

Toast Emerald

Sample ID: 1909CSALA7913.6709

Strain: Toast Emerald

Matrix: Plant

Type: Preroll

Sample Size: 9 units

Batch Size:

Produced: N/A

Collected: 09/19/2019

Received: 09/19/2019

Completed: 09/25/2019

Batch#: TE-091919-WAF

Client

Butterfly, LLC

Lic. #

1701 California St., Unit LL1015

Denver, CO 80202



Summary

Pass

17.01% Total Cannabinoids	Pass Pesticides	Pass Residual Solvents
Pass Microbials	Pass Mycotoxins	Pass Heavy Metals

Cannabinoids

Pass

Testing method: HPLC-SOP 101

Analyte	LOD	LOQ	Mass	Mass
	%	%	%	mg/g
CBDa	0.00002	0.0001	14.00	140.04
CBD	0.00004	0.0001	1.69	16.87
CBGa	0.00002	0.0001	0.44	4.35
THCa	0.00002	0.0001	0.41	4.12
Δ9-THC	0.00004	0.0001	0.27	2.66
CBC	0.00001	0.0001	0.13	1.30
CBG	0.00004	0.0001	0.07	0.71
CBDV	0.00001	0.0001	ND	ND
CBN	0.00002	0.0001	ND	ND
THCV	0.00004	0.0001	ND	ND
Δ8-THC	0.00004	0.0001	ND	ND
Total			17.01	170.05

0.63%
Total THC
13.97%
Total CBD

Date Tested: 09/23/2019

Total THC = THCa * 0.877 + d9-THC

Total CBD = CBDa * 0.877 + CBD

LOQ = Limit of Quantitation; LOD = Limit of Detection; NT = Not Tested; ND = Not Detected.

The reported result is based on a sample weight with the applicable moisture content for that sample;

Terpenes

Complete

Testing method: HS-GC-FID - SOP 201

Analyte	LOD	LOQ	Mass	Mass
	%	%	%	mg/g
β-Caryophyllene	0.00017	0.0013	0.11	1.15
α-Bisabolol	0.00015	0.0013	0.07	0.70
Guaiol	0.00018	0.0013	0.04	0.44
α-Humulene	0.00057	0.0013	0.04	0.41
trans-Nerolidol	0.00058	0.0013	0.03	0.26
Camphene	0.00072	0.0013	ND	ND
Caryophyllene Oxide	0.00017	0.0013	ND	ND
Eucalyptol	0.00017	0.0013	ND	ND
Geraniol	0.00013	0.0013	ND	ND
Isopulegol	0.00011	0.0013	ND	ND
Linalool	0.00015	0.0013	ND	ND
Ocimene	0.00013	0.0013	ND	ND
p-Cymene	0.0001	0.0013	ND	ND
Terpinolene	0.00016	0.0013	ND	ND
α-Pinene	0.00015	0.0013	ND	ND
α-Terpinene	0.00012	0.0013	ND	ND
β-Myrcene	0.00012	0.0013	ND	ND
β-Pinene	0.00034	0.0013	ND	ND
γ-Terpinene	0.00012	0.0013	ND	ND
δ-3-Carene	0.0004	0.0013	ND	ND
δ-Limonene	0.00016	0.0013	ND	ND
Total			0.30	2.96

Date Tested: 09/24/2019

7.9% Moisture Moisture Analyzer SOP-103 Date Tested: 09/23/2019	0.470 aw Water Activity Water Activity Meter SOP-102 Date Tested: 09/23/2019	Pass Foreign Matter Visual Inspection SOP-600 Date Tested: 09/22/2019
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 ISO / IEC 17025:2017 ACCREDITED LABORATORY
 Accreditation No. 73653



 Mallory Speakman
 Laboratory Director - LA
 09/25/2019



 Anya Engen
 Quality Review
 09/25/2019



 Amanda Bravo
 COA Review
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Pesticides

