

CERTIFICATE OF ANALYSIS

Prepared for:

Nuleaf Naturals

1550 Larimer St #964

Denver, CO USA 80202

D316

Batch ID or Lot Number: LB-O-60396	Test: Potency	Reported: 19Apr2023	USDA License: N/A
Matrix: Solution	Test ID: T000241762	Started: 19Apr2023	Sampler ID: N/A
	Method(s): TM14 (HPLC-DAD): Potency – Standard Cannabinoid Analysis	Received: 19Apr2023	Status: Active

Cannabinoids

	LOD (mg/mL)	LOQ (mg/mL)	Result (mg/mL)	Result (mg/g)	Notes
Cannabichromene (CBC)	0.075	0.186	2.103	2.27	Density = 0.926g/mL
Cannabichromenic Acid (CBCA)	0.068	0.170	ND	ND	
Cannabidiol (CBD)	0.189	0.476	61.353	66.26	
Cannabidiolic Acid (CBDA)	0.194	0.489	0.647	0.70	
Cannabidivarin (CBDV)	0.045	0.113	0.328	0.35	
Cannabidivarinic Acid (CBDVA)	0.081	0.204	ND	ND	
Cannabigerol (CBG)	0.042	0.105	0.744	0.80	
Cannabigerolic Acid (CBGA)	0.178	0.440	ND	ND	
Cannabinol (CBN)	0.055	0.137	<LOQ	<LOQ	
Cannabinolic Acid (CBNA)	0.121	0.300	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.212	0.525	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.192	0.477	1.803	1.95	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.170	0.422	ND	ND	
Tetrahydrocannabivarin (THCV)	0.039	0.096	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.150	0.372	ND	ND	
Total Cannabinoids			66.978	72.33	
Total Potential THC			1.803	1.95	
Total Potential CBD			61.920	66.87	

Final ApprovalSam Smith
19Apr2023
01:04:00 PM MDT

PREPARED BY / DATE

Karen Winternheimer
19Apr2023
01:12:00 PM MDT

APPROVED BY / DATE

<https://results.botanacor.com/api/v1/coas/uuid/9941c21a-41ed-492f-8241-ae3c7d79104b>**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

D316

Batch ID or Lot Number: LB-O-60396	Test: Heavy Metals	Reported: 24Apr2023	USDA License: NA
Matrix: Unit Co	Test ID: T000241765	Started: 20Apr2023	Sampler ID: NA
	Method(s): TM19 (ICP-MS): Heavy Metals	Received: 19Apr2023	Status: NA

Heavy Metals

	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.05 - 4.53	ND	
Cadmium	0.05 - 4.50	ND	
Mercury	0.04 - 4.44	ND	
Lead	0.04 - 4.50	ND	

Final Approval



Sam Smith
24Apr2023
08:51:00 AM MDT

PREPARED BY / DATE



Karen Winternheimer
24Apr2023
08:58:00 AM MDT

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/58e8f6ab-b2e5-4f30-8443-2a8e6f383ab4>

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

D316

Batch ID or Lot Number: LB-O-60396	Test: Microbial Contaminants	Reported: 24Apr2023	USDA License: N/A
Matrix: Finished Product	Test ID: T000241764	Started: 19Apr2023	Sampler ID: N/A
	Method(s): TM25 (qPCR) TM24, TM26, TM27 (Culture Plating): Microbial (Colorado Panel)	Received: 19Apr2023	Status: Active

Microbial

Contaminants

	Method	LOD	Quantitation Range	Result	Notes
STEC	TM25: PCR	10 ⁰ CFU/25g	NA	Absent	Free from visual mold, mildew, and foreign matter
<i>Salmonella</i>	TM25: PCR	10 ⁰ CFU/25g	NA	Absent	
Total Yeast and Mold*	TM24: Culture Plating	10 ¹ CFU/g	1.0x10 ² - 1.5x10 ⁴	None Detected	
Total Aerobic Count*	TM26: Culture Plating	10 ² CFU/g	1.0x10 ³ - 1.5x10 ⁵	None Detected	
Total Coliforms*	TM27: Culture Plating	10 ¹ CFU/g	1.0x10 ² - 1.5x10 ⁴	None Detected	

Final Approval



Eden Thompson-Wright

22Apr2023

10:23:00 AM MDT



Brett Hudson

24Apr2023

03:06:00 PM MDT



PREPARED BY / DATE

APPROVED BY / DATE

<https://results.botanacor.com/api/v1/coas/uuid/38dd0424-76b6-415d-8851-ba8999681f15>

Definitions

* 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
CFU/g = Colony Forming Units per Gram, LOD = Limit of Detection
ULOQ = Upper Limit of Quantitation, LLOQ = Lower Limit of Quantitation
STEC = Shiga Toxin-Producing E. coli

