

# Test Report: Commercial in Confidence

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United Kingdom



1642

Test Report No.: FR001224\_S20031622

Date: 6<sup>th</sup> July 2020

Customer:	MG Group Limited
Analysis:	Suite of 7 cannabinoids by HPLC-UV
Matrix:	CBD oil
Received:	24 <sup>th</sup> of June 2020
Analysed	26 <sup>th</sup> of June to 1 <sup>st</sup> of July 2020

## 1. BACKGROUND

This report describes the analytical testing of a CBD sample product.

The term "CBD" is an acronym for cannabidiol, which is one of several cannabinoids, or chemical compounds, that are found in cannabis and hemp plants.

The sample was analysed for the concentrations of 7 cannabinoids:

- **CBC**, Cannabichromene
- **CBD**, Cannabidiol
- **CBDA**, Cannabidiolic acid
- **CBG**, Cannabigerol
- **CBN**, Cannabinol
- **THC**, Tetrahydrocannabinol
- **THCA**, Tetrahydrocannabinolic acid

## 2. SAMPLE DESCRIPTION

The sample was received at the laboratory in satisfactory condition and stored at ambient temperature prior to analysis.

The sample was received in a 10 mL amber glass vial with black plastic screw cap. A label with the customers identification letter was attached to the side of the vial.

A unique identifying number was assigned to the sample using the Fera laboratory information management system. The relevant sample details are shown in the table below.

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Sample information					
Fera reference	Sample identification	Bottle label	Sample type	Batch/LOT code	Best before
S20-031622	Broad spectrum CBD tincture 4000mg. B/N 4000/01	Full spec 4000 E	Broad spectrum oil	B/N 4000/01	N/A

## 3. SAMPLING AND ANALYSIS

### 3.1 Cannabinoids

**Cannabidiol (CBD)** - The sample was extracted into solvent and diluted before CBD was determined using LC-UV. Accuracy of the method was assessed by analysing in-house reference material with known concentrations of CBD alongside the sample.

**Cannabichromene (CBC), cannabidiolic acid (CBD-A), cannabigerol (CBG), cannabinol (CBN), Tetrahydrocannabinol (THC) and tetrahydrocannabinolic acid (THC-A)** - The sample was extracted into solvent and diluted before the cannabinoids were determined using LC-UV. Accuracy of the method was assessed by overspiking blank oil with a known concentration of each cannabinoid. **These analytes do not fall under the scope of our ISO17025 accreditation.**

## 4. RESULTS

### 4.1 Cannabidiol

Sample information		
Fera reference	Sample identification	CBD (%)
S20-031622	Broad spectrum CBD tincture 4000mg. B/N 4000/01	35.9

Expanded relative measurement uncertainty (95% confidence) for CBD is 12.8%.

### 4.2 Cannabichromene (CBC), cannabidiolic acid (CBD-A), cannabigerol (CBG), cannabinol (CBN), Tetrahydrocannabinol (THC) and tetrahydrocannabinolic acid (THC-A)

Sample identification		Other cannabinoid concentrations (%)					
Fera reference	Sample identification	CBC	CBDA	CBG	CBN	THC	THCA
S20-031622	Broad spectrum CBD tincture 4000mg. B/N 4000/01	0.181	<0.002	0.035	0.057	0.043	0.196

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<b>Issuing Officer:</b>	Mark Harrison, Analytical chemist	<b>Date:</b>	02/07/20
<b>Countersigning Manager:</b>	Rosario Romero, Senior analytical chemist	<b>Date:</b>	06/07/20

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