

Certificate of Analysis

Final Product: Cannabidiol Isolate
Date of Manufacture: October 2020

Lot Number: IL2010I-026



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	CBD(%w/w)	TM-001 (HPLC - DAD)	>=98 %w/w	98.3	Pass	
THC Content	THC(%w/w)	TM-001 (HPLC - DAD)	≤ Limit of Quantification¹	<LOQ	Pass	
	THCA(%w/w)	TM-001 (HPLC - DAD)	≤ Limit of Quantification¹	ND	Pass	
	Total THC(%w/w)	TM-001 (HPLC - DAD)	≤ Limit of Quantification¹	<LOQ	Pass	
Related Cannabinoid Content	CBN(%w/w)	TM-001 (HPLC - DAD)	≤ Limit of Quantification¹	ND	Pass	
	cis-THC(%w/w)	TM-001 (HPLC - DAD)	≤ Limit of Quantification¹	<LOQ	Pass	
	delta 8-THC(%w/w)	TM-001 (HPLC - DAD)	≤ Limit of Quantification¹	ND	Pass	
	THCV(%w/w)	TM-001 (HPLC - DAD)	≤ Limit of Quantification¹	ND	Pass	
	THCVA(%w/w)	TM-001 (HPLC - DAD)	≤ Limit of Quantification¹	ND	Pass	
	CBC(%w/w)	TM-001 (HPLC - DAD)	Report	<LOQ	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	0.274	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	0.204	NA	
	Total (Sum of all observed RCs known and unknown) (%w/w)	TM-001 (HPLC - DAD)	Report	0.478	NA	
	Total Cannabinoids	(CBD plus total RCs)(% w/w)	TM-001 (HPLC - DAD)	Report	98.745	NA
	Residual Solvents	Pentane(ppm)	TM-005 (HS-GC - FID)	≤500 ppm	115	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)²	TM-011 (LC-MS)	Individual Pesticide Limit²	CONFORMS	Pass	

Elemental Impurities	Arsenic(ppm)	ICP-MS ³	<1.0 ppm	<LOQ	Pass
	Cadmium(ppm)	ICP-MS ³	<0.4 ppm	<LOQ	Pass
	Lead(ppm)	ICP-MS ³	<0.5 ppm	<LOQ	Pass
	Mercury (Total)(ppm)	ICP-MS ³	<0.2 ppm	<LOQ	Pass
Mycotoxins	B1 (AFB1)(ppb)	USP<561> ³	≤2 ppb	<LOQ	Pass
	B2 (AFB2)(ppb)	USP<561> ³	≤0.5 ppb	<LOQ	Pass
	G1 (AFG1)(ppb)	USP<561> ³	≤0.5 ppb	<LOQ	Pass
	G2 (AFG2)(ppb)	USP<561> ³	≤0.5 ppb	<LOQ	Pass
	Total(ppb)	USP<561> ³	≤4 ppb	<LOQ	Pass

*Number of replicates: 11

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

²Full table of individual pesticides and associated limits on file.

³Contract Testing performed by Eurofins BioDiagnostics.

Data Reviewed and Approved by:

