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CERTIFICATE OF ANALYSIS

ADVANCED CANNABIS ANALYTICS
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H4CBD Hash 40

Product description: /
Batch number: na
Sample type: biomass
SFP id: V13835
Sample received date: 2025-11-04
Remarks: /

Analysis ID: A14993-3

Method id:
GCMS_GC_FID_general_with_HPLC_v1.0
Date of aquisition: 2025-11-04
Date of processing: 2025-11-05
Date of approval: 2025-12-12
Remarks: /

Customer

Canna b2b, s.r.o.
Žižkova 708
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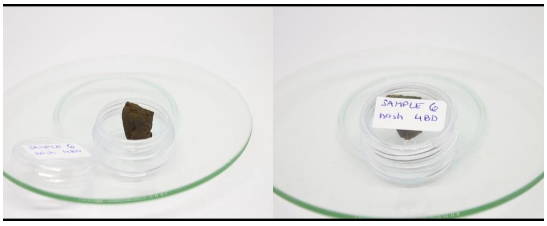
Czech Republic



Assay of Main/Natural Cannabinoids

Short	Substance name	Assay %	M.U.
CBG	Cannabigerol	0.09	0.04
CBC	Cannabichromene	0.25	0.07
CBGV	Cannabigerivarin	ND	ND
CBDV	Cannabidivarin	0.03	0.01
CBCV	Cannabichromevarin	ND	ND
CBN	Cannabinol	0.03	0.01
CBD	Cannabidiol	2.92	0.44
Δ8-THC	Δ8-tetrahydrocannabinol	ND	ND
Δ9-THC	Δ9-tetrahydrocannabinol	0.14	0.06
CBV	Cannabivarin	ND	ND
CBL	Cannabicyclol	ND	ND
CBE	Cannabielsoin	0.06	0.03
Δ8-THCV	Δ8-tetrahydrocannabivarin	ND	ND
Δ9-THCV	Δ9-tetrahydrocannabivarin	ND	ND
THCA	Δ9-Tetrahydrocannabinolic acid	0.04	0.01
CBDA	Cannabidiolic acid	3.84	0.58
CBGA	Cannabigerolic acid	0.28	0.08
CBDVA	Cannabidivarinic acid	0.05	0.02
THCVA	Δ9-Tetrahydrocannabivarinic acid	ND	ND
CBCA	Cannabichromenic acid	0.20	0.08
CBT	Cannabicitran	0.04	0.02
CBDB	Cannabidibutol	ND	ND

Method of Analysis: GC-FID (Gas Chromatography with Flame Ionization Detection) coupled with GC-MS (Gas Chromatography-Mass Spectrometry). The determined measurement uncertainty (M. U.) is always given in the same unit as specified result. LOQ = Values bellow quantification limit of 0.02 % (respectively 200 mg/kg). ND = Not Detected - bellow detection limit (lower than 0.01 % respectively 100 mg/kg). Acid forms are determined using HPLC method with DAD detector with LOQ = Values bellow quantification limit of 0.02 % (respectively 200 mg/kg). ND = Not Detected - bellow detection limit (lower than 0.01 % respectively 100 mg/kg).

