

# Certificate of Analysis Documents KND Labs CBD Isolate

**Product:** KND23-397

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### **KND Labs CBD Isolate**

Sample ID: SA-231211-31639 Batch: KND23-397 Type: In-Process Material Matrix: Concentrate - Isolate Unit Mass (g):

Received: 12/12/2023 Completed: 12/22/2023 Client KND Labs, LLC. 5801 W 6th Ave., Unit A Lakewood, CO 80214 USA

Lic. #: 0031X8

Terpenes by GC-MS

		ult	Analyte	LOD (%)	LOQ (%)	Result (%)
.002 0.0	0.012	23	Limonene	0.002	0.01	ND
.002 0.0	nD ND		Linalool	0.002	0.01	ND
.002 0.0	nD ND		β-myrcene	0.002	0.01	ND
.004 0.0	2 ND		Nerol	0.002	0.01	ND
.002 0.0	nD ND		cis-Nerolidol	0.002	0.01	ND
.002 0.0	ND.		trans-Nerolidol	0.002	0.01	ND
.002 0.0	nD ND		Ocimene	0.002	0.01	ND
.002 0.0	nD ND		<b>α</b> -Phellandrene	0.002	0.01	ND
.002 0.0	nD ND		<b>α</b> -Pinene	0.002	0.01	ND
.002 0.0	nD ND		β-Pinene	0.002	0.01	ND
.004 0.0	2 ND		Pulegone	0.002	0.01	ND
.002 0.0	nD ND		Sabinene	0.002	0.01	ND
.002 0.0	nD ND		Sabinene Hydrate	0.002	0.01	ND
.002 0.0	nD		α-Terpinene	0.002	0.01	ND
.002 0.0	) ND		γ-Terpinene	0.002	0.01	ND
.002 0.0	)] ND		α-Terpineol	0.001	0.005	ND
.002 0.0	ND ND		γ-Terpineol	0.001	0.005	ND
.002 0.0	ND F		Terpinolene	0.002	0.01	ND
.002 0.0	ND		Valencene	0.002	0.01	ND
			Total Terpenes (%)			0.0123
	6) (%) 002 0.0 002 0.0 004 0.0 002 0.0	6)         (%)         (%)           0002         0.01         0.01           0002         0.01         ND           0002         0.01         ND           0004         0.02         ND           0002         0.01         ND	(%) (%) (%) 0002 0.01 0.0123 0002 0.01 ND 0002 0.01 ND 0004 0.02 ND 0002 0.01 ND	(%) (%) (%)   (	(%) (%) (%) (%)   Analyte (%)	(%) (%) (%) (%) (%) (%) (%) (%) (%) (%)

ND = Not Detected; NT = Not Tested; LOD = Limit of Detection; LOQ = Limit of Quantitation; P = Pass; F = Fail; RL = Reporting Limit







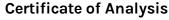




Generated By: Ryan Bellone CCO

Date: 12/22/2023

Tested By: Jasper van Heemst Principal Scientist Date: 12/18/2023



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### **KND Labs CBD Isolate**

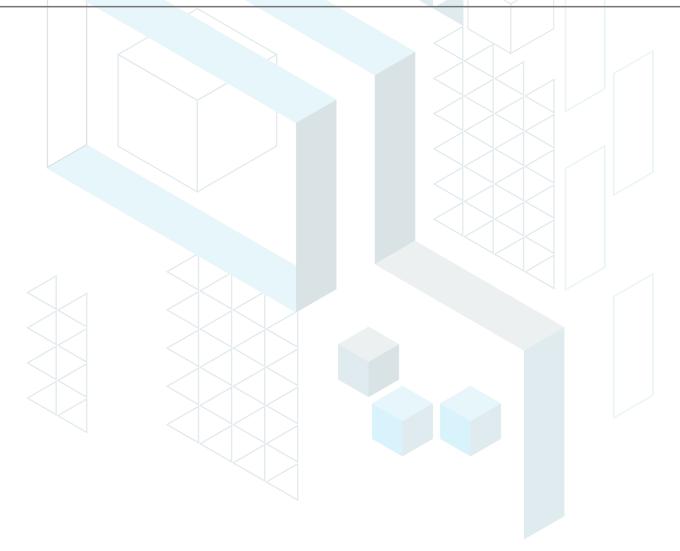
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### **Heavy Metals by ICP-MS**

