0.00001	ND
3-Carene	0.00001	0.00005	0.000674	cis-Nerolidol	0.00001	0.00001	ND
β-Caryophyllene	0.00001	0.00005	1.57	trans-Nerolidol	0.00001	0.00001	0.002016
Caryophyllene Oxide	0.00001	0.00005	0.00136	Ocimene	0.00001	0.00001	ND
α-Cedrene	0.00001	0.00005	ND	α-Phellandrene	0.00001	0.00001	0.004353
Cedrol	0.00001	0.00005	ND	α-Pinene	0.00001	0.00001	0.025581
Eucalyptol	0.00001	0.00005	0.025	β-Pinene	0.00001	0.00001	0.025974
Fenchone	0.00001	0.00005	ND	Pulegone	0.00001	0.00001	ND
Fenchyl Alcohol	0.00001	0.00005	ND	Sabinene	0.00001	0.00001	0.000223
Geraniol	0.00001	0.00005	ND	Sabinene Hydrate	0.00001	0.00001	ND
Geranyl Acetate	0.00001	0.00005	ND	α-Terpinene	0.00001	0.00001	0.00029
Guaiol	0.00001	0.00005	0.00327	γ-Terpinene	0.00001	0.00001	0.000156
Hexadhydrothymol	0.00001	0.00005	0.00359	α-Terpineol	0.00001	0.00001	<LOQ
α-Humulene	0.00001	0.00005	0.397	γ-Terpineol	0.00001	0.00001	ND
Isoborneol	0.00001	0.00005	ND	Terpinolene	0.00001	0.00001	0.001323
Isopulegol	0.00001	0.00005	ND	**Total Terpenes (%)**			**3.36**

ND = Not Detected; NT = Not Tested; LOD = Limit of Detection; LOQ = Limit of Quantitation; P = Pass; F = Fail; RL = Reporting Limit


Pepper


Hops


Clove


Sweet


Floral

10/21/2021

This product or substance has been tested by KCA Laboratories using validated testing methodologies and an ISO/IEC 17025:2017 accredited quality system. Values reported relate only to the product or substance tested. The reported result is based on a sample weight. Unless otherwise stated, results of tests performed on all quality control samples met criteria for acceptance established by KCA Laboratories. KCA Laboratories makes no claims as to the efficacy, safety or other risks associated with any detected or non-detected amounts of any substances reported herein. This Certificate of Analysis shall not be reproduced except in full, without the written approval of KCA Laboratories. KCA Laboratories can provide measurement uncertainty upon request.

KCA Laboratories
232 North Plaza Drive
Nicholasville, KY 40356

+1-833-KCA-LABS
https://kcalabs.com
KDA Lic.# P_0058

0321CART

Sample ID: SA-10122021-4696
Batch: 0321CART
Type: Finished Products
Matrix: Concentrate - Vape

Received: 10/14/2021
Completed: 10/21/2021

Client
SunFlora Inc.
600 8th Ave W, STE 400
Palmetto, FL 34221
USA

Reporting Limit Appendix

Heavy Metals -

Analyte	Limit (ppb)	Analyte	Limit (ppb)
Arsenic	200	Lead	500
Cadmium	200	Mercury	100

Microbials -

Analyte	Limit (CFU/g)	Analyte	Limit (CFU/g)
Coliforms	1	Aerobic Bacteria	1000

Residual Solvents - USP 467

Analyte	Limit (ppm)	Analyte	Limit (ppm)
Acetone	5000	Ethylene Oxide	1
Acetonitrile	410	Heptane	5000
Benzene	2	n-Hexane	290
Butane	5000	Isobutane	5000
1-Butanol	5000	Isopropyl Acetate	5000
2-Butanol	5000	Isopropyl Alcohol	5000
2-Butanone	5000	Isopropylbenzene	5000
Chloroform	60	Methanol	3000
Cyclohexane	3880	2-Methylbutane	5000
1,2-Dichloroethane	5	Methylene Chloride	600
1,2-Dimethoxyethane	100	2-Methylpentane	290
Dimethyl Sulfoxide	5000	3-Methylpentane	290
N,N-Dimethylacetamide	1090	n-Pentane	5000
2,2-Dimethylbutane	290	1-Pentanol	5000
N,N-Dimethylformamide	880	n-Propane	5000
2,2-Dimethylpropane	5000	1-Propanol	5000
1,4-Dioxane	380	Pyridine	200
Ethanol	5000	Tetrahydrofuran	720
2-Ethoxyethanol	160	Toluene	890
Ethyl Acetate	5000	Trichloroethylene	80
Ethyl Ether	5000	Tetramethylene Sulfone	160
Ethylbenzene	70	Xylenes (o-, m-, and p-)	2170
Ethylene Glycol	620		

Pesticides - CA BCC

Analyte	Limit (ppb)	Analyte	Limit (ppb)
Abamectin	300	Hexythiazox	2000
Acephate	5000	Imazalil	30
Acetamiprid	5000	Imidacloprid	3000

Pesticides - CA BCC

Analyte	Limit (ppb)	Analyte	Limit (ppb)
Aldicarb	30	Kresoxim methyl	1000
Azoxystrobin	40000	Malathion	5000
Bifenazate	5000	Metalaxyl	15000
Bifenthrin	500	Methiocarb	30
Boscalid	10000	Methomyl	100
Carbaryl	500	Mevinphos	30
Carbofuran	30	Myclobutanil	9000
Chloranthraniliprole	40000	Naled	500
Chlorfenapyr	30	Oxamyl	200
Chlorpyrifos	30	Paclobutrazol	30
Clofentezine	500	Permethrin	20000
Coumaphos	30	Phosmet	200
Daminozide	30	Piperonyl Butoxide	8000
Diazinon	200	Prallethrin	400
Dichlorvos	30	Propiconazole	20000
Dimethoate	30	Propoxur	30
Dimethomorph	20000	Pyrethrins	1000
Ethoprophos	30	Pyridaben	3000
Etofenprox	30	Spinetoram	3000
Etoxazole	1500	Spinosad	3000
Fenhexamid	10000	Spiromesifen	12000
Fenoxycarb	30	Spirotetramat	13000
Fenpyroximate	2000	Spiroxamine	30
Flonicamid	2000	Tebuconazole	2000

This product or substance has been tested by KCA Laboratories using validated testing methodologies and an ISO/IEC 17025:2017 accredited quality system. Values reported relate only to the product or substance tested. The reported result is based on a sample weight. Unless otherwise stated, results of tests performed on all quality control samples met criteria for acceptance established by KCA Laboratories. KCA Laboratories makes no claims as to the efficacy, safety or other risks associated with any detected or non-detected amounts of any substances reported herein. This Certificate of Analysis shall not be reproduced except in full, without the written approval of KCA Laboratories. KCA Laboratories can provide measurement uncertainty upon request.