Pass

Testing method: LCMS & GCMS-SOP 301 and 302

Analyte	LOD	LOQ	Limit	Mass	Status	Analyte	LOD	LOQ	Limit	Mass	Status
	µg/g	µg/g	µg/g	µg/g			µg/g	µg/g	µg/g	µg/g	
Abamectin	0.0009	0.003	0.1	ND	Pass	Fludioxonil	0.0143	0.048	0.1	ND	Pass
Acephate	0.005	0.017	0.1	ND	Pass	Hexythiazox	0.0237	0.079	0.1	ND	Pass
Acequinocyl	0.0193	0.064	0.1	ND	Pass	Imazalil *	0.0077	0.026	0.0077	ND	Pass
Acetamiprid	0.0073	0.024	0.1	ND	Pass	Imidacloprid	0.0053	0.018	5.0	ND	Pass
Aldicarb *	0.0094	0.031	0.0094	ND	Pass	Kresoxim Methyl	0.0182	0.061	0.1	ND	Pass
Azoxystrobin	0.015	0.05	0.1	ND	Pass	Malathion	0.015	0.05	0.5	ND	Pass
Bifenazate	0.0129	0.043	0.1	ND	Pass	Metaxyl	0.0076	0.025	2.0	ND	Pass
Bifenthrin	0.029	0.097	3.0	ND	Pass	Methiocarb *	0.0103	0.034	0.0103	ND	Pass
Boscalid	0.0172	0.058	0.1	ND	Pass	Methomyl	0.0109	0.036	1.0	ND	Pass
Captan	0.036	0.12	0.7	ND	Pass	Methyl Parathion *	0.0091	0.0303	0.0091	ND	Pass
Carbaryl	0.0542	0.181	0.5	ND	Pass	Mevinphos *	0.0041	0.014	0.0041	ND	Pass
Carbofuran *	0.0077	0.026	0.0077	ND	Pass	Myclobutanil	0.01	0.033	0.1	ND	Pass
Chlorantraniliprole	0.0095	0.032	10.0	ND	Pass	Naled	0.0107	0.036	0.1	ND	Pass
Chlordane *	0.0055	0.0182	0.0055	ND	Pass	Oxamyl	0.0071	0.024	0.5	ND	Pass
Chlorfenapyr *	0.0048	0.0159	0.0048	ND	Pass	Paclobutrazol *	0.0092	0.031	0.0092	ND	Pass
Chlorpyrifos *	0.0197	0.066	0.0197	ND	Pass	Pentachloronitrobenzene	0.0084	0.0279	0.1	ND	Pass
Clofentezine	0.0216	0.072	0.1	ND	Pass	Permethrin	0.0142	0.048	0.5	ND	Pass
Coumaphos *	0.0196	0.065	0.0196	ND	Pass	Phosmet	0.0138	0.046	0.1	ND	Pass
Cyfluthrin	0.0107	0.036	2.0	ND	Pass	Piperonyl Butoxide	0.0156	0.052	3.0	ND	Pass
Cypermethrin	0.0105	0.035	1.0	ND	Pass	Prallethrin	0.018	0.06	0.1	ND	Pass
Daminozide *	0.0052	0.017	0.0052	ND	Pass	Propiconazole	0.013	0.043	0.1	ND	Pass
DDVP *	0.0081	0.027	0.0081	ND	Pass	Propoxur *	0.0097	0.033	0.0097	ND	Pass
Diazinon	0.0134	0.045	0.1	ND	Pass	Pyrethrins	0.0025	0.008	0.5	ND	Pass
Dimethoate *	0.0083	0.028	0.0083	ND	Pass	Pyridaben	0.0236	0.079	0.1	ND	Pass
Dimethomorph	0.0025	0.008	2.0	ND	Pass	Spinetoram	0.0042	0.014	0.1	ND	Pass
Ethoprophos *	0.0112	0.037	0.0112	ND	Pass	Spinosad	0.0002	0.001	0.1	ND	Pass
Etofenprox *	0.0247	0.082	0.0247	ND	Pass	Spiromesifen	0.0199	0.066	0.1	ND	Pass
Etoxazole	0.0269	0.09	0.1	ND	Pass	Spirotetramat	0.0068	0.023	0.1	ND	Pass
Fenhexamid	0.0215	0.072	0.1	ND	Pass	Spiroxamine *	0.0065	0.022	0.0065	ND	Pass
Fenoxycarb *	0.0186	0.062	0.0186	ND	Pass	Tebuconazole	0.0099	0.033	0.1	ND	Pass
Fenpyroximate	0.0253	0.084	0.1	ND	Pass	Thiacloprid *	0.0094	0.031	0.0094	ND	Pass
Fipronil *	0.0228	0.076	0.0228	ND	Pass	Thiamethoxam	0.005	0.017	5.0	ND	Pass
Flonicamid	0.0073	0.024	0.1	ND	Pass	Trifloxystrobin	0.0192	0.064	0.1	ND	Pass

