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Test Report No.: FR001224_S20030419b **Date: 19th June 2020**

Customer:	**MG Group Limited**
Analysis:	**Suite of 7 cannabinoids by HPLC-UV**
Matrix:	**CBD oil**
Received:	**4th of June 2020**
Analysed	**8th to 12th 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.

Sample information				
Fera reference	**Sample identification**	**Sample type**	**Batch/LOT code**	**Best before**
S20-030419	CBD isolate tincture 1500mg. B/N 1500/01	CBD isolate oil	B/N 1500/01	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

Sample information		
Fera reference	**Customer identification**	**CBD (%)**
S20-030419	CBD isolate tincture 1500mg. B/N 1500/01	**16.6**

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**
S20-030419	CBD isolate tincture 1500mg. B/N 1500/01	**0.003**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**

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