Assay of semisynthetic and synthetically derived cannabinoids

Short	Substance name	Assay %	M.U.
iso-THC	Δ8-iso-Tetrahydrocannabinol	ND	ND
S-HHC	9S-Hexahydrocannabinol	ND	ND
R-HHC	9R-Hexahydrocannabinol	ND	ND
R-HHCP	9R-Hexahydrocannabiphorol	ND	ND
S-HHCP	9S-Hexahydrocannabiphorol	ND	ND
d9-THCP	Trans-Δ9-tetrahydrocannabiphorol	ND	ND
CBDP	cannabidiphorol	ND	ND
RH4CBD	R-Tetrahydrocannibidiol	19.58	2.55
SH4CBD	S-Tetrahydrocannibidiol	6.31	0.82
d8-THCP	Trans-Δ8-Tetrahydrocannabiphorol	ND	ND
CBND	Cannabinodiol	ND	ND
ciso-HHC	cis-iso-Hexahydrocannabinol	ND	ND
tiso-HHC	trans-iso-Hexahydrocannabinol	ND	ND
H2CBD	8,9-Dihydrocannabidiol	0.28	0.08
d9-THCB	Δ9-Tetrahydrocannabibutol	ND	ND
9R-HHCAc	9R-Hexahydrocannabinol Acetate	ND	ND
Δ10-THC	Δ10-Tetrahydrocannabinol	ND	ND
CBGAc	Cannabigerol acetate	ND	ND
S-HHCAc	9S-Hexahydrocannabinol acetate	ND	ND
CBGmAc	Cannabigerol monoacetate isomer	ND	ND
CBNAc	Cannabinol acetate	ND	ND
Δ9-THCC8	Δ9-THC-C8	ND	ND
Δ8-THCC8	Δ8-THC-C8	ND	ND
CBNP	Cannabiphorol	ND	ND
Δ3-THC	9(R)-Δ6a,10a-THC	ND	ND
Δ7-THC	9(S)-Δ7-THC	ND	ND
Δ9-THCH	Δ9-THCH	ND	ND
Δ8-THCH	Δ8-THCH	ND	ND
Δ9-THCO	Δ9-THC Acetate	ND	ND
Δ8-THCO	Δ8-THC Acetate	ND	ND
Δ9-THCPO	Δ9-THCP Acetate	ND	ND
Δ8-THCPO	Δ8-THCP Acetate	ND	ND
Δ8-THCHO	Δ8-THCH Acetate	ND	ND
Δ9-THCVO	Tetrahydrocannabivarin Acetate	ND	ND
Δ8-THCVO	Δ8-Tetrahydrocannabivarin Acetate	ND	ND
Δ8-THCBO	Δ9-THCB Acetate	ND	ND
S-HHCC8	9(S)-Hexahydrocannabinol-C8	ND	ND
R-HHCC8	9(R)-Hexahydrocannabinol-C8	ND	ND
R-HHCH	9(R)-Hexahydrocannabihexol	ND	ND
S-HHCH	9(S)-Hexahydrocannabihexol	ND	ND
R-HHCB	9(R)-Hexahydrocannabutol	ND	ND
S-HHCB	9(S)-Hexahydrocannabihexol	ND	ND
R-HHCV	9(R)-Hexahydrocannabivarin	ND	ND
S-HHCV	9(S)-Hexahydrocannabivarin	ND	ND
R-HHCPAc	9(R)-Hexahydrocannabiphorol Acetate	ND	ND
S-HHCPAc	9(S)-Hexahydrocannabiphorol Acetate	ND	ND
10H-RHHC	10(S)-hydroxy-9(R)-Hexahydrocannabinol	ND	ND
OH-HHCP	10-hydroxy-Hexahydrocannabiphorol	ND	ND
MCO-THC	Methyl Carbonate Tetrahydrocannabinol	ND	ND

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Screening for Spice type compounds and other synthetic cannabinoids

