

Certificate of Analysis

Company: Mad River Botanicals
 410 Butternut Hill Rd
 Waitsfield, VT 05673

Sample ID: 20mg CBD Elderberry Lemon Gumdrop

Lot: G34

Report Date: 7/28/2023

Matrix: Gummy

Date Analyzed: 7/27/2023

Customer ID: 210119-0

Date Sampled: N/A

Analyst: 011

Grower License #: #50_2022_00000111

Date Received: 7/24/2023

Report ID: C230724AL

Cannabinoid Summary

Cannabinoid Profile	LOQ (mg/g)	Concentration (mg/g)	Weight (%)
CBDVA	0.0005	<LOQ	<LOQ
CBDV	0.0012	<LOQ	<LOQ
CBDA	0.0008	0.19	0.02
CBGA	0.0008	<LOQ	<LOQ
CBG	0.0019	0.54	0.05
CBD	0.0019	8.59	0.86
THCV	0.0021	<LOQ	<LOQ
CBN	0.0013	<LOQ	<LOQ
Δ9-THC	0.0020	0.31	0.03
Δ8-THC	0.0019	<LOQ	<LOQ
THC-A	0.0034	<LOQ	<LOQ
CBC	0.0024	0.46	0.05
Total THC		0.31	0.03
Total CBD		8.76	0.88
Total Cannabinoids		10.08	1.01

0.03%
Total THC

0.88%
Total CBD

1.01%
Total Cannabinoids

0.03%
Δ9-THC

N/A
Percent Moisture

1 : 28.4
THC : CBD Ratio



Cannabinoids Methodology: High Performance Liquid Chromatography (HPLC) using PerkinElmer FLEXAR™ with Photo Diode Array Detector (PDA)

Total CBD and total THC are calculated values, to account for assumed decarboxylation from the acid form (THCA or CBDA) to the neutral form, causing weight loss of the acid group. These values are calculated as follows:
 Total THC = (THCA x 0.877) + Δ9-THC Total CBD = (CBDA x 0.877) + CBD
 Ratio of Total CBD: Total THC Reagent Blanks: < LOQs for all analytes

LOQ = The lowest quantity that this method can reliably detect. Any cannabinoid that was not detected is assumed to be less than the stated LOQ (<LOQ).

All results reflect dry weight of material, based on % moisture of the sample.

Measurement of Uncertainty (MU): the parameter, associated with the result of a measurement, that characterizes the dispersion of the values that could reasonably be attributed to the particular quantity subject to measurement.
 Δ9-THC MU = ±0.005% Total THC MU = ±0.007%

All other cannabinoid MU values are available upon request.

All moisture analysis is determined by loss-on-drying measurement using OHAUS Model MB90 Moisture Content Readers.

This report shall not be reproduced except in full without approval of the laboratory. This is to provide assurance that parts of a report are not taken out of context. Results apply to the samples as received.

Certified by: *Luke E. M.*
 Luke Emerson Mason (Laboratory Director, Bia Diagnostics)

Summary of Results

20mg CBD Elderberry Lemon Gumdrops

Prepared for Mad River Botanicals

MANUFACTURER INFO

Mad River Botanicals

LOT NUMBER

G34

SERVING SIZE

2.230g

MATRIX

Gummy

DATE RECEIVED

7/24/2023

DATE ANALYZED

7/27/2023

REPORT DATE

7/28/2023

ORIGINAL REPORT ID

C230724AL

TOTAL CANNABINOIDS

22.49 mg
per serving

Cannabinoid Profile	Concentration (mg/g)	Weight (%)
CBC	0.46	0.05
CBD	8.59	0.86
CBDA	0.19	0.02
CBDV	Not Detected	Not Detected
CBDVA	Not Detected	Not Detected
CBG	0.54	0.05
CBGA	Not Detected	Not Detected
CBN	Not Detected	Not Detected
THC-A	Not Detected	Not Detected
THCV	Not Detected	Not Detected
$\Delta 8$ -THC	Not Detected	Not Detected
$\Delta 9$ -THC	0.31	0.03
Total CBD	8.76	0.88
Total THC	0.31	0.03
Total Cannabinoids	10.08	1.01

TOTAL THC

0.69 mg
per serving

TOTAL CBD

19.52 mg
per serving



Cannabinoids Methodology: High Performance Liquid Chromatography (HPLC) using PerkinElmer FLEXAR™ with Photo Diode Array Detector (PDA)

Total CBD and total THC are calculated values.

Not Detected = The lowest quantity that this method can reliably detect. Any cannabinoid that was not detected is assumed to be less than the stated LOQ (<LOQ).

This is not an official Certificate of Analysis

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