

Certificate of Analysis

PRODUCT INFORMATION

Product: Hemp Derived Broad Spectrum Distillate
Description: 1000 mg Total CBD in 1 FL OZ in Organic Hemp Seed Oil
Batch ID: WNC5880X0-33B07HV
Mfg Date: 19-Sep-19
Product Code: WNC33HV
Production ID: VS091919W33HV
Biomass Source: Vermont, USA
Cultivar: Blend



Product of Vermont USA

PRODUCT DATA

| Parameter | Test Procedure | Specification | Units | Result |
|-------------------------|--------------------------|----------------------------|-------|-------------|
| Appearance (20 - 25°C) | ASTM E1627 - 11 | Dark Amber, viscous liquid | - | PASS |
| Odor (20 - 25°C) | ASTM E1627 - 11 | Floral, earthy | - | PASS |
| Total CBD (Potency) | C5210-LCUV (Internal) | 1000 - 1180 | mg/mL | 1088 PASS |
| CBDA | C5210-LCUV (Internal) | ≤ 10 | %w/w | < 0.05 PASS |
| Delta 9-THC | C5210-LCUV (Internal) | ≤ 0.34 | %w/w | 0.14 PASS |
| THCA-A | C5210-LCUV (Internal) | ≤ 0.05 | %w/w | < 0.05 PASS |
| Minor Cannabinoids | C5938A-LCMSMS (Internal) | ≥ 0.01 | %w/w | 0.12 PASS |
| Terpenes | C5933-GCMS (Internal) | ≥ 150 | ppm | 428 PASS |
| Water Activity | D8196-18 | ≤ 0.350 | Aw | 0.396 PASS |
| Residual Solvent | C5923-GCMS (Internal) | USP 467** | ppm | PASS |
| Microbiological Screen* | MCR-TM-00006 (External) | MDH Exhibit 6 | - | PASS |
| Heavy Metals | MCR-TM-00006 (External) | MDH Exhibit 4 | ppb | PASS |
| Pesticides* | MCR-TM-00009 (External) | MDH Exhibit 5 | ppb | PASS |
| Mycotoxins* | MCR-TM-00013 (External) | MDH Exhibit 6 | ppb | PASS |

*Results based on source whole plant concentrate prior to distillation

**Class I & II solvents methanol, pentane, ethanol, acetone, 2-propanol, acetonitrile, n-hexane, tetrahydrofuran, chloroform, n-heptane, toluene, xylene (m,p).

***Specification limits are set based on internal process monitoring and represent expected levels depending on the type of material described in this document.

****MDH - Massachusetts Department of Health

PRODUCT STABILITY

Recommended Storage: 20-25 ° C (68-77° F), Refrigerate for long term storage (> 3 months).
Retest Date: 1-Sep-21 Avoid exposure to extreme hot or cold and protect from exposure to light.
NOTE: Product will grow darker in color with exposure to light.

IMPORTANT: Some data for this product are collected using NEP internal analytical testing procedures undergoing validation. Testing results will vary within reasonable procedure performance limits. Results demonstrating regulatory compliance are provided by NEP are for directional purposes in support of manufacturing processes and are not a substitute for 3rd party lab testing of this material. External testing denoted by "(External)" in procedure field is performed by MCR Labs (Framingham, MA USA); reports available upon request.

Approved by:



Date: 14-Oct-19

Name: Keith Griswold, M.S.

Title: Director of Analytics & Formulations

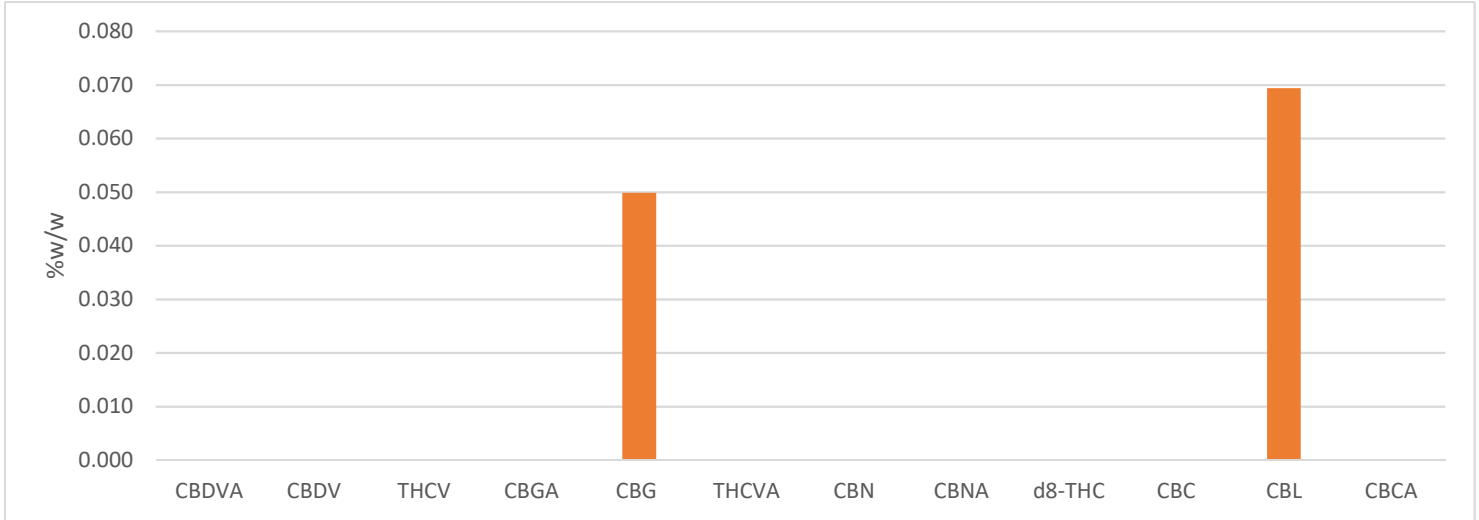
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Minor Cannabinoids

