



University of Chemistry and Technology, Prague
Metrological and Testing Laboratory UCT Prague

Testing laboratory No. 1316.2 accredited by the CAI according to the EN ISO/IEC 17025:2018



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Test certificate ML: 1087/25

print no.: ENG_439/25

Client: The Hempier Sp. z o.o.

ul. Jana Pawła II 3A
Jarosław
Poland

Sample received: 2.6.2025

Order no.: 29.05.2025

Sample description (client's): MEaningful
Nr partii: 27052025, Termin przydatności: 26.11.2026

Testing item: Oil
packaging: tube
quantity: 1 ml

Date of testing: 2.6.2025 - 16.6.2025

Location of testing: facilities of the MZL UTC, Technická 1903/3, 166 28 Prague 6 - Dejvice

Testing methods used: KM 21: LC-MS

TEST RESULTS:

CANNABINOIDS

Analyte	Result*	Expanded uncertainty	Unit	Testing method	Notice
CBD (cannabidiol)	2.47	0.12	% w/w	KM 21	
CBDA (cannabidiolic acid)	0.013	0.002	% w/w	KM 21	
trans- Δ^9 -THC (trans-delta-9-tetrahydrocannabinol)	0.0023	0.0003	% w/w	KM 21	
cis- Δ^9 -THC (cis-delta-9-tetrahydrocannabinol)	0.0017	0.0002	% w/w	KM 21	
exo-THC (exo-tetrahydrocannabinol)	<0.0005	-	% w/w	KM 21	
Δ^8 -THC (delta-8-tetrahydrocannabinol)	<0.0005	-	% w/w	KM 21	
Δ^9 -THCA-A (delta-9-tetrahydrocannabinolic acid-A)	<0.00025	-	% w/w	KM 21	
Δ^8 -THCA-A (delta8-tetrahydrocannabinolic acid A)	<0.0005	-	% w/w	KM 21	
Δ^9 -THCV (delta-9-tetrahydrocannabivarin)	0.00064	0.0002	% w/w	KM 21	
Δ^8 -THCV (delta-8-tetrahydrocannabivarin)	<0.0005	-	% w/w	KM 21	
THCVA (tetrahydrocannabivarinic acid)	<0.00025	-	% w/w	KM 21	
CBN (cannabinol)	0.016	0.002	% w/w	KM 21	
CBNA (cannabinolic acid)	<0.00025	-	% w/w	KM 21	
CBG (cannabigerol)	0.014	0.002	% w/w	KM 21	
CBGA (cannabigerolinic acid)	<0.00025	-	% w/w	KM 21	
CBDV (cannabidivarin)	0.0075	0.0009	% w/w	KM 21	
CBDVA (cannabidivarinic acid)	<0.00025	-	% w/w	KM 21	
CBC (cannabichromene)	0.0024	0.0003	% w/w	KM 21	
CBCA (cannabichromenic acid)	<0.00025	-	% w/w	KM 21	
CBL (cannabicyclo)	<0.0005	-	% w/w	KM 21	
CBLA (cannabicyclololic acid)	<0.00025	-	% w/w	KM 21	
CBT (cannabicitran)	<0.0005	-	% w/w	KM 21	
CBE (cannabielsoin)	0.052	0.008	% w/w	KM 21	
CBDP (cannabidiphorol)	0.0032	0.0004	% w/w	KM 21	
Δ^9 -THCP (delta-9-tetrahydrocannabiphorol)	<0.0005	-	% w/w	KM 21	
Δ^8 -THCP (delta8-tetrahydrocannabiphorol)	<0.0005	-	% w/w	KM 21	
CBDB (cannabidibutol)	0.0014	0.0002	% w/w	KM 21	
Δ^9 -THCB (delta-9-tetrahydrocannabutol)	<0.0005	-	% w/w	KM 21	
CBDH (cannabidihexol)	<0.0005	-	% w/w	KM 21	