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Prepared for:
Nuleaf Naturals

1550 Larimer St #964
Denver, CO USA 80202

D316

Batch ID or Lot Number: LB-O-60396	Test: Pesticides	Reported: 21Apr2023	USDA License: NA
Matrix: Concentrate	Test ID: T000241763	Started: 20Apr2023	Sampler ID: NA
	Method(s): TM17 (LC-QQ LC MS/MS)	Received: 19Apr2023	Status: NA

Pesticides

	Dynamic Range (ppb)	Result (ppb)
Abamectin	288 - 2828	ND
Acephate	40 - 2763	ND
Acetamiprid	40 - 2708	ND
Azoxystrobin	44 - 2714	ND
Bifenazate	40 - 2688	ND
Boscalid	43 - 2728	ND
Carbaryl	40 - 2699	ND
Carbofuran	41 - 2690	ND
Chlorantraniliprole	45 - 2732	ND
Chlorpyrifos	41 - 2801	ND
Clofentezine	285 - 2727	ND
Diazinon	283 - 2736	ND
Dichlorvos	287 - 2753	ND
Dimethoate	41 - 2706	ND
E-Fenpyroximate	295 - 2776	ND
Etofenprox	41 - 2738	ND
Etoxazole	299 - 2739	ND
Fenoxycarb	41 - 2738	ND
Fipronil	56 - 2725	ND
Flonicamid	42 - 2775	ND
Fludioxonil	302 - 2665	ND
Hexythiazox	42 - 2732	ND
Imazalil	294 - 2706	ND
Imidacloprid	43 - 2758	ND
Kresoxim-methyl	42 - 2745	ND

	Dynamic Range (ppb)	Result (ppb)
Malathion	302 - 2695	ND
Metalaxyl	43 - 2697	ND
Methiocarb	41 - 2721	ND
Methomyl	43 - 2742	ND
MGK 264 1	164 - 1656	ND
MGK 264 2	113 - 1058	ND
Myclobutanil	42 - 2719	ND
Naled	42 - 2712	ND
Oxamyl	41 - 2731	ND
Paclobutrazol	45 - 2694	ND
Permethrin	312 - 2754	ND
Phosmet	41 - 2681	ND
Prophos	283 - 2712	ND
Propoxur	42 - 2698	ND
Pyridaben	295 - 2746	ND
Spinosad A	31 - 2088	ND
Spinosad D	69 - 670	ND
Spiromesifen	280 - 2738	ND
Spirotetramat	297 - 2732	ND
Spiroxamine 1	19 - 1212	ND
Spiroxamine 2	23 - 1520	ND
Tebuconazole	276 - 2721	ND
Thiacloprid	40 - 2710	ND
Thiamethoxam	41 - 2759	ND
Trifloxystrobin	43 - 2703	ND

Final Approval



Karen Winternheimer
21Apr2023
09:52:00 AM MDT

PREPARED BY / DATE



Sam Smith
21Apr2023
09:54:00 AM MDT

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/274a0925-855c-4ef5-89fa-08baf6b2b95a>

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:

Nuleaf Naturals

1550 Larimer St #964

Denver, CO USA 80202

D316

Batch ID or Lot Number: LB-O-60396	Test: Residual Solvents	Reported: 24Apr2023	USDA License: N/A
Matrix: Concentrate	Test ID: T000241766	Started: 24Apr2023	Sampler ID: N/A
	Method(s): TM04 (GC-MS): Residual Solvents	Received: 19Apr2023	Status: Active

Residual Solvents

Residual Solvents	Dynamic Range (ppm)	Result (ppm)	Notes
Propane	89 - 1772	ND	
Butanes (Isobutane, n-Butane)	184 - 3677	ND	
Methanol	59 - 1172	ND	
Pentane	94 - 1884	ND	
Ethanol	100 - 1992	ND	
Acetone	95 - 1908	ND	
Isopropyl Alcohol	96 - 1921	ND	
Hexane	6 - 114	ND	
Ethyl Acetate	95 - 1908	ND	
Benzene	0.2 - 4.3	ND	
Heptanes	102 - 2049	ND	
Toluene	18 - 353	ND	
Xylenes (m,p,o-Xylenes)	136 - 2718	ND	

Final Approval



Sam Smith
24Apr2023
03:39:00 PM MDT

PREPARED BY / DATE



Karen Winternheimer
24Apr2023
03:40:00 PM MDT

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/bbb7a498-188c-47e7-82de-a969582a5222>

Definitions

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Dynamic Range = Limit of Quantitation (LOQ) through Upper Limit of Method Range

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