Product: Hemp Derived Broad Spectrum Distillate
Procedure ID: C5938A LCMSMS (Internal)

Product Batch ID: Vermont, USA

Total Minor Cannabinoids: **0.12** %w/w



| Analyte | Reporting Limit | %W/W | MG/G |
|---------------------------------------|-----------------|------------|--------|
| Cannabidivarinic Acid (CBDVA) | 0.005 %w/w | Non Detect | - |
| Cannabidivarin (CBDV) | 0.005 %w/w | Non Detect | - |
| Tetrahydrocannabivarin (THCV) | 0.005 %w/w | < 0.005 | < 0.05 |
| Cannabigerolic Acid (CBGA) | 0.005 %w/w | Non Detect | - |
| Cannabigerol (CBG) | 0.005 %w/w | 0.050 | 0.50 |
| Tetrahydrocannabivarinic Acid (THCVA) | 0.005 %w/w | Non Detect | - |
| Cannabinol (CBN) | 0.005 %w/w | Non Detect | - |
| Cannabinolic Acid (CBNA) | 0.005 %w/w | Non Detect | - |
| Delta 8-THC | 0.005 %w/w | Non Detect | - |
| Cannabichromene (CBC) | 0.005 %w/w | < 0.005 | < 0.05 |
| Cannabicyclol (CBL) | 0.005 %w/w | 0.069 | 0.69 |
| Cannabichromic Acid (CBCA) | 0.005 %w/w | Non Detect | - |

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Terpene Profile

Product: Hemp Derived Broad Spectrum Distillate
Procedure ID: C5933-GCMS (Internal)

Product Batch ID: Vermont, USA

Total Terpenes: 428 ppm

| Analyte | Units | Reporting Limit | Results |
|------------------------|-------|-----------------|------------|
| α -Pinene | PPM | 20 | < 20 |
| Camphene | PPM | 20 | Non Detect |
| Sabinene- | PPM | 20 | Non Detect |
| β -Pinene | PPM | 20 | < 20 |
| β -Myrcene | PPM | 20 | Non Detect |
| α -Phellandrene | PPM | 20 | Non Detect |
| Carene | PPM | 20 | Non Detect |
| α -Terpinene | PPM | 20 | Non Detect |
| D-Limonene | PPM | 20 | Non Detect |
| o-Cymene | PPM | 20 | Non Detect |
| Eucalyptol | PPM | 20 | Non Detect |
| β -Ocimene | PPM | 20 | Non Detect |
| γ Terpinene | PPM | 20 | Non Detect |
| Terpinolene | PPM | 20 | < 20 |
| Sabinene Hydrate | PPM | 20 | Non Detect |
| Fenchone | PPM | 20 | Non Detect |
| Linalool | PPM | 20 | < 20 |
| Fenchol | PPM | 20 | Non Detect |
| Isopulegol | PPM | 20 | Non Detect |
| Camphor | PPM | 20 | Non Detect |
| Isoborneol | PPM | 20 | Non Detect |
| Menthol | PPM | 20 | Non Detect |
| endo-Borneol | PPM | 20 | < 20 |
| α -Terpineol | PPM | 20 | 100 |
| γ Terpineol | PPM | 20 | Non Detect |
| Nerol | PPM | 20 | Non Detect |
| Pulegone | PPM | 20 | Non Detect |
| Geraniol | PPM | 20 | < 20 |
| Geranyl acetate | PPM | 20 | Non Detect |
| α -Cedrene | PPM | 20 | Non Detect |
| (E)- β -Famesene | PPM | 20 | Non Detect |
| Caryophyllene | PPM | 20 | 125 |
| α -Humulene | PPM | 20 | 180 |
| trans-Neradiol | PPM | 20 | Non Detect |
| cis-Neradiol | PPM | 20 | < 20 |
| Valencene | PPM | 20 | Non Detect |
| Guaiol | PPM | 20 | < 20 |
| Caryophyllene Oxide | PPM | 20 | < 20 |
| Cedrol | PPM | 20 | Non Detect |
| α -Bisabolol | PPM | 20 | 23 |

*BQL - Below quantitation limit

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Residual Solvents

Product: Hemp Derived Broad Spectrum Distillate
Procedure ID: C5923-GCMS (Internal)

Product Batch ID: Vermont, USA

| Analyte | Units | Reporting Limit | MRL (USP 467) | Result | |
|-----------------|-------|-----------------|---------------|--------|------|
| Methanol | ppm | 25 | < 3000 | <25 | PASS |
| Pentane | ppm | 25 | < 5000 | < 25 | PASS |
| Ethanol | ppm | 25 | < 5000 | 410 | PASS |
| Acetone | ppm | 25 | < 5000 | < 25 | PASS |
| Isopropanol | ppm | 25 | < 5000 | < 25 | PASS |
| Acetonitrile | ppm | 25 | < 410 | <25 | PASS |
| n-Hexane | ppm | 25 | < 290 | < 25 | PASS |
| Tetrahydrofuran | ppm | 25 | < 720 | < 25 | PASS |
| Chloroform | ppm | 25 | < 60 | < 25 | PASS |
| n-Heptane | ppm | 25 | < 5000 | < 25 | PASS |
| Toluene | ppm | 25 | < 890 | < 25 | PASS |
| m & p Xylene | ppm | 25 | < 2170 | < 25 | PASS |