

NOV 10 2021

703850 (4)

# Certificate of Analysis

Final Product: Cannabidiol Isolate

Date of Manufacture: August 2021

Lot Number: L21081034



MILE HIGH LABS™



Test	Methodology	Specification	Test Results (Average)*	Pass/Fail	
Color and Appearance	TM-004 (Visual)	White, crystalline powder free of particulates	Conforms	Pass	
Cannabidiol Identification	TM-001 (DAD Retention Time)	Retention time of the primary peak in sample chromatogram matches that in the analytical reference standard.	Conforms	Pass	
	TM-001 (DAD UV Spectrum)	UV Spectrum of the primary peak in sample chromatogram matches that in the analytical reference standard.	Conforms	Pass	
CBD Potency (% w/w)	TM-001 (HPLC - DAD)	>=98 %w/w	99.7	Pass	
THC Content (% w/w)	THC(%w/w)	TM-001 (HPLC - DAD)	≤0.05 %w/w <sup>1</sup>	<LOQ	Pass
	THCA(%w/w)	TM-001 (HPLC - DAD)	≤ Limit of Quantification <sup>1</sup>	ND	Pass
	Total THC (THC + THCA*0.877)(%w/w)	TM-001 (HPLC - DAD)	≤0.05 %w/w <sup>1</sup>	<LOQ	Pass
Related Cannabinoid Content (% w/w)	CBN(%w/w)	TM-001 (HPLC - DAD)	≤ Limit of Quantification <sup>1</sup>	ND	Pass
	cis-THC(%w/w)	TM-001 (HPLC - DAD)	≤ Limit of Quantification <sup>1</sup>	0.030	Pass
	dB-THC(%w/w)	TM-001 (HPLC - DAD)	≤ Limit of Quantification <sup>1</sup>	ND	Pass
	THCV(%w/w)	TM-001 (HPLC - DAD)	≤ Limit of Quantification <sup>1</sup>	ND	Pass
	THCVA(%w/w)	TM-001 (HPLC - DAD)	≤ Limit of Quantification <sup>1</sup>	ND	Pass
	CBC(%w/w)	TM-001 (HPLC - DAD)	Report	ND	NA
	CBCA(%w/w)	TM-001 (HPLC - DAD)	Report	ND	NA
	CBDA(%w/w)	TM-001 (HPLC - DAD)	Report	ND	NA
	CBDVA(%w/w)	TM-001 (HPLC - DAD)	Report	ND	NA
	CBDV(%w/w)	TM-001 (HPLC - DAD)	Report	0.297	NA
	CBE(%w/w)	TM-001 (HPLC - DAD)	Report	ND	NA
	CBGA(%w/w)	TM-001 (HPLC - DAD)	Report	ND	NA
	CBG(%w/w)	TM-001 (HPLC - DAD)	Report	ND	NA
	CBL(%w/w)	TM-001 (HPLC - DAD)	Report	ND	NA
	CBLA(%w/w)	TM-001 (HPLC - DAD)	Report	ND	NA
	CBT(%w/w)	TM-001 (HPLC - DAD)	Report	ND	NA
	Total Unknowns(%w/w)	TM-001 (HPLC - DAD)	Report	0.286	NA
	Total (Sum of all observed RCs known and unknown) (%w/w)	TM-001 (HPLC - DAD)	Report	0.583	NA
	Total Cannabinoids (CBC plus related RCs) (%w/w)	TM-001 (HPLC - DAD)	Report	100.225	NA
Residual Solvents	Pentane(ppm)	TM-005 (HS-GC - FID)	≤500 ppm	185	Pass
	Acetone(ppm)	TM-005 (HS-GC - FID)	≤500 ppm	<LOQ	Pass
	Isopropyl Alcohol(ppm)	TM-005 (HS-GC - FID)	≤500 ppm	<LOQ	Pass
	Ethanol(ppm)	TM-005 (HS-GC - FID)	≤500 ppm	<LOQ	Pass
	Methanol(ppm)	TM-005 (HS-GC - FID)	≤300 ppm	<LOQ	Pass
	Hexane(ppm)	TM-005 (HS-GC - FID)	≤25 ppm	<LOQ	Pass
Pesticides	Individual Pesticide Content (ppm) <sup>2</sup>	TM-011 (LC-MS)	Individual Pesticide Limit <sup>2</sup>	CONFORMS	Pass