Analyte	Result*	Expanded uncertainty	Unit	Testing method	Notice
Δ^9 -THCH (delta-9-tetrahydrocannabinol)	<0.0005	-	% w/w	KM 21	
CBCV (cannabichromevarine)	0.00062	0.00012	% w/w	KM 21	
CBCVA (cannabichromevarinic acid)	<0.0005	-	% w/w	KM 21	
CBCO (cannabichromeorcin)	<0.0005	-	% w/w	KM 21	
CBCOA (cannabichromeorcin acid)	<0.0005	-	% w/w	KM 21	
CBGAQ (cannabigerol quinone acid)	<0.0005	-	% w/w	KM 21	
CBND (cannabinodiol)	0.0027	0.0004	% w/w	KM 21	
CBV (cannabivarine)	<0.0005	-	% w/w	KM 21	
CBVA (cannabivarinic acid)	<0.0005	-	% w/w	KM 21	
CBGV (cannabigerovarine)	<0.0005	-	% w/w	KM 21	
CBGVA (cannabigerovarinic acid)	<0.0005	-	% w/w	KM 21	
(R)-HHC (9(R)-hexahydrocannabinol)	<0.0005	-	% w/w	KM 21	
(S)-HHC (9(S)-hexahydrocannabinol)	<0.0005	-	% w/w	KM 21	
CBGO (cannabigerorcine)	<0.0005	-	% w/w	KM 21	
CBGOA (cannabigerorcinic acid)	<0.0005	-	% w/w	KM 21	
CBGM (cannabigerol monomethyl ether)	<0.0005	-	% w/w	KM 21	
CBNM (cannabinol monomethyl ether)	<0.0005	-	% w/w	KM 21	
CBGB (cannabigerobutol)	<0.0005	-	% w/w	KM 21	
Δ^9 -THC equivalents (sum of Δ^9 -THC + Δ^9 -THCA·A x 0.877)	0.0040	0.0006	% w/w	KM 21	
CBD equivalents (sum of CBD + CBDA x 0.877)	2.48	0.12	% w/w	KM 21	
CBN equivalents (sum of CBN + CBNA x 0.876)	0.016	0.002	% w/w	KM 21	
CBG equivalents (sum of CBG + CBGA x 0.878)	0.014	0.0017	% w/w	KM 21	
CBDV equivalents (sum of CBDV + CBDVA x 0.867)	0.0075	0.0009	% w/w	KM 21	
CBC equivalents (sum of CBC + CBCA x 0.877)	0.0024	0.0003	% w/w	KM 21	
THCV equivalents (sum of THCV + THCVA x 0.867)	0.00064	0.0002	% w/w	KM 21	
CBL equivalents (sum of CBL + CBLA x 0.877)	<0.0005	-	% w/w	KM 21	
(R)-HHCP (9(R)-hexahydrocannabiphorol)	<0.0005	-	% w/w	KM 21	
(S)-HHCP (9(S)-hexahydrocannabiphorol)	<0.0005	-	% w/w	KM 21	
(R)-HHCPA (9(R)-hexahydrocannabiphorol acetate)	<0.0005	-	% w/w	KM 21	
(S)-HHCPA (9(S)-hexahydrocannabiphorol acetate)	<0.0005	-	% w/w	KM 21	
(R)-HHCO (9(R)-hexahydrocannabinol acetate)	<0.0005	-	% w/w	KM 21	
(S)-HHCO (9(S)-hexahydrocannabinol acetate)	<0.0005	-	% w/w	KM 21	
(R)-H4CBD (1(R)-tetrahydrocannabidiol)	<0.0005	-	% w/w	KM 21	
(S)-H4CBD (1(S)-tetrahydrocannabidiol)	<0.0005	-	% w/w	KM 21	
(R)-HHCH (9(R)-hexahydrocannabinol)	<0.0005	-	% w/w	KM 21	
(S)-HHCH (9(S)-hexahydrocannabinol)	<0.0005	-	% w/w	KM 21	
9-OH-HHC (($\pm$)-9 α -hydroxy-hexahydrocannabinol)	<0.0005	-	% w/w	KM 21	

* the sign "<" indicates that concentration is lower than this value, i.e. below the limit of quantitation (LOQ)

Expanded uncertainty was calculated using coverage factor $k = 2$ corresponding to a coverage probability of approximately 95%.

Uncertainty was calculated and stated according to the ILAC G17:01(2021) and Kvalimetric 11 (EURACHEM/CITAC 4). Uncertainty of sampling is not covered.

The results given herein apply only to the sample as received. This certificate shall not be reproduced except in full, without written approval of the Laboratory. The certificate does not substitute any other legal document. Laboratory is not responsible for information supplied by customer, if such information can affect the validity of results.

Appendix: No.1 is an integral part of the Test certificate

Date of issue: 16.6.2025

prof. Jana Hajslova, Ph.D. , Head of Laboratory

The end of Certificate

Appendix No. 1 to the Test certificate**ML 1087/25****Converted test results**

Testing methods:

UHPLC-HRMS; re-calculation

***Test results converted to product weight:**

Analyte	*Result	*Expanded uncertainty	*Unit	Testing method	Notice
CBD (cannabidiol)	697	105	mg/28.2 g of product	KM21	x
CBDA (cannabidiolic acid)	3.5	0.9	mg/28.2 g of product	KM21	x
CBD equivalents (sum of CBD + CBDA x 0.877)	700	105	mg/28.2 g of product	KM21	x
trans-Δ9-THC (trans-delta-9-tetrahydrocannabinol)	0.65	0.16	mg/28.2 g of product	KM21	x
cis-Δ9-THC (cis-delta-9-tetrahydrocannabinol)	0.48	0.12	mg/28.2 g of product	KM21	x
Δ9-THC equivalents (sum of Δ9-THC + Δ9-THCA-A x 0.877)	1.1	0.3	mg/28.2 g of product	KM21	x
Δ9-THCV (delta-9-tetrahydrocannabivarin)	0.18	0.06	mg/28.2 g of product	KM21	x
CBN (cannabinol)	4.5	1.1	mg/28.2 g of product	KM21	x
CBG (cannabigerol)	3.9	1.0	mg/28.2 g of product	KM21	x
CBDV (cannabidivarin)	2.1	0.5	mg/28.2 g of product	KM21	x
CBC (cannabichromene)	0.67	0.17	mg/28.2 g of product	KM21	x
CBE (cannabielsoin)	15	4	mg/28.2 g of product	KM21	x
CBDP (cannabidiphorol)	0.91	0.23	mg/28.2 g of product	KM21	x
CBDB (cannabidibutol)	0.41	0.10	mg/28.2 g of product	KM21	x
CBCV (cannabichromevarin)	0.17	0.06	mg/28.2 g of product	KM21	x
CBND (cannabinodiol)	0.75	0.19	mg/28.2 g of product	KM21	x

Specification used for the assessment of test results:**Notice:**

^{x)} Re-calculation of results from % weight to mg/28.2 g of product was made as required by customer

Expanded uncertainty was calculated using coverage factor $k = 2$ corresponding to a coverage probability of approximately 95%. Uncertainty was calculated and stated according to the documents ILAC G17:01(2021) and Kvalimetric 11 (issued as EURACHEM/CITAC 4). Uncertainty of sampling is not covered.

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End of the Appendix