

# Certificate of Analysis

Final Product: Cannabidiol Isolate  
Date of Manufacture: February 2020

Lot Number: IL2001I-002A



Test	Methodology		Specification	Test Results (Average)*	Pass/Fail
Visual	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	CBD(%w/w)	TM-001 (HPLC - DAD)	>=98 %w/w	98.1	Pass
THC Content	THC(%w/w)	TM-001 (HPLC - DAD)	≤0.05 %w/w <sup>1</sup>	ND	Pass
	THCA(%w/w)	TM-001 (HPLC - DAD)	≤0.05 %w/w <sup>1</sup>	ND	Pass
	Total THC(%w/w)	TM-001 (HPLC - DAD)	Report <sup>1</sup>	ND	Pass
Related Cannabinoid Content	CBDA(%w/w)	TM-001 (HPLC - DAD)	Report	ND	NA
	CBN(%w/w)	TM-001 (HPLC - DAD)	Report	ND	NA
	CBDV(%w/w)	TM-001 (HPLC - DAD)	Report	0.247	NA
	CBG(%w/w)	TM-001 (HPLC - DAD)	Report	ND	NA
	Other (Highest RC)(%w/w)	TM-001 (HPLC - DAD)	Report	0.207	NA
	Total (RC)(%w/w)	TM-001 (HPLC - DAD)	Report	0.454	NA
Total Cannabinoids	(CBD plus total RCs)(%w/w)	TM-001 (HPLC - DAD)	Report	98.568	NA
Residual Solvents	Pentane(ppm)	TM-005 (HS-GC - FID)	≤500 ppm	149	Pass
	Acetone(ppm)	TM-005 (HS-GC - FID)	≤500 ppm	<LOQ	Pass
	Isopropyl Alcohol(ppm)	TM-005 (HS-GC - FID)	≤500 ppm	<LOQ	Pass
	Hexane(ppm)	TM-005 (HS-GC - FID)	≤25 ppm	<LOQ	Pass
Pesticides	Individual Pesticide Content (Report Highest) <sup>2</sup>	LC-MS <sup>3</sup>	Individual Pesticide Limit <sup>1</sup>	CONFORMS	Pass
Elemental Impurities	Arsenic(ppm)	LC-MS <sup>3</sup>	<1.5 ppm	<LOQ	Pass
	Cadmium(ppm)	LC-MS <sup>3</sup>	<0.5 ppm	<LOQ	Pass
	Lead(ppm)	LC-MS <sup>3</sup>	<0.5 ppm	<LOQ	Pass
	Mercury(ppm)	LC-MS <sup>3</sup>	<1.5 ppm	<LOQ	Pass
Mycotoxins	B1 (AFB1)(ppb)	USP<561> <sup>3</sup>	≤2 ppb	<LOQ	Pass
	B2 (AFB2)(ppb)	USP<561> <sup>3</sup>	≤0.5 ppb	<LOQ	Pass
	G1 (AFG1)(ppb)	USP<561> <sup>3</sup>	≤0.5 ppb	<LOQ	Pass
	G2 (AFG2)(ppb)	USP<561> <sup>3</sup>	≤0.5 ppb	<LOQ	Pass
	Total(ppb)	USP<561> <sup>3</sup>	≤4 ppb	<LOQ	Pass

\*Number of replicates: 19

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

<sup>2</sup>Full list of individual pesticide residues on file, Eurofins LOQ of 0.1 ppm for individual residues.

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

Data Reviewed and Approved by: **Beth Grant**  
3/18/2020 8:55:40 AM