# Test Report: Commercial in Confidence

Fera Science Ltd, Sand Hutton, York, **YO41 1LZ United Kingdom** 





Date: 19th June 2020

Test Report No.: FR001224\_S20030421b

Customer:	MG Group Limited
Analysis:	Suite of 7 cannabinoids by HPLC-UV
Matrix:	CBD oil
Received:	4 <sup>th</sup> of June 2020
Analysed	8 <sup>th</sup> to 12 <sup>th</sup> of June 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	Sample type Batch/L code		Best before		
S20-030421	CBD isolate tincture 500mg. B/N 500/01	CBD isolate oil	B/N 500/01	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 cannabinnoids were determined using LC-UV. Accuracy of the method was assessed by overspiking blank oil with a known concentration of each cannabinoid. This method does not fall under the scope of our ISO17025 accreditation.

#### 4. RESULTS

## 4.1 Cannabidiol

Sam		
Fera reference	Customer identification	CBD (%)
S20-030421	CBD isolate tincture 500mg. B/N 500/01	5.4

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)

Samp	Other cannabinoid concentrations (%)						
Fera reference	Sample identification	СВС	CBDA	CBG	CBN	тнс	THCA
S20-030421	CBD isolate tincture 500mg. B/N 500/01	0.002	<0.002	<0.002	<0.002	<0.002	<0.002

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Issuing Officer:	Mark Harrison, Analytical chemist		12/06/20
Countersigning Manager:	Rosario Romero, Senior analytical chemist	Date:	16/06/20

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