Elemental Impurities	Arsenic(ppm)	ICP-MS <sup>3</sup>	<1.0 ppm	<LOQ	Pass
	Cadmium(ppm)	ICP-MS <sup>3</sup>	<0.4 ppm	<LOQ	Pass
	Lead(ppm)	ICP-MS <sup>3</sup>	<0.5 ppm	<LOQ	Pass
	Mercury (Total)(ppm)	ICP-MS <sup>3</sup>	<0.2 ppm	<LOQ	Pass
Mycotoxins	B <sub>1</sub> (AFB <sub>1</sub> )(ppb)	USP<561> <sup>3</sup>	≤2 ppb	<0.500	Pass
	B <sub>2</sub> (AFB <sub>2</sub> )(ppb)	USP<561> <sup>3</sup>	≤0.5 ppb	<0.500	Pass
	G <sub>1</sub> (AFG <sub>1</sub> )(ppb)	USP<561> <sup>3</sup>	≤0.5 ppb	<0.500	Pass
	G <sub>2</sub> (AFG <sub>2</sub> )(ppb)	USP<561> <sup>3</sup>	≤0.5 ppb	<0.500	Pass
	Total(ppb)	USP<561> <sup>3</sup>	≤4 ppb	<2.00	Pass

<sup>3</sup>Number of replicates: 24

<sup>1</sup>TM-001 LOQ of 0.05% w/w for related cannabinoids.

<sup>2</sup>Full table of individual pesticides and associated limits on file.

<sup>3</sup>Contract Testing performed by Eurofins BioDiagnostics.

Data Reviewed and Approved by: 

Digitally signed by Tim Ghelli  
Date: 2021.10.01 09:16:30 -06'00'

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763850 (1)



MILE HIGH LABS

# Certificate of Analysis

Final Product: Cannabidiol Isolate  
Date of Manufacture: November 2021

Lot Number: L21111039

Test	Methodology	Specification	Test Results (Average)*	Pass/Fail	
Color and Appearance	TM-004 (Visual)	White, crystalline powder free of particulates	Conforms	Pass	
Cannabinoid Identification	TM-001 (DAD Retention Time)	Retention time of the primary peak in sample chromatogram matches that in the analytical reference standard.	Conforms	Pass	
	TM-001 (DAD UV Spectrum)	UV Spectrum of the primary peak in sample chromatogram matches that in the analytical reference standard.	Conforms	Pass	
CBD Purity (% w/w)	TM-001 (HPLC - DAD)	>=98 %w/w	99.4	Pass	
THC Content (% w/w)	THC(%w/w)	TM-001 (HPLC - DAD)	≤0.05 %w/w <sup>1</sup>	Pass	
	THCA(%w/w)	TM-001 (HPLC - DAD)	≤ Limit of Quantification <sup>1</sup>	Pass	
	Total THC (THC + THCA*0.877)(%w/w)	TM-001 (HPLC - DAD)	≤0.05 %w/w <sup>1</sup>	Pass	
Retailer Cannabinoid Content (% w/w)	CBN(%w/w)	TM-001 (HPLC - DAD)	≤ Limit of Quantification <sup>1</sup>	Pass	
	cis-THC(%w/w)	TM-001 (HPLC - DAD)	≤ Limit of Quantification <sup>1</sup>	Pass	
	δ8-THC(%w/w)	TM-001 (HPLC - DAD)	≤ Limit of Quantification <sup>1</sup>	Pass	
	THCV(%w/w)	TM-001 (HPLC - DAD)	≤ Limit of Quantification <sup>1</sup>	Pass	
	THCVA(%w/w)	TM-001 (HPLC - DAD)	≤ Limit of Quantification <sup>1</sup>	Pass	
	CBC(%w/w)	TM-001 (HPLC - DAD)	Report	ND	NA
	CBCA(%w/w)	TM-001 (HPLC - DAD)	Report	ND	NA
	CBDA(%w/w)	TM-001 (HPLC - DAD)	Report	ND	NA
	CBDVA(%w/w)	TM-001 (HPLC - DAD)	Report	ND	NA
	CBDV(%w/w)	TM-001 (HPLC - DAD)	Report	0.377	NA
	CBE(%w/w)	TM-001 (HPLC - DAD)	Report	ND	NA
	CBGA(%w/w)	TM-001 (HPLC - DAD)	Report	ND	NA
	CBG(%w/w)	TM-001 (HPLC - DAD)	Report	ND	NA
	CBL(%w/w)	TM-001 (HPLC - DAD)	Report	ND	NA
	CBLA(%w/w)	TM-001 (HPLC - DAD)	Report	ND	NA
	CBT(%w/w)	TM-001 (HPLC - DAD)	Report	ND	NA
	Total Unknowns(%w/w)	TM-001 (HPLC - DAD)	Report	0.202	NA
Total (Sum of all observed RCs known and unknown) (%w/w)	TM-001 (HPLC - DAD)	Report	0.578	NA	
Total Cannabinoids (CBD plus total RCs) (%w/w)	TM-001 (HPLC - DAD)	Report	99.937	NA	
Residual Solvents	Pentane(ppm)	TM-005 (HS-GC - FID)	≤500 ppm	181	Pass
	Acetone(ppm)	TM-005 (HS-GC - FID)	≤500 ppm	<LOQ	Pass
	Isopropyl Alcohol(ppm)	TM-005 (HS-GC - FID)	≤500 ppm	<LOQ	Pass
	Ethanol(ppm)	TM-005 (HS-GC - FID)	≤500 ppm	<LOQ	Pass
	Methanol(ppm)	TM-005 (HS-GC - FID)	≤300 ppm	<LOQ	Pass
	Hexane(ppm)	TM-005 (HS-GC - FID)	≤25 ppm	<LOQ	Pass
Pesticides	Individual Pesticide Content (ppm) <sup>2</sup>	TM-011 (LC-MS)	Individual Pesticide Limit <sup>2</sup>	CONFORMS	Pass



Specification: FP001  
Lot: L21111039

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Elemental Impurities	Arsenic(ppm)	ICP-MS <sup>3</sup>	<1.0 ppm	<LOQ	Pass
	Cadmium(ppm)	ICP-MS <sup>3</sup>	<0.4 ppm	<LOQ	Pass
	Lead(ppm)	ICP-MS <sup>3</sup>	<0.5 ppm	<LOQ	Pass
	Mercury (Total)(ppm)	ICP-MS <sup>3</sup>	<0.2 ppm	<LOQ	Pass
Mycotoxins	B <sub>1</sub> (AFB <sub>1</sub> )(ppb)	USP<561> <sup>3</sup>	≤2 ppb	<0.500	Pass
	B <sub>2</sub> (AFB <sub>2</sub> )(ppb)	USP<561> <sup>3</sup>	≤0.5 ppb	<0.500	Pass
	G <sub>1</sub> (AFG <sub>1</sub> )(ppb)	USP<561> <sup>3</sup>	≤0.5 ppb	<0.500	Pass
	G <sub>2</sub> (AFG <sub>2</sub> )(ppb)	USP<561> <sup>3</sup>	≤0.5 ppb	<0.500	Pass
	Total(ppb)	USP<561> <sup>3</sup>	≤4 ppb	<2.00	Pass

<sup>1</sup>Number of replicates: 17

<sup>2</sup>TM-001 LOQ of 0.05% w/w for related cannabinoids.

<sup>3</sup>Full table of individual pesticides and associated limits on file.

<sup>4</sup>Contract Testing performed by Eurofins BioDiagnostics.

**Data Reviewed and Approved by: Tim Ghelli**  
**12/7/2021 1:12:58 PM**

Specification: FP001

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