Short	Substance name	Assay %	M.U.
JWH018	JWH 018 CAS:209414-07-3	ND	ND
JWH073	JWH 073 CAS:208987-48-8	ND	ND
JWH122	JWH 122 CAS:619294-47-2	ND	ND
JWH210	JWH 210 CAS:824959-81-1	ND	ND
JWH250	JWH 250 CAS:864445-43-2	ND	ND
AM2201	AM2201 CAS:335161-24-5	ND	ND
AM694	AM694 CAS:335161-03-0	ND	ND
AM1248	AM1248 CAS:335160-66-2	ND	ND
HU210	HU-210 CAS:112830-95-2	ND	ND
HU211	HU-211 CAS:112924-45-5	ND	ND
CP47497	(±)-CP 47,497 CAS:70434-82-1	ND	ND
CP55940	(±)-CP 55,940 CAS:83003-12-7	ND	ND
UR144	UR-144 CAS:1199943-44-6	ND	ND
XLR11	XLR11 CAS:1364933-54-9	ND	ND
AKB48	APINACA CAS:1345973-53-6	ND	ND
5FAKB48	5-fluoro AKB48 CAS:1400742-13-3	ND	ND
PB22	PB-22 CAS:1400742-17-7	ND	ND
5FPB22	5-fluoro PB-22 CAS:1400742-41-7	ND	ND
FUB144	FUB-144 CAS:2185863-15-2	ND	ND
FUBAMB	MMB-FUBINACA CAS:1971007-92-7	ND	ND
ABFUB	AB-FUBINACA CAS:1185282-01-2	ND	ND
ABCHMI	AB-CHMINACA CAS:1185887-21-1	ND	ND
ADBFUB	ADB-FUBINACA CAS:1445583-51-6	ND	ND
ADBPINA	ADB-PINACA CAS:1633766-73-0	ND	ND
MABCHMI	MAB-CHMINACA CAS:1863065-92-2	ND	ND
MDMBCHMI	MDMB-CHMICA CAS:1971007-95-0	ND	ND
5FADB	(R)-5-fluoro ADB CAS:1838134-16-9	ND	ND
CUMYPINA	5-fluoro CUMYL-PINACA CAS:1400742-16-6	ND	ND
AFB48	AKB48 N-(4-fluorobenzyl) analog CAS:2180933-90-6	ND	ND
5FAMB	5-fluoro AMB CAS:1801552-03-3	ND	ND
5FABICA	5-fluoro ABICA CAS:1801338-26-0	ND	ND
5FSDB006	5-fluoro SDB-006 CAS:1776086-02-2	ND	ND
ADTHPIN	ATHPINACA isomer 1 CAS:1400742-48-4	ND	ND
ADBCHMI	ADB-CHMICA CAS:2221100-70-3	ND	ND
SGT67	5-fluoro CUMYL-PICA CAS:1400742-18-8	ND	ND
CUMPINA	CUMYL-PINACA CAS:1400742-15-5	ND	ND
CUMP7AIC	5-fluoro CUMYL-P7AICA CAS:2171492-36-5	ND	ND
CUMPICA	CUMYL-PICA CAS:1400742-32-6	ND	ND
SDB006	SDB-006 CAS:695213-59-3	ND	ND
ABPINA	AB-PINACA CAS:1445752-09-9	ND	ND
SGT78	4-cyano CUMYL-BUTINACA CAS:1631074-54-8	ND	ND
5FMD2201	5-fluoro MDMB-PICA CAS:1971007-88-1	ND	ND
4FMDBIN	4-fluoro MDMB-BUTINACA CAS:2390036-46-9	ND	ND
MD4enPIN	MDMB-4en-PINACA CAS:2504100-70-1	ND	ND
4FMDBIC	4-fluoro MDMB-BUTICA CAS:2682867-53-2	ND	ND
CUMPEGA	CUMYL-PeGACLONE CAS:2160555-55-3	ND	ND
ADBBUTI	ADB-BUTINACA CAS:2682867-55-4	ND	ND
5FCUMPeG	5-fluoro CUMYL-PeGACLONE CAS:2377403-49-9	ND	ND
ADB4PIN	ADB-4en-PINACA CAS:2666932-44-9	ND	ND
5FMBPICA	5-fluoro EDMB-PICA CAS:2666934-54-7	ND	ND
5BrAKB48	5-bromo APINACA CAS:2160555-51-9	ND	ND

Short	Substance name	Assay %	M.U.
5FEPIC	5-fluoro EMB-PICA CAS:2648861-83-8	ND	ND
MD5BrIN	MDMB-5Br-INACA CAS:MD5BrIN	ND	ND
ADB5BrIN	ADB-5Br-INACA CAS:ADB5BrIN	ND	ND
EADBFU	5,3-ADB-4en-PFUPPYCA CAS:EADBFU	ND	ND
FUACADB	ADB-FUBIATA CAS:2938025-73-9	ND	ND
AP5BIN	ADB-5'Br-PINACA CAS:AP5BIN	ND	ND
SGT152	CUMYL-NBMINACA CAS:1631074-60-6	ND	ND
ADBHEX	ADB-HEXINACA CAS:ADBHEX	ND	ND
RCS4	RCS-4 CAS:1345966-78-0	ND	ND
FAP7A	5-fