

CERTIFICATE OF ANALYSIS

Prepared for:
Nuleaf Naturals

1550 Larimer St #964
Denver, CO USA 80202


D304


Batch ID or Lot Number: LB-O-60357	Test: Potency	Reported: 31Jan2023	USDA License: N/A
Matrix: Solution	Test ID: T000234125	Started: 31Jan2023	Sampler ID: N/A
	Method(s): TM14 (HPLC-DAD): Potency – Standard Cannabinoid Analysis	Received: 27Jan2023	Status: Active

Cannabinoids

	LOD (mg/mL)	LOQ (mg/mL)	Result (mg/mL)	Result (mg/g)	Notes
Cannabichromene (CBC)	0.058	0.168	2.344	2.55	Density = 0.919g/mL
Cannabichromenic Acid (CBCA)	0.053	0.154	ND	ND	
Cannabidiol (CBD)	0.157	0.471	63.884	69.51	
Cannabidiolic Acid (CBDA)	0.161	0.484	1.807	1.97	
Cannabidivarin (CBDV)	0.037	0.112	0.135	0.15	
Cannabidivarinic Acid (CBDVA)	0.067	0.202	ND	ND	
Cannabigerol (CBG)	0.033	0.096	1.263	1.37	
Cannabigerolic Acid (CBGA)	0.137	0.400	ND	ND	
Cannabinol (CBN)	0.043	0.125	<LOQ	<LOQ	
Cannabinolic Acid (CBNA)	0.094	0.273	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.163	0.476	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.148	0.432	2.319	2.52	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.131	0.383	ND	ND	
Tetrahydrocannabivarin (THCV)	0.030	0.087	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.116	0.338	ND	ND	
Total Cannabinoids			71.752	78.07	
Total Potential THC			2.319	2.52	
Total Potential CBD			65.469	71.24	

Final Approval


PREPARED BY / DATE
Sam Smith
31Jan2023
01:02:00 PM MST


APPROVED BY / DATE
Karen Winternheimer
31Jan2023
01:10:00 PM MST



<https://results.botanacor.com/api/v1/coas/uuid/de709efe-6eba-4b26-b51c-0c2ad79ff7c0>

Definitions
% = % (w/w) = Percent (weight of analyte / weight of product). ND = None Detected (defined by dynamic range of the method).
Total Potential Delta 9-THC or CBD is calculated to take into account the loss of a carboxyl group during decarboxylation step, using the following formulas: Total Potential Delta 9-THC = Delta 9-THC + (Delta 9-THCa *(0.877)) and Total CBD = CBD + (CBDA *(0.877)).

Testing results are based solely upon the sample submitted to SC Laboratories, Inc., in the condition it was received. SC Laboratories, Inc., warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices using validated methods. Data was generated using an unbroken chain of comparison to NIST traceable Reference Standards and Certified Reference Materials. This report may not be reproduced, except in full, without the written approval of SC Laboratories, Inc. ISO/IEC 17025:2017 Accredited by A2LA.



Cert #4329.02

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CERTIFICATE OF ANALYSIS

Prepared for:
Nuleaf Naturals


1550 Larimer St #964
Denver, CO USA 80202

D304

Batch ID or Lot Number: LB-O-60357	Test: Heavy Metals	Reported: 31Jan2023	USDA License: NA
Matrix: Other	Test ID: T000234128	Started: 30Jan2023	Sampler ID: NA
	Method(s): TM19 (ICP-MS): Heavy Metals	Received: 27Jan2023	Status: NA

Heavy Metals	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.04 - 4.48	ND	
Cadmium	0.04 - 4.39	ND	
Mercury	0.04 - 4.31	ND	
Lead	0.05 - 5.18	ND	

Final Approval



Sam Smith
31Jan2023
12:00:00 PM MST

PREPARED BY / DATE



Karen Winternheimer
31Jan2023
12:04:00 PM MST

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/01b9cb2c-6749-4863-89fa-7eb0c4c26312>

Definitions

ND = None Detected (defined by dynamic range of the method)
Dynamic Range = Limit of Quantitation (LOQ) through Upper Limit of Method Range

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Prepared for:


D304

Nuleaf Naturals

Batch ID or Lot Number: LB-O-60357	Test: Microbial Contaminants	Reported: 2/2/23	Location: 1550 Larimer St #964 Denver, CO 80202
Matrix: General/Other	Test ID: T000234127	Started: 1/30/23	USDA License: N/A
Status: Active	Methods: TM25 (qPCR) TM24, TM26, TM27(Culture Plating): Microbial	Received: 01/27/2023 @ 01:44 PM	Sampler ID: N/A

MICROBIAL CONTAMINANTS DETERMINATION

Contaminant	Method	LOD	QUANTITATION RANGE	Result	Notes
Total Aerobic Count*	TM-26, Culture Plating	10 ² CFU/g	2.0x10 ³ - 3.0x10 ⁵ CFU/g	None Detected	Free from visual mold, mildew, and foreign matter
Total Coliforms*	TM-27, Culture Plating	10 ¹ CFU/g	1.0x10 ² - 1.5x10 ⁴ CFU/g	None Detected	
Total Yeast and Mold*	TM-24, Culture Plating	10 ¹ CFU/g	2.0x10 ² - 3.0x10 ⁴ CFU/g	None Detected	
STEC	TM-25, PCR	10 ⁰ CFU/25 g	N/A	Absent	
Salmonella	TM-25, PCR	10 ⁰ CFU/25 g	N/A	Absent	

 Brett Hudson
2/2/2023
3:35:00 PM

 Brianne Maillot
2/2/2023
4:33:00 PM

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Definitions

LOD = Limit of Detection | LLOQ = Lower Limit of Quantitation | ULOQ = Upper Limit of Quantitation

CFU/g = Colony Forming Units per Gram | STEC = Shiga Toxin-Producing *E. coli*

* Values recorded in scientific notation, a common microbial practice of expressing numbers that are too large to be conveniently written in decimal form.

- Examples:
- 10² = 100 CFU
 - 10³ = 1,000 CFU
 - 10⁴ = 10,000 CFU
 - 10⁵ = 100,000 CFU

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Prepared for:
Nuleaf Naturals

1550 Larimer St #964
Denver, CO USA 80202

D304


Batch ID or Lot Number: LB-O-60357	Test: Pesticides	Reported: 03Feb2023	USDA License: NA
Matrix: Concentrate	Test ID: T000234126	Started: 01Feb2023	Sampler ID: NA
	Method(s): TM17 (LC-QQ LC MS/MS)	Received: 27Jan2023	Status: NA

Pesticides

Pesticides	Dynamic Range (ppb)	Result (ppb)
Abamectin	292 - 2707	ND
Acephate	45 - 2767	ND
Acetamiprid	44 - 2758	ND
Azoxystrobin	43 - 2747	ND
Bifenazate	39 - 2732	ND
Boscalid	35 - 2700	ND
Carbaryl	45 - 2731	ND
Carbofuran	44 - 2717	ND
Chlorantraniliprole	43 - 2666	ND
Chlorpyrifos	50 - 2713	ND
Clofentezine	270 - 2767	ND
Diazinon	276 - 2752	ND
Dichlorvos	278 - 2771	ND
Dimethoate	41 - 2761	ND
E-Fenpyroximate	289 - 2734	ND
Etofenprox	42 - 2774	ND
Etoxazole	298 - 2712	ND
Fenoxycarb	42 - 2767	ND
Fipronil	51 - 2704	ND
Flonicamid	50 - 2802	ND
Fludioxonil	288 - 2756	ND
Hexythiazox	41 - 2761	ND
Imazalil	263 - 2758	ND
Imidacloprid	44 - 2755	ND
Kresoxim-methyl	41 - 2798	ND

Pesticides	Dynamic Range (ppb)	Result (ppb)
Malathion	289 - 2718	ND
Metalaxyl	44 - 2730	ND
Methiocarb	45 - 2709	ND
Methomyl	41 - 2762	ND
MGK 264 1	168 - 1637	ND
MGK 264 2	120 - 1139	ND
Myclobutanil	43 - 2701	ND
Naled	42 - 2772	ND
Oxamyl	43 - 2764	ND
Paclbutrazol	40 - 2735	ND
Permethrin	280 - 2765	ND
Phosmet	40 - 2744	ND
Prophos	293 - 2662	ND
Propoxur	42 - 2724	ND
Pyridaben	293 - 2751	ND
Spinosad A	35 - 2244	ND
Spinosad D	49 - 498	ND
Spiromesifen	281 - 2750	ND
Spirotetramat	272 - 2754	ND
Spiroxamine 1	20 - 1148	ND
Spiroxamine 2	21 - 1557	ND
Tebuconazole	296 - 2732	ND
Thiacloprid	42 - 2746	ND
Thiamethoxam	42 - 2770	ND
Trifloxystrobin	44 - 2749	ND

Final Approval



Karen Winternheimer
03Feb2023
09:29:00 AM MST

PREPARED BY / DATE



Sam Smith
03Feb2023
09:39:00 AM MST

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/5d07ae98-b48f-4dda-ad70-8c600196f6fd>

Definitions

ND = None Detected (defined by dynamic range of the method)
Dynamic Range = Limit of Quantitation (LOQ) through Upper Limit of Method Range
ppb = Parts Per Billion

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CERTIFICATE OF ANALYSIS

Prepared for:
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1550 Larimer St #964
Denver, CO USA 80202

D304

Batch ID or Lot Number: LB-O-60357	Test: Residual Solvents	Reported: 31Jan2023	USDA License: N/A
Matrix: Concentrate	Test ID: T000234129	Started: 31Jan2023	Sampler ID: N/A
	Method(s): TM04 (GC-MS): Residual Solvents	Received: 27Jan2023	Status: Active

Residual Solvents	Dynamic Range (ppm)	Result (ppm)	Notes
Propane	119 - 2380	ND	
Butanes (Isobutane, n-Butane)	248 - 4960	ND	
Methanol	75 - 1505	ND	
Pentane	124 - 2490	ND	
Ethanol	120 - 2397	ND	
Acetone	122 - 2443	ND	
Isopropyl Alcohol	124 - 2472	ND	
Hexane	8 - 150	ND	
Ethyl Acetate	124 - 2484	ND	
Benzene	0.3 - 5.2	ND	
Heptanes	133 - 2659	ND	
Toluene	23 - 461	ND	
Xylenes (m,p,o-Xylenes)	170 - 3402	ND	

Final Approval



Sam Smith
31Jan2023
02:45:00 PM MST

PREPARED BY / DATE



Karen Winternheimer
31Jan2023
02:48:00 PM MST

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Definitions

ND = None Detected (defined by dynamic range of the method)
Dynamic Range = Limit of Quantitation (LOQ) through Upper Limit of Method Range

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CERTIFICATE OF ANALYSIS

Prepared for:
Nuleaf Naturals


1550 Larimer St #964
Denver, CO USA 80202

D304

Batch ID or Lot Number: LB-O-60357	Test: Mycotoxins	Reported: 02Feb2023	USDA License: N/A
Matrix: Concentrate	Test ID: T000234130	Started: 01Feb2023	Sampler ID: N/A
	Method(s): TM18 (UHPLC-QQQ LCMS/MS): Mycotoxins	Received: 27Jan2023	Status: Active

Mycotoxins	Dynamic Range (ppb)	Result (ppb)	Notes
Ochratoxin A	3.81 - 130.81	ND	N/A
Aflatoxin B1	0.91 - 33.17	ND	
Aflatoxin B2	0.94 - 33.27	ND	
Aflatoxin G1	1.03 - 32.75	ND	
Aflatoxin G2	1.07 - 33.24	ND	
Total Aflatoxins (B1, B2, G1, and G2)		ND	

Final Approval



Sam Smith
02Feb2023
07:24:00 AM MST

PREPARED BY / DATE



Karen Winternheimer
02Feb2023
07:29:00 AM MST

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Definitions

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