Analyte	LOD (ppb)	LOQ (ppb)	Result (ppb)
Arsenic	2	20	ND
Cadmium	1	20	ND
Lead	2	20	<loq< td=""></loq<>
Mercury	12	50	ND

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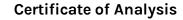


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Date: 12/22/2023

Tested By: Chris Farman Scientist Date: 12/20/2023







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### Pesticides by LC-MS/MS

Analyte	LOD (ppb)	LOQ (ppb)	Result (ppb)	Analyte	LOD (ppb)	LOQ (ppb)	Result (ppb)
Abamectin	30	100	ND	Hexythiazox	30	100	ND
Acephate	30	100	ND	Imazalil	30	100	ND
Acequinocyl	30	100	ND	Imidacloprid	30	100	ND
Acetamiprid	30	100	ND	Kresoxim methyl	30	100	ND
Aldicarb	30	100	ND	Malathion	30	100	ND
Azoxystrobin	30	100	ND	Metalaxyl	30	100	ND
Bifenazate	30	100	ND	Methiocarb	30	100	ND
Bifenthrin	30	100	ND	Methomyl	30	100	ND
Boscalid	30	100	ND	Mevinphos	30	100	ND
Carbaryl	30	100	ND	Myclobutanil	30	100	ND
Carbofuran	30	100	ND	Naled	30	100	ND
Chloranthraniliprole	30	100	ND	Oxamyl	30	100	ND
Chlorfenapyr	30	100	ND	Paclobutrazol	30	100	ND
Chlorpyrifos	30	100	ND	Permethrin	30	100	ND
Clofentezine	30	100	ND	Phosmet	30	100	ND
Coumaphos	30	100	ND	Piperonyl Butoxide	30	100	ND
Cypermethrin	30	100	ND	Propiconazole	30	100	ND
Daminozide	30	100	ND	Propoxur	30	100	ND
Diazinon	30	100	ND	Pyrethrins	30	100	ND
Dichlorvos	30	100	ND	Pyridaben	30	100	ND
Dimethoate	30	100	ND	Spinetoram	30	100	ND
Dimethomorph	30	100	ND	Spinosad	30	100	ND
Ethoprophos	30	100	ND	Spiromesifen	30	100	ND
Etofenprox	30	100	ND	Spirotetramat	30	100	ND
Etoxazole	30	100	ND	Spiroxamine	30	100	ND
Fenhexamid	30	100	ND	Tebuconazole	30	100	ND
Fenoxycarb	30	100	ND	Thiacloprid	30	100	ND
Fenpyroximate	30	100	ND	Thiamethoxam	30	100	ND
Fipronil	30	100	ND	Trifloxystrobin	30	100	ND
Flonicamid	30	100	ND				
Fludioxonil	30	100	ND				

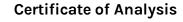
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Date: 12/22/2023

Tested By: Jasper van Heemst Principal Scientist





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#### **KND Labs CBD Isolate**

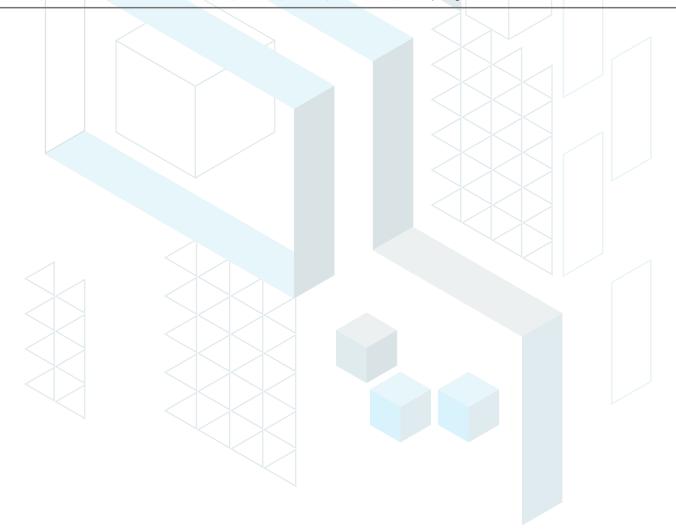
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### Mycotoxins by LC-MS/MS