Date Tested: 09/24/2019

* Denotes Category I pesticides, which fail when detected; LOQ = Limit of Quantitation; LOD = Limit of Detection; NT = Not Tested; ND = Not Detected.


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Microbials

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Testing method: PCR-SOP 400

Analyte	Result	Status
Aspergillus flavus	Not Detected	Pass
Aspergillus fumigatus	Not Detected	Pass
Aspergillus niger	Not Detected	Pass
Aspergillus terreus	Not Detected	Pass
Salmonella	Not Detected	Pass
Shiga toxin-producing E. Coli	Not Detected	Pass

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Mycotoxins

Pass

Testing method: LCMS-SOP 301

Analyte	LOD	LOQ	Limit	Units	Status
	µg/kg	µg/kg	µg/kg	µg/kg	
Aflatoxin B1	0.0036	0.012		ND	Tested
Aflatoxin B2	0.0092	0.031		ND	Tested
Aflatoxin G1	0.0058	0.019		ND	Tested
Aflatoxin G2	0.0034	0.011		ND	Tested
Total Aflatoxins			20.0	ND	Pass
Ochratoxin A	0.0113	0.038	20.0	ND	Pass

Date Tested: 09/24/2019

LOQ = Limit of Quantitation; LOD = Limit of Detection; NT = Not Tested; ND = Not Detected.

Heavy Metals

Pass

Testing method: ICPMS-SOP 502

Analyte	LOD	LOQ	Limit	Mass	Status
	µg/g	µg/g	µg/g	µg/g	
Arsenic	0.02	0.06	0.2	0.073	Pass
Cadmium	0.03	0.1	0.2	ND	Pass
Lead	0.002	0.005	0.5	0.145	Pass
Mercury	0.02	0.06	0.1	ND	Pass

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Residual Solvents

Testing method: HSGCMS-SOP 202

Pass

Analyte	LOD	LOQ	Limit	Mass	Status
	µg/g	µg/g	µg/g	µg/g	
1,2-Dichloro-Ethane	0.024	0.24	1	ND	Pass
Acetone	0.112	1.12	5000	ND	Pass
Acetonitrile	0.0196	0.196	410	ND	Pass
Benzene	0.0096	0.096	1	ND	Pass
Butane	0.2	2.0	5000	ND	Pass
Chloroform	0.0288	0.288	1	ND	Pass
Ethanol	0.112	1.12	5000	ND	Pass
Ethyl-Acetate	0.112	1.12	5000	ND	Pass
Ethylene Oxide	0.024	0.24	1	ND	Pass
Ethyl-Ether	0.112	1.12	5000	ND	Pass
Heptane	0.112	1.12	5000	ND	Pass
Isopropanol	0.112	1.12	5000	ND	Pass
Methanol	0.144	1.44	3000	ND	Pass
Methylene-Chloride	0.0288	0.288	1	ND	Pass
n-Hexane	0.1392	1.392	290	ND	Pass
Pentane	0.112	1.12	5000	ND	Pass
Propane	0.08	0.8	5000	ND	Pass
Toluene	0.4272	4.272	890	ND	Pass
Trichloroethene	0.0384	0.384	1	ND	Pass
Xylenes	1.0416	10.416	2170	ND	Pass

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