

Chemical Content Analysis

Date: 10-05-2019

Client: Vitality

Product: Vitality CBD Full Spectrum Oral Drops

Natural 1200mg

Batch No: OT270319HN

Lab ID: CBD0198

Visual Inspection:

Yellowy-green liquid.

Method Summary:

1ml of sample was measured in a pipette and extracted in Isopropyl Alcohol to provide a sample at 1.6mg/ml. This was then diluted further in Methanol. CBD content was analysed on an Agilent HPLC fitted with a DAD detector. Content on HPLC was analysed against a standard calibration of CBD, CBN and THC, supplied by Restek, as well as CBDA and THCA supplied by Sigma-Aldrich. The results are presented in Table 1 and Figure 1 below.

Compound	CAS Number	Concentration (mg/ml)	LoQ (µg/ml)
Cannabidiol	13956-291	38.47	0.1
Cannabinol	521-35-7	BQL	0.1
Delta-9- Tetrahydrocannabinol	1972-08-3	BQL	0.1
Cannabidiolic Acid	1244-58-2	0.35	0.1
Delta-9-Tetrahydrocannabinolic Acid	23978-85-0	BQL	0.2

BQL, Below Quantitation Limit.

% Content of Sample

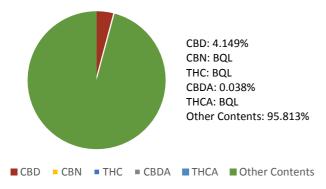


Figure 1. Pie chart of the analysis result.

Comments:

1200mg of CBD in 30ml is equivalent to 40mg/ml

Acceptance Criteria: $\pm 5\%$ of target concentration CBD total, including

CBDA, below legal limit of CBN, THC and THCA.

CBD- Cannabidiol

CBDA- Cannabidiolic Acid

CBN- Cannabinol. The legal limit for this compound is 1mg per container.

THC- delta-9-Tetrahydrocannabinol.

THCA- delta-9-Tetrahydrocannabinolic Acid. The legal limit for both THC

and THCA this compound is 1mg per container

The sample passes all acceptance criteria for CBD, CBN and THC.



Figure 2. Chromatogram of the analysis

Analysis By: Lawrence Theobald

Approved By:

Mark Portsmouth, Analytical Chemistry Consultant

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