Analyte	LOD (ppb)	LOQ (ppb)	Result (ppb)
B1	1	5	ND
B2	1	5	ND
G1	1	5	ND
G2	1	5	ND
Ochratoxin A	1	5	ND

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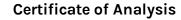


Generated By: Ryan Bellone CCO Tested By: Jasper van Heemst Principal Scientist Date: 12/18/2023



Date: 12/22/2023 Date: 12/18/2023

This product or substance has been tested by KCA Laboratories using validated testing methodologies and an ISO/IEC 170252017 accredited quality system. Values reported relate only to the product or substance tested. The reported result is based on a sample weight. Unless otherwise stated, results of tests performed on all quality control samples met criteria for acceptance established by KCA Laboratories. KCA Laboratories makes no claims as to the efficacy, safety or other risks associated with any detected or non-detected amounts of any substances reported herein. This Certificate of Analysis shall not be reproduced except in full, without the written approval of KCA Laboratories. KCA Laboratories can provide measurement uncertainty upon request.





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### Residual Solvents by HS-GC-MS

Analyte	LOD (ppm)	LOQ (ppm)	Result (ppm)	Analyte	LOD (ppm)	LOQ (ppm)	Result (ppm)
Acetone	167	500	ND	Ethylene Oxide	0.5	1	ND
Acetonitrile	14	41	ND	Heptane	167	500	<rl< td=""></rl<>
Benzene	0.5	1	ND	n-Hexane	10	29	ND
Butane	167	500	ND	Isobutane	167	500	ND
1-Butanol	167	500	ND	Isopropyl Acetate	167	500	ND
2-Butanol	167	500	ND	Isopropyl Alcohol	167	500	ND
2-Butanone	167	500	ND	Isopropylbenzene	167	500	ND
Chloroform	2	6	ND	Methanol	100	300	ND
Cyclohexane	129	388	ND	2-Methylbutane	10	29	ND
1,2-Dichloroethane	0.5	1	ND	Methylene Chloride	20	60	ND
1,2-Dimethoxyethane	4	10	ND	2-Methylpentane	10	29	ND
Dimethyl Sulfoxide	167	500	ND	3-Methylpentane	10	29	ND
N,N-Dimethylacetamide	37	109	ND	n-Pentane	167	500	ND
2,2-Dimethylbutane	10	29	ND	1-Pentanol	167	500	ND
2,3-Dimethylbutane	10	29	ND	n-Propane	167	500	ND
N,N-Dimethylformamide	30	88	ND	1-Propanol	167	500	ND
2,2-Dimethylpropane	167	500	ND	Pyridine	7	20	ND
1,4-Dioxane	13	38	ND	Tetrahydrofuran	24	72	ND
Ethanol	167	500	ND	Toluene	30	89	ND
2-Ethoxyethanol	6	16	ND	Trichloroethylene	3	8	ND
Ethyl Acetate	167	500	ND	Xylenes (o-, m-, and p-)	73	217	ND
Ethyl Ether	167	500	ND				
Ethylbenzene	3	7	ND				

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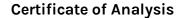
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Tested By: Scott Caudill Laboratory Manager Date: 12/19/2023



Date: 12/22/2023

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USA

Lic. #: 0031X8

## **Reporting Limit Appendix**

#### Heavy Metals - Colorado CDPHE

Analyte	Li	mit (ppl	) Analyte	Limit (ppb)
Arsenic		1500	Lead	500
Cadmium		500	Mercury	1500

#### Residual Solvents - USP 467

Analyte	Limit (ppm)	Analyte	Limit (ppm)
Acetone	5000	Ethylene Oxide	1
Acetonitrile	410	Heptane	5000
Benzene	2	n-Hexane	290
Butane	5000	Isobutane	5000
1-Butanol	5000	Isopropyl Acetate	5000
2-Butanol	5000	Isopropyl Alcohol	5000
2-Butanone	5000	Isopropylbenzene	5000
Chloroform	60	Methanol	3000
Cyclohexane	3880	2-Methylbutane	290
1,2-Dichloroethane	5	Methylene Chloride	600
1,2-Dimethoxyethane	100	2-Methylpentane	290
Dimethyl Sulfoxide	5000	3-Methylpentane	290
N,N-Dimethylacetamide	1090	n-Pentane	5000
2,2-Dimethylbutane	290	1-Pentanol	5000
2,3-Dimethylbutane	290	n-Propane	5000
N,N-Dimethylformamide	880	1-Propanol	5000
2,2-Dimethylpropane	5000	Pyridine	200
1,4-Dioxane	380	Tetrahydrofuran	720
Ethanol	5000	Toluene	890
2-Ethoxyethanol	160	Trichloroethylene	80
Ethyl Acetate	5000	Xylenes (o-, m-, and p-)	2170
Ethyl Ether	5000		
Ethylbenzene	70		

#### Pesticides - CA DCC

Limit (ppb)	Analyte	Limit (ppb)
500	Myclobutanil	9000
30	Naled	500
40000	Oxamyl	200
30	Paclobutrazol	30
30	Permethrin	20000
500	Phosmet	200
30	Piperonyl Butoxide	8000
1000	Propiconazole	20000
30	Propoxur	30
200	Pyrethrins	1000
30	Pyridaben	3000
30	Spinetoram	3000
20000	Spinosad	3000
30	Spiromesifen	12000
30	Spirotetramat	13000
1500	Spiroxamine	30
10000	Tebuconazole	2000
30	Thiacloprid	30
2000	Thiamethoxam	4500
30	Trifloxystrobin	30000
2000		
30000		
	500 30 40000 30 30 500 30 1000 30 2000 30 20000 30 30 1500 10000 30 20000 30 20000 30 20000	500 Myclobutanil 30 Naled 40000 Oxamyl 30 Paclobutrazol 30 Permethrin 500 Phosmet 30 Piperonyl Butoxide 1000 Propiconazole 30 Propoxur 200 Pyrethrins 30 Pyridaben 30 Spinetoram 20000 Spinosad 30 Spiromesifen 30 Spirotetramat 1500 Spiroxamine 10000 Tebuconazole 30 Thiacloprid 2000 Thiamethoxam 30 Trifloxystrobin

#### Mycotoxins - Colorado CDPHE

Analyte	Limit (ppm) Analyte	Limit (ppm)
B1	5 B2	5
G1	5 G2	5
Ochratoxin A	5	

#### Pesticides - CA DCC

Analyte	Limit (ppb)	Analyte	Limit (ppb)
Abamectin	300	Hexythiazox	2000
Acephate	5000	Imazalil	30
Acequinocyl	4000	Imidacloprid	3000
Acetamiprid	5000	Kresoxim methyl	1000
Aldicarb	30	Malathion	5000
Azoxystrobin	40000	Metalaxyl	15000
Bifenazate	5000	Methiocarb	30
Bifenthrin	500	Methomyl	100
Boscalid	10000	Mevinphos	30





### **Technical Specifications**

**Product Name: CRYSTALLINE CANNABIDIOL ISOLATE** 

≥ 98% CBD | ≤ 0.2% THC

### The Industry Leader in Certifications & Compliance



















#### 1. Product Data

#### DESCRIPTION

KND Crystalline Cannabidiol (CBD) Isolate goes through a primary extraction from industrial hemp using approved hydrocarbon solvents, denatured ethyl alcohol, or CO<sub>2</sub>. It is then refined into a high-potency isolate. The Industrial Hemp Biomass is sourced from US Growers who have registered with their state's respective Department of Agriculture.

#### **INTENDED USE**

Industry specific per customer. Unfinished ingredient requiring further processing.

#### **COUNTRY OF ORIGIN**

Made in USA from domestic ingredients

#### **INCOMPATIBILITIES**

No known incompatibilities

#### STANDARD PACKAGING

HDPE Food Grade Plastic - Bucket, Canister, Drum; Aluminum Screw-top Bottle, Metal Tin, Steel Drum

#### **SHELF LIFE**

24 months after packaging

#### **STORAGE & HANDLING**

Storage Container: Store in original, tightly closed containers under dry conditions at ambient temperature. Do not freeze. Limit exposure to light.

Temperature: Keep at temperatures between 10°C to 23°C.

Once cannabinoids are exposed to air, they may oxidize and darken in color. Cannabinoid powders are highly hygroscopic and may clump when exposed to humidity, causing a decrease in potency. It is recommended to add desiccants to the product after opening to mitigate moisture absorption.

#### ALLERGEN STATEMENT

Does not contain beef, buckwheat, celery, cereals with gluten, chicken, crustacean shellfish, egg, fish, lupin, mango, milk, molluscan shellfish, mustard, peach, peanut, pork, royal jelly, sesame, soy, tree nuts, tomato, or wheat.

#### FOOD AND DRUG ADMINISTRATION DISCLOSURE

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

#### **WARNING STATEMENT**

Not recommended for children, pregnant, or nursing women. If taking medication, consult a physician before use. Keep out of the reach of children.

#### **CALIFORNIA PROPOSITION 65**

May contain exposures to delta-9- Tetrahydrocannabinol ( $\Delta 9$  THC) which is known to the State of California to cause birth defects or other reproductive harm. KND Labs tests for  $\Delta 9$  THC and though its presence may not be detected or may be minimal, a warning is required because limitations of exposure are not defined.

### 2. Specifications - General Information

#### **APPEARANCE**

White crystalline powder

#### **FLAVOR**

No significant flavor

#### ODOR

No significant odor

#### CONSISTENCY

Fine-coarse powdered crystal

**SOLUBILITY** 

Oil

#### COMPOSITION

100% Hemp extract by weight

#### **PLANT PARTS USED IN OIL**

Stalk, stem, flower



### **Technical Specifications**

**Product Name: CRYSTALLINE CANNABIDIOL ISOLATE** 

≥ 98% CBD | ≤ 0.2% THC

### 3. Composition/Ingredient Information

#### APPROVED TESTING LABS

The following third party labs have been approved to test KND products based on a track record of quality and regulatory compliance:

- Botanacor dba SC Labs
- DB Labs
- Eurofins

If the listed labs are not used for the finished product, KND recommends that the ingredient is tested at the desired non KND approved lab to calibrate the finished product results.

CANNABINOID CONTENT	%	METHOD(S)
CBD	≥ 98.0	
THC	≤ 0.2	
CBDA	Reportable	HPLC applications LCMS
CBDV	Reportable	LCUV
CBN	Reportable	
CBG	Reportable	

CANNABIDIOL INFORMATION	
INCI Name	Cannabidiol
CAS-No	13956-29-1
Molecular Weight (g/mol)	314.46
Chemical Formula	C <sub>21</sub> H <sub>30</sub> O <sub>2</sub>

OTHER	LIMIT	METHOD(S)
HEAVY METALS	See Note <sup>1</sup>	ICP-MS; MS-MS
PESTICIDES	See Note <sup>1</sup>	GC applications; HPLC applications ; LCMS applications
MICROBIOLOGICAL	See Note <sup>1</sup>	Microarray ; PCR ; qPCR ; Petrifilm ; VIDAS
RESIDUAL SOLVENTS	See Note <sup>1</sup>	GC applications

#### NOTE:

<sup>1</sup> Unfinished hemp products are only required to test for potency per 6 CCR 1010-21.7 (F) Colorado Wholesale Food, Industrial Hemp, and Shellfish Regulations. All other contaminants are not required for compliance testing. Additional testing may be arranged. Please contact a KND representative. For more information, visit <a href="https://cdphe.colorado.gov/hemp-food">https://cdphe.colorado.gov/hemp-food</a>.