# CERTIFICATE OF ANALYSIS

**PRODUCT NAME:** Nano Softgel (Melatonin)

**PRODUCT STRENGTH:** 25 mg CBD

21264A,220616J, 220603A BATCH:

**BEST BY DATE: HEMP** 06/24/2023 21E0000845 **EXTRACT LOT:** 



# \*Click on the links to view third-party reports\*

## Physical Atttributes

Test	Method	Specification	Results
Color	Internal	Golden to Amber	PASS
Odor	Internal	No odor	PASS
Appearance	Internal	Dry, ovoid softgel capsules in container with lid and shrink-band	PASS
Primary Package Eval.	Internal	Container clean and free of filth. Container caps tight and shrink bands intact	PASS
Secondary Package Eval.	Internal	Labeling Compliance Checked, Cartons sturdy and clean. Sufficient cushion material exists. Box taped and secure.	PASS

### Review of Third-Party Analysis

Panel	Method	Specification	Results*	Pass/Fail
Potency - Total CBD	HPLC-UV DAD	*LOQ: ≥ 25 mg / softgel	32.219 mg	PASS
Potency - D9-THC	HPLC-UV DAD	LOQ: <0.01% (broad spectrum)	ND	PASS
Expanded Pesticide Panel	HPLC-QQQ	LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract	Below LOQ	PASS
Microbial Escherichia coli (STEC)	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 **CFU/25 gram	Absent	PASS
Microbial Salmonella	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram	Absent	PASS
Microbial Yeast and Mold	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10^2 CFU/gram	Below LOQ	PASS
Microbial Total Coliforms*	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10^2 CFU/gram	Below LOQ	PASS
Microbial Total Aerobic Count*	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10^3 CFU/gram	Below LOQ	PASS
Heavy Metals	ICP-MS	Arsenic (As): ≤1.5 ppm† Cadmium (Cd): ≤0.5 ppm Lead (Pb): ≤0.5 ppm Mercury (Hg): ≤1.5 ppm	Below LOQ	PASS
Mycotoxins	ICP-MS	Total Aflatoxins <20 ppb†† Afltoxin B1 < 5 ppb Ochratoxin < 5ppb	Below LOQ	PASS
Residual Solvents	GC-HS-MSD	LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract	Below LOQ	PASS

Values expressed using scientific notation. Examples:  $10^2=100$   $10^3=1,000$ 

Quality Certified

Kayla Kolber Kayla Kolber

09/27/2021

Date

Quality Assurance Technician

<sup>\*</sup> Level of Quantification \*\*CFU/g=Colony Forming Units per Gram † Parts Per Million †† Part Per Billion



#### SG25M

Batch ID or Lot Number: Test: Reported: 21E0000845 Potency 7/30/21

Matrix: Test ID: Started: USDA License:

Unit T000153142 7/28/21 N/A

Status: Method: Received: Sampler ID:

N/A TM14 (HPLC-DAD): Potency - Broad 07/22/2021 @ 10:29 AM N/A

(Colorado Panel)

Spectrum Analysis, 0.01% THC

### CANNABINOID PROFILE

Compound	LOD (mg)	LOQ (mg)	Result (mg)	Result (mg/g)
Delta 9-Tetrahydrocannabinolic acid (THCA-A)	0.007	0.018	ND	ND
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.007	0.020	ND	ND
Cannabidiolic acid (CBDA)	0.065	0.237	ND	ND
Cannabidiol (CBD)	0.064	0.231	32.219	58.84
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.083	0.240	ND	ND
Cannabinolic Acid (CBNA)	0.047	0.137	ND	ND
Cannabinol (CBN)	0.022	0.063	ND	ND
Cannabigerolic acid (CBGA)	0.069	0.201	ND	ND
Cannabigerol (CBG)	0.017	0.048	2.071	3.78
Tetrahydrocannabivarinic Acid (THCVA)	0.059	0.170	ND	ND
Tetrahydrocannabivarin (THCV)	0.015	0.044	ND	ND
Cannabidivarinic Acid (CBDVA)	0.027	0.099	ND	ND
Cannabidivarin (CBDV)	0.015	0.055	0.052*	0.09*
Cannabichromenic Acid (CBCA)	0.027	0.078	ND	ND
Cannabichromene (CBC)	0.029	0.085	ŊĎ	ND
Total Cannabinoids			34.342	62.72
Total Potential THC**			ND /	ND
Total Potential CBD**			32.219	58.84

**Notes** 

# of Servings = 1 Sample Weight=0.548g

Mygan Neurs

Ryan Weems 30-Jul-2021 09:48 AM

Toph But

Taylor Brevik 30-Jul-21 9:53 AM

#### PREPARED BY / DATE

### APPROVED BY / DATE

#### **Definitions**

% = % (w/w) = Percent (Weight of Analyte / Weight of Product)

- \* Indicates a value below the Limit of Quantitiation (LOQ) and above the Limit of Detection (LOD).
- \*\* Total Potential THC/CBD is calculated using the following formulas to take into account the loss of a carboxyl group during decarboxylation step.

Total THC = THC + (THCa \*(0.877)) and

Total CBD = CBD + (CBDa \*(0.877))

Total Cannabinoids result reflects the absolute sum of all cannabinoids detected.

ND = None Detected (Defined by Dynamic Range of the method)











#### SG25M

Batch ID:	21E0000845	Test ID:	T000153143
Type:	Concentrate	Submitted:	07/22/2021 @ 10:29 AM
Test:	Pesticides	Started:	7/26/2021
Method:	TM17 (UHPLC-QQQ LC MS/MS)	Reported:	7/28/2021

### PESTICIDE RESIDUE

Compound	Dynamic Range (ppb)	Result (ppb)
Acephate	42 - 2343	ND*
Acetamiprid	40 - 2343	ND*
Abamectin	>256	ND*
Azoxystrobin	41 - 2343	ND*
Bifenazate	39 - 2343	ND*
Boscalid	40 - 2343	ND*
Carbaryl	39 - 2343	ND*
Carbofuran	43 - 2343	ND*
Chlorantraniliprole	50 - 2343	ND*
Chlorpyrifos	43 - 2343	ND*
Clofentezine	273 - 2343	ND*
Diazinon	278 - 2343	ND*
Dichlorvos	>236	ND*
Dimethoate	40 - 2343	ND*
E-Fenpyroximate	322 - 2343	ND*
Etofenprox	40 - 2343	ND*
Etoxazole	297 - 2343	ND*
Fenoxycarb	>40	ND*
Fipronil	48 - 2343	ND*
Flonicamid	42 - 2343	ND*
Fludioxonil	>274	ND*
Hexythiazox	36 - 2343	ND*
Imazalil	262 - 2343	ND*
Imidacloprid	43 - 2343	ND*
Kresoxim-methyl	43 - 2343	ND*

Compound	Dynamic Range (ppb)	Result (ppb)
Malathion	282 - 2343	ND*
Metalaxyl	39 - 2343	ND*
Methiocarb	39 - 2343	ND*
Methomyl	41 - 2343	ND*
MGK 264 1	161 - 2343	ND*
MGK 264 2	115 - 2343	ND*
Myclobutanil	44 - 2343	ND*
Naled	44 - 2343	ND*
Oxamyl	37 - 2343	ND*
Paclobutrazol	43 - 2343	ND*
Permethrin	269 - 2343	ND*
Phosmet	39 - 2343	ND*
Prophos	249 - 2343	ND*
Propoxur	42 - 2343	ND*
Pyridaben	304 - 2343	ND*
Spinosad A	29 - 2343	ND*
Spinosad D	79 - 2343	ND*
Spiromesifen	>271	ND*
Spirotetramat	>303	ND*
Spiroxamine 1	17 - 2343	ND*
Spiroxamine 2	22 - 2343	ND*
Tebuconazole	309 - 2343	ND*
Thiacloprid	40 - 2343	ND*
Thiamethoxam	40 - 2343	ND*
Trifloxystrobin	41 - 2343	ND*

N/A

## FINAL APPROVAL



Tavlor Brevik 28-Iul-2021 9:34 AM Sawantha Smill

Sam Smith 28-Iul-2021 9:37 AM

#### PREPARED BY / DATE

APPROVED BY / DATE



<sup>\*</sup> ND = None Detected (Defined by Dynamic Range of the method)



#### SG25M

Batch ID or Lot Number: Reported: Test: **Microbial** 9/25/21 21264A **Contaminants** 

Started: Matrix: Test ID: **USDA License:** 

**Finished Product** T000165100 9/22/21 N/A

Sampler ID: Status: Methods: Received:

TM25 (qPCR) N/A 09/22/2021 @ 10:51 AM N/A

> TM24, TM26, TM27(Culture Plating): Microbial (Colorado Panel)

### MICROBIAL CONTAMINANTS DETERMINATION

Contaminant	Method	LOD	LLOQ	ULOQ	Result
Total Aerobic Count*	TM-26, Culture Plating	10^2 CFU/g	10^3 CFU/g	1.5x10^5 CFU/g	None Detected
Total Coliforms*	TM-27, Culture Plating	10^2 CFU/g	10^2 CFU/g	1.5x10^4 CFU/g	None Detected
Total Yeast and Mold*	TM-24, Culture Plating	10^2 CFU/g	10^2 CFU/g	1.5x10^4 CFU/g	None Detected
E. coli (STEC)	TM-25, PCR	1 CFU/25 g	NA	NA	Absent
Salmonella	TM-25, PCR	1 CFU/25 g	NA	NA	Absent

**Notes** 

Free from visual mold, mildew, and foreign matter

PREPARED BY / DATE

Jackson Osaghae-Nosa 9/25/2021

1:53:00 PM

Courtney Richards 9/25/2021 10:06:00 PM

APPROVED BY / DATE

# **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.

10^2 = 100 CFU Examples:

10^3 = 1,000 CFU 10^4 = 10,000 CFU 10^5 = 100,000 CFU









#### SG25M

Batch ID or Lot Number: 21E0000845	Test: <b>Metals</b>	Reported: <b>8/4/21</b>	
Matrix: Unit Co	Test ID: T000153145	Started: 7/28/21	USDA License: N/A
Status: N/A	Method: TM19 (ICP-MS): Heavy Metals (Colorado Panel)	Received: 07/22/2021 @ 10:29 AM	Sampler ID: N/A

# **HEAVY METALS DETERMINATION**

Compound		Dynamic Range (ppb)	Result (ppb)	<b>Notes</b> Amendment to certificate
Arsenic		0.052 - 5.23	ND	T000153145, certificate updated to
Cadmium		0.044 - 4.42	ND	Colorado Compliance format.
Mercury		0.044 - 4.38	ND	colorado compilance formac.
Lead		0.044 - 4.37	ND	
Myson News	Ryan Weems 4-Aug-21 10:45 AM	Samantha	Sam Smith 4-Aug-21 10:53 AM	
PREPARED BY / DATE		APPROVED BY	/ DATE	

#### **Definitions**

ND = None Detected (Defined by Dynamic Range of the method)







#### SG25M

Batch ID or Lot Number: 21E0000845	Test:  Mycotoxins	Reported: <b>7/29/21</b>	
Matrix: Concentrate	Test ID: T000153147	Started: 7/28/21	USDA License: N/A
Status: N/A	Method: TM18 (UHPLC-QQQ LCMS/MS): Mycotoxins (Colorado Panel)	Received: 07/22/2021 @ 10:29 AM	Sampler ID: N/A

# MYCOTOXIN DETERMINATION

Compound	Dynamic Range (ppb)	Result (ppb)	Notes	
Ochratoxin A	4.2 - 138.3	ND	N/A	
Aflatoxin B1	1.1 - 35	ND		
Aflatoxin B2	1.1 - 35	ND		
Aflatoxin G1	1.2 - 33.6	ND		
Aflatoxin G2	1.2 - 33.2	ND		
Total Aflatoxins (B1, B2, G1, and G2)		ND		

Garmantha Grands

PREPARED BY / DATE

Sam Smith 29-Jul-21 8:42 AM

APPROVED BY / DATE

Chris Jungling 29-Jul-21 3:32 PM

#### **Definitions**

\* ND = None Detected (Defined by Dynamic Range of the method)











#### SG25M

Batch ID or Lot Number: Test: Reported:

21E0000845 Residual Solvents 7/28/21

Matrix: Test ID: Started: USDA License:

N/A T000153146 7/27/21 N/A

Status: Methods: Received: Sampler ID:

N/A TM04 (GC-MS): Residual Solvents 07/22/2021 @ 10:29 AM N/A

(Colorado Panel)

# **RESIDUAL SOLVENTS DETERMINATION**

Solvent	Dynamic Range (ppm)	Result (ppm)	Notes
Propane	140 - 2796	*ND	
Butanes	330 - 6602	*ND	
(Isobutane, n-Butane)  Methanol	116 - 2325	*ND	
Pentane	159 - 3176	*ND	
Ethanol	180 - 3610	*ND	
Acetone	181 - 3628	*ND	
Isopropyl Alcohol	195 - 3892	*ND	
Hexane	11 - 218	*ND	
Ethyl Acetate	182 - 3649	*ND	
Benzene	0 - 7	*ND	
Heptanes	173 - 3462	*ND	
Toluene	33 - 662	*ND	
Xylenes (m.n.o-Xylenes)	242 - 4833	*ND	

Toph Bil

Taylor Brevik 28-Jul-21 1:15 PM

Somantha Smill

Sam Smith 28-Jul-21 1:19 PM

PREPARED BY / DATE

APPROVED BY / DATE

#### **Definitions**

\* ND = None Detected (Defined by Dynamic Range of the method)





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