

Certificate of Analysis

Cannabinoids Potency

Catalog Number:	C-939	Expiration:	10/31/2024
Lot Number:	211019	Matrix:	Hemp
Manufacture Date:	10/19/2021	Hazards:	Irritant, Flammable

<u>Analyte</u>		<u>CAS</u>	<u>Analyte Purity</u>	<u>Analytical Concentration (mg/g)</u>		
Cannabidivarinic Acid (CBDVA)	*	31932-13-5	100%	0.482	±	0.066
Cannabidivarin (CBDV)		24274-48-4	100%	0.620	±	0.050
Cannabidiolic Acid (CBDA)		1244-58-2	100%	49.6	±	3.106
Cannabigerolic Acid (CBGA)		25555-57-1	100%	1.176	±	0.103
Cannabigerol (CBG)	*	25654-31-1	100%	0.280	±	0.024
Cannabidiol (CBD)		13956-29-1	100%	17.7	±	1.310
delta-9-Tetrahydrocannabivarin (THCV)	*	31262-37-0	100%	0.000	±	0.000
delta9-Tetrahydrocannabivarinic Acid (THCVA)	*	39986-26-0	100%	0.000	±	0.000
Cannabinol (CBN)	*	521-35-7	100%	0.025	±	0.000
Cannabinolic Acid (CBNA)	*	2808-39-1	100%	0.000	±	0.000
Dronabinol (D9-THC)		1972-08-3	100%	1.67	±	0.103
delta-8-Tetrahydrocannabinol (D8-THC)	*	5957-75-5	100%	0.000	±	0.000
Cannabicyclol (CBL)	*	21366-63-2	100%	0.104	±	0.004
Cannabichromene (CBC)		20675-51-8	100%	1.29	±	0.101
Tetrahydrocannabinolic Acid (THCA)		23978-85-0	100%	0.948	±	0.081
Cannabichromenic Acid (CBCA)		185505-15-1	100%	2.70	±	0.219
Cannabicyclolic Acid (CBLA)		40524-99-0	100%	0.00	±	0.000
Total THC		0.25%		2.50		
Total CBD		6.12%		61.2		

* Note - Estimated value - RL=0.588mg/g

This certified reference material (CRM) was manufactured and certified by NSI Lab Solutions according to quality procedures meeting our accreditation requirements of ISO 17034:2016 and ISO/IEC 17025:2017. Our certificates and scopes of accreditation may be viewed at www.anab.org.

Packaging, Storage, Instructions For Use

This CRM is packaged in a 20mL VOA vial and must be stored at -10°C to -20°C. To use this CRM, allow it to reach room temperature. Open the vial and withdraw an amount appropriate for your application.

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Traceability Information

Analyte Source Materials: The highest purity analyte source materials are used in the manufacture of this standard. The actual purity is referenced above.

Method: This CRM was verified Gravimetrically and Analytically.

Balance: All analytical balances are calibrated on a semiannual basis by an ISO 17025 accredited calibration laboratory and are traceable to NIST. Traceable Calibration Certificate available upon request.

All balances are checked daily by an in-house standard operating procedure. The weights used for this daily verification are calibrated annually by an ISO 17025 accredited calibration laboratory and are certified traceable to NIST. Certificate of Calibration and Traceability available upon request.

Thermometer: All thermometers are NIST traceable through thermometers that are calibrated annually by an ISO 17025 accredited calibration laboratory.

Glassware: All glassware used in the manufacture of our standards is Class A. An in-house standard operating procedure is used to verify all glassware prior to it being placed into service. Volumetric pipetors are calibrated every four months by an ISO 17025 accredited calibration laboratory.

Intended Uses

- Calibration of analytical instruments
- Validation of analytical methods
- Preparation of working level reference materials, i.e. "check standards"
- Detection limit studies

Homogeneity

This CRM was thoroughly mixed in production and is guaranteed homogenous.

Ken Grzybowski

Ken Grzybowski, Organics Department Manager

Mark Hammersla

Mark Hammersla, President