

# Certificate of Analysis Cannabinoids

Client: MAMAKA

Sample material: oil

Sample ID: 781930648370

Description: CBD FS 20%

Harvest date: 2021-05-21

Sample entry: 2021-05-25 at 15:30

| Abbr. | Substance                               | Result | Unit  | M.U.* |
|-------|---|--------|-------|-------|
| Sa-We | Sample weight                           | 3.834  | g     | -     |
| T-CBD | Total Cannabidiol (CBD + CBDA)          | 20.36  | w/w % | 1.018 |
| CBD   | Cannabidiol                             | 20.08  | w/w % | 1.004 |
| CBDA  | Cannabidiolic acid                      | 0.32   | w/w % | 0.024 |
| T-THC | Total Tetrahydrocannabinol (THC + THCA) | 0.16   | w/w % | 0.005 |
| D9THC | D9-Tetrahydrocannabinol                 | 0.03   | w/w % | 0.005 |
| THCA  | Tetrahydrocannabinolic acid             | ND**   | w/w % | -     |
| D8THC | D8-Tetrahydrocannabinol                 | 0.13   | w/w % | 0.005 |
| T-CBG | Total Cannabigerol (CBG + CBGA)         | 0.44   | w/w % | 0.033 |
| CBG   | Cannabigerol                            | 0.44   | w/w % | 0.033 |
| CBGA  | Cannabigerolic acid                     | ND**   | w/w % | -     |
| CBN   | Cannabinol                              | 0.27   | w/w % | 0.020 |
| CBC   | Cannabichromene                         | 0.15   | w/w % | 0.005 |
| THCV  | Tetrahydrocannabivarin                  | ND**   | w/w % | -     |
| CBDV  | Cannabidivarin                          | 0.07   | w/w % | 0.005 |
| CBDVA | Cannabidivarinic Acid                   | ND**   | w/w % | -     |

Picture of sample upon arrival:



Head of Laboratory Services:



Ing. Christian Fuczik, Chemist

Analysis finalized and reviewed:  
2021-05-27 at 11:01

Footnotes:

\*) The determined measurement uncertainty (M.U.) is always given in the same unit as the specified result.

\*\*) ND = Not Detected. the measured value was below the detection limit of 0,01 % respectively 100 mg/kg.

For the calculations of the equivalence sums, the respective acid forms were multiplied by the factor of 0.877 and 0.878, respectively, to infer the equivalent amount of the neutral forms.

Method of Analysis: HPLC-DAD (High Performance Liquid Chromatography - Diode Array Detector). All measurement methods were calibrated and controlled with certified reference materials (CRM). The measurements with HPLC were carried out strictly according to the USA certified method of the HPLC manufacturer.

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