

## CERTIFICATE OF QUALITY ASSURANCE

PRODUCT NAME:Blue Label 150mg Vol 30ml CBD AdditivePRODUCT CODE:DBCBDVAP150ADLOT NUMBER:34008CK

ACTIVE INGREDIENT:	THC-Free Hemp Oil		
INACTIVE INGREDIENTS:	Vegetable glycerin (organic, non-GMO, 0% Vitamin E acetate), natural flavoring		
Attributes	Acceptance Criteria	Compliance	<b>Compliance Protocol</b>
Appearance	Viscous White to Amber Water-soluble oil.	Pass	QCU002
Odor	Characteristic	Pass	QCU002
Color	Light Amber	Pass	QCU002
Dissolution	Characteristic color.	Pass	QCU002
Microbial Testing	Total Aerobic Count <2000 CFU/g Total Yeast & Mold <200 CFU/g	Pass	USP<2021>

Cannabinoid Ass	say	Terpene Assay			
Compound	Wt. (mg)	Compound	Wt. (mg)	Compound	Wt. (mg)
CBD	150mg ±4.8mg	β-Bisabolene	0.036mg ±0.025mg Camphene		0.003mg ±0.001mg
CBG	3.628mg ±0.116mg	β-Farnesene	0.027mg ±0.013mg	E-Farnesene	0.003mg ±0.001mg
CBG-A	6.309mg ±0.202mg	Guaiol	0.022mg ±0.019mg	Farnesol	0.003mg ±0.001mg
CBDV	2.36mg ±0.076mg	β-Maaliene	0.022mg ±0.019mg	α-Bisabolol	< 0.002mg
CBC	3.785mg ±0.121mg	Calarene	0.018mg ±0.013mg	P-Cymene	< 0.002mg
CBN	ND	β-Caryophyl- lene	0.01mg ±0.011mg	Linalool	< 0.002mg
THC	ND	α-Humulene	0.01mg ±0.011mg	Myrcene	< 0.002mg
THC-A	ND	Cadinene	0.01mg ±0.011mg	Phytol	< 0.002mg
CBDV-A	ND	α-Gurjunene	0.005mg ±0.005mg	lsopulegol	< 0.002mg
CBD-A	ND	δ-Limonene	0.005mg ±0.005mg	Terpinene	< 0.002mg
THCV	ND	Ncrolidol	0.005mg ±0.005mg	Geraniol	< 0.002mg
		α-Pinene	0.005mg ±0.005mg	Myrcene	< 0.002mg
		Aristolene	0.004mg ±0.003mg	γ-Terpinene	< 0.002mg
		Eucalyptol	0.003mg ±0.001mg	δ-3-Carene	< 0.002mg

Pesticide Assay (HPLC*)	Result	
Acequinocyl	Not Detected	
Pyrethrium	Not Detected	
Spiromesifen	Not Detected	
Abamectin	Not Detected	
Imidacloprid	Not Detected	
Spinosad	Not Detected	
Spirotetramat	Not Detected	
Bifenazate	Not Detected	
Fenoxycarb	Not Detected	
Paclobutrazol	Not Detected	

\*High-performance liquid chromatography

Residual Solvent Assay*	Compliance
Propane	Pass
Isobutane	Pass
Butane	Pass
Ethanol	Pass
Pentane	Pass
Isopropanol	Pass
Hexane	Pass
Acetone	Pass
Heavy Metals Assay*	Compliance
Arsenic	Pass
Cadmium	Pass
Lead	Pass
Mercury	Pass

\*Compliance with USP<233>

Batch and lot asssays are conducted using a combination of HPLC, GC-MS, IR, and H1 NMR spectroscopic methods. All results are periodically confirmed using multiple 3rd-party testing services. Non-detections are tested usiong standard high performance liquid chromatography and mass spectrometry methods (in compliance with USP protocols). Every harvest is tested for pesticides using a third-party service using reporting limits (rl) established by the United States Environmental Protection Agency (EPA). Detailed analytical data is available to academic insititutions, regulatory agencies, and other governmental bodies upon request. Please direct enquiries to qualityassurance@deltacbd.com. Where possible, note lot/batch number, date of purchase. Delta Botanicals performs analytical testing in association with Johns Hopkins University and National Institute on Drug Abuse as part of ongoing prospective observational studies. These data are suspected to be accurate within their asso ciated errors for three years from the date of production if the product is stored in the unopened original container between 15°C - 30°C, protected from light. Because these materials are sensitive to oxidation, they are, wherever possible during the manufacturing process, saturated with nitrogen and sealed within a nitrogen atmosphere for protection. If containers are opened for sampling, limit exposure of the product to ambient air and refill atmosphere with nitrogen to maintain accuracy within the above-stated expected error. Containers that have been opened should be tested every six (6) months to ensure potency. Although Delta Botanicals Inc. (DBI) believes the above information to be accurate based on the information available to DBI, it is the responsibility of the customer and user of the material to perform its own investigation and due diligence prior to use to verify that the product purchased from Delta Botanicals meets their quality requirements and is appropriate for the use to which the product is to be put. The information provided in this document shall be considered effective only for the lot with which the information is being provided. Use and purchase of this material is subject to DBI standard terms and conditions, which supersede any conflicting terms contained on Buyer's purchase order or any document or instrument supplied by Buyer.



## Glycerol (aka Vegetable Glycerin)

Vegetable glycerin (VG) is a slightly sweet, syrupy liquid made by heating natural vegetable fats under pressure. It is derived from plants just like our cannabinoid-rich hemp oil. VG is "aqueous," meaning that it naturally dissolves in water (unlike coconut/MCT oil).

Water-soluble sublingual tinctures have a higher bioavailability than tinctures using coconut/MCT oil, and they quickly dissolve in aqueous liquids such as water, juices, and coffee.

Additionally, VG can withstand higher temperatures than coconut oil before denaturing or producing harmful byproducts, which makes it the preferred medium for consumers who vape hemp products. Recent news has highlighted an empirically driven need to guarantee the highest purity in vegetable glycerin products. Vegetable glycerin is extracted from plants that contain significant amounts of Vitamin E, a compound known to be harmful when vaporized and inhaled. A proton NMR is helpful toward confirming that the vegetable glycerin base used in Delta products contains nothing but pure, natural glycerol.

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DATA PROCESSING

## FT size 32768

Total time: 0 min 28 sec



MCT OIL 60/40 (MEDIUM CHAIN TRIGLYCERIDE)					
CERTIFICATE OF ANALYSIS					
LOT:	20695				
Date of Production:	March, 2019				
Expiration Date:	March, 2022				
Parameter:	Units	Lin	nits	Results	
		Min	Мах		
Saponification Value	mgKOH/g	325	345	337.5	
Acid Value	mgKOH/g		0.1	0.027	
Color			100	15	
Peroxide Value	meq O2/kg		1	0	
Hydroxyl Value	mgKOH/g		5	2.8	
Refractive Index @20°C		1.440	1.452	1.449	
Fatty Acid Composition					
C:6:0 Caproic Acid	%		2	0	
C:8:0 Caprylic Acid	%	50	65	61	
C:10:0 Capric Acid	%	30	45	38.9	
C:12:0 Lauric Acid	%		3	0.1	



QR CODE FOR 3rd-party confirmation of organic certification (MCT oil). Although Delta Botanicals Inc. (DBI) believes the above information to be accurate based on the information available to DBI, it is the responsibility of the customer and user of the material to perform its own investigation and due diligence prior to use to verify that the product purchased from Delta Botanicals meets their quality requirements and is appropriate for the use to which the product is to be put. The information provided in this document shall be considered effective only for the lot with which the information is being provided. Use and purchase of this material is subject to DBI standard terms and conditions, which supersede any conflicting terms contained on Buyer's purchase order or any document or instrument supplied by Buyer.



QR CODE FOR 3rd-party validation of analytical chemistry (specifically cannabinoid content of raw oil). Delta Botanicals periodicially updates 3rd-party confirmation of analyses from multiple testing services available in the US including private institutions, academic institutions, and US government labs as part of ongoing pre-clinical prospective observational trials. DBI emphasizes that it is the responsibility of the customer and user of any Delta Botanicals products to perform his, her, or their own investigation and due diligence prior to use to verify that the product purchased from Delta Botanicals meets their quality requirements and is appropriate for the use to which the product is to be put. The information provided in this document shall be considered effective only for the lot with which the information is being provided. Use and purchase of this material is subject to DBI standard terms and conditions, which supersede any conflicting terms contained on Buyer's purchase order or any document or instrument supplied by Buyer.

**Benjamin Miller** Manufacturing Director

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