

Certificate ID: **86551**

 Received: **9/18/20**

 Scan QR Code  
 for authenticity

**HempTech Ireland**
**Bridge Meadows, Hollywood Glen Rd**
**Donard, Co. Wicklow, WW W91Y880**
**Attn: Edward Hanbidge**

 Client Sample ID: **CP S:F 1:1**

 Lot Number: **S19F20-0001**

 Matrix: **Tincture/Infused Oil - Hemp Seed Oil**

Authorization:

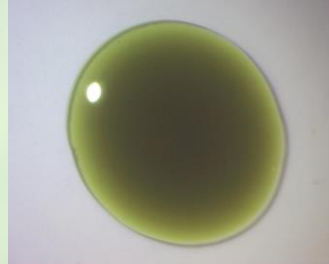
Chris Hudalla, Chief Science Officer

Signature:



Date:

9/28/2020



The data contained within this report was collected in accordance with the requirements of ISO/IEC17025:2017. I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

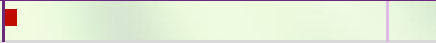

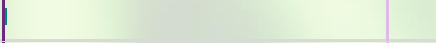
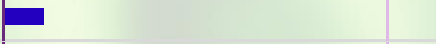
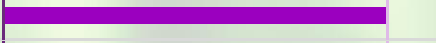
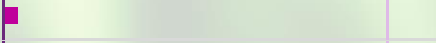
**CN: Cannabinoid Profile & Potency [WI-10-17 & WI-10-17-01]**

 Analyst: **JFD**

 Test Date: **9/25/2020**

The client sample was analyzed for plant-based cannabinoids by Liquid Chromatography (LC). The collected data was compared to data collected for certified reference standards at known concentrations.

**86551-CN**

| ID      | Weight % | Concentration (mg/mL) |   |
|---------|----------|-----------------------|---|
| D9-THC  | 0.0719   | 0.658                 |  |
| THCV    | ND       | ND                    |   |
| CBD     | 0.233    | 2.13                  |  |
| CBDV    | ND       | ND                    |   |
| CBG     | ND       | ND                    |   |
| CBC     | 0.0203   | 0.186                 |  |
| CBN     | ND       | ND                    |   |
| THCA    | 0.211    | 1.93                  |  |
| CBDA    | 1.99     | 18.2                  |  |
| CBGA    | 0.0750   | 0.686                 |  |
| D8-THC  | ND       | ND                    |   |
| exo-THC | ND       | ND                    |   |
| Total   | 2.60     | 23.8                  |   |
| Max THC | 0.257    | 2.35                  |   |
| Max CBD | 1.98     | 18.1                  |   |

**Ratio of Total CBD to THC 7.7:1**

Limit of Quantitation (LOQ) = 0.0115 wt%

Max THC (and Max CBD) are calculated values for total cannabinoids after heating, assuming complete decarboxylation of the acid to the neutral form. It is calculated based on the weight loss of the acid group during decarboxylation: Max THC = (0.877 x THCA) + THC. This calculation does not include other cannabinoid isomers (eg. D8-THC and exo-THC). ND = None detected above the limits of detection (LOD), which is one third of LOQ.

**TP: Terpenes Profile [WI-10-27]**

Analyst: CA

Test Date: 9/19/2020

Client sample analysis was performed using full evaporative technique (FET) headspace sample delivery and gas chromatographic (GC) compound separation. A combination of flame ionization detection (FID) and/or mass spectrometric (MS) detection with mass spectral confirmation against the National Institute of Standards and Technology (NIST) Mass Spectral Database, Revision 2017 were used. Chromatographic and/or mass spectral data were processed by quantitatively comparing the analytical peak areas against calibration curves prepared from certified reference standards.

**86551-TP**

| Compound            | CAS        | Conc. (wt%) | Conc. (ppm) | Qualitative Profile |
|---------------------|------------|-------------|-------------|---------------------|
| alpha-pinene        | 80-56-8    | 0.0023      | 23.0        |                     |
| camphene            | 79-92-5    | ND          | ND          |                     |
| sabinene*           | 3387-41-5  | 0.0017      | 16.8        |                     |
| beta-myrcene        | 123-35-3   | 0.0058      | 58.3        |                     |
| beta-pinene         | 127-91-3   | 0.0013      | 13.0        |                     |
| alpha-phellandrene  | 99-83-2    | ND          | ND          |                     |
| delta-3-carene      | 13466-78-9 | <RL         | <RL         |                     |
| alpha-terpinene     | 99-86-5    | <RL         | <RL         |                     |
| alpha-ocimene       | 502-99-8   | <RL         | <RL         |                     |
| D-limonene          | 138-86-3   | 0.0009      | 8.77        |                     |
| p-cymene            | 99-87-6    | <RL         | <RL         |                     |
| cis-beta-ocimene    | 3338-55-4  | 0.0029      | 29.4        |                     |
| eucalyptol          | 470-82-6   | <RL         | <RL         |                     |
| gamma-terpinene     | 99-85-4    | <RL         | <RL         |                     |
| terpinolene         | 586-62-9   | 0.0023      | 23.3        |                     |
| linalool            | 78-70-6    | ND          | ND          |                     |
| L-fenchone*         | 7787-20-4  | ND          | ND          |                     |
| isopulegol          | 89-79-2    | ND          | ND          |                     |
| menthol*            | 89-78-1    | <RL         | <RL         |                     |
| geraniol            | 106-24-1   | ND          | ND          |                     |
| beta-caryophyllene  | 87-44-5    | 0.0246      | 246         |                     |
| alpha-humulene      | 6753-98-6  | 0.0046      | 45.7        |                     |
| cis-nerolidol       | 3790-78-1  | ND          | ND          |                     |
| trans-nerolidol     | 40716-66-3 | <RL         | <RL         |                     |
| guaiol              | 489-86-1   | ND          | ND          |                     |
| caryophyllene oxide | 1139-30-6  | 0.0013      | 13.4        |                     |
| alpha-bisabolol     | 23089-26-1 | <RL         | <RL         |                     |

Total Terpene: &lt;0.1 wt%

\* Certified reference standard not available for this compound. Concentration is estimated using the response factor from alpha-pinene. ND = None Detected. RL = Reporting Limit of 5 ppm.

**END OF REPORT**