



Certificate ID: **93046**      Received: **3/12/21**  
 Client Sample ID: **20MG/1ML S FWR BASE**  
 Lot Number:  
 Matrix: **Tincture/Infused Oil - SUNFLOWER OI**

Scan QR Code for authenticity



**CUBED Naturals**  
**4301 Vestal Road**  
**Vestal, NY 13850**  
**Attn: WAYNE KERBER**

Authorization: Chris Hudalla, Chief Science Officer	Signature: 	Date: 4/5/2021
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The data contained within this report was collected in accordance with the requirements of ISO/IEC17025:2017. I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

**CN: Cannabinoid Profile & Potency [WI-10-17 & WI-10-17-01]**

Analyst: AC

Test Date: 3/20/2021

The client sample was analyzed for plant-based cannabinoids by Liquid Chromatography (LC). The collected data was compared to data collected for certified reference standards at known concentrations.

**93046-CN**

ID	Weight %	Concentration (mg/mL)			
D9-THC	0.0647	0.595			
THCV	ND	ND			
CBD	2.19	20.1			
CBDV	0.0133	0.122			
CBG	0.0125	0.115			
CBC	0.0725	0.666			
CBN	<LOQ	<LOQ			
THCA	ND	ND			
CBDA	ND	ND			
CBGA	ND	ND			
D8-THC	ND	ND			
exo-THC	ND	ND			
Total	2.36	21.6	0%	Cannabinoids (wt%)	2.2%
Max THC	0.0647	0.595		Limit of Quantitation (LOQ) =	0.0114 wt%
Max CBD	2.19	20.1		Limit of Detection (LOD) =	0.0038 wt%

**Ratio of Total CBD to THC 33.8:1**

Max THC (and Max CBD) are calculated values for total cannabinoids after heating, assuming complete decarboxylation of the acid to the neutral form. It is calculated based on the weight loss of the acid group during decarboxylation: Max THC = (0.877 x THCA) + THC. This calculation does not include other cannabinoid isomers (eg. D8-THC and exo-THC). ND = None detected above the limits of detection (LOD), which is one third of LOQ.

**EA: Elemental Analysis [WI-10-13]**

Analyst: CJS

Test Date: 4/1/2021

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**93046-EA**

Symbol	Metal	Conc. <sup>1</sup> (µg/kg)	RL (µg/kg)	Limits <sup>2</sup> (µg/kg)	Status
Al	Aluminum	ND	50	-	
As	Arsenic	ND	50	1,500	PASS
Cd	Cadmium	ND	50	500	PASS
Ca	Calcium	2,790	500	-	
Cr	Chromium	ND	50	1,100,000	PASS
Co	Cobalt	ND	50	5,000	PASS
Cu	Copper	ND	50	300,000	PASS
Fe	Iron	1,190	50	-	
Pb	Lead	ND	50	500	PASS
Mg	Magnesium	7,970	50	-	
Mn	Manganese	143	50	-	
Hg	Mercury	ND	50	3,000	PASS
Mo	Molybdenum	ND	50	300,000	PASS
Ni	Nickel	ND	50	20,000	PASS
P	Phosphorus	657,000	500	-	
K	Potassium	2,500	500	-	
Se	Selenium	ND	50	-	
Ag	Silver	ND	50	15,000	PASS
S	Sulfur	ND	500	-	
Sn	Tin	875	500	600,000	PASS
Zn	Zinc	1,080	50	-	

1) ND = None detected to the Method Detection Limit (MDL)

2) USP recommended maximum daily limits for oral drug product.

**MB1: Microbiological Contaminants [WI-10-09]**

Analyst: MM

Test Date: 3/17/2021

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**93046-MB1**

Symbol	Analysis	Results	Units	Limits*	Status
AC	Total Aerobic Bacterial Count	<100	CFU/g	100,000 CFU/g	PASS
CC	Total Coliform Bacterial Count	<100	CFU/g	1,000 CFU/g	PASS
EB	Total Bile Tolerant Gram Negative Count	<100	CFU/g	1,000 CFU/g	PASS
YM	Total Yeast & Mold	<100	CFU/g	10,000 CFU/g	PASS

Recommended limits established by the American Herbal Pharmacopoeia (AHP) monograph for Cannabis Inflorescence [2013], for consumable botanical products, including processed and unprocessed cannabis materials, and solvent-based extracts. Note: All recorded Microbiological tests are within the established limits.

**MB2: Pathogenic Bacterial Contaminants [WI-10-10]**

Analyst: MM

Test Date: 3/18/2021

This test method was performed in accordance with the requirements of ISO/IEC 17025. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

**93046-MB2**

Test ID	Analysis	Results	Units	Limits*	Status
93046-ECPT	E. coli (O157)	Negative	NA	Non Detected	PASS
93046-SPT	Salmonella	Negative	NA	Non Detected	PASS

Note: All recorded pathogenic bacteria tests passed.

**END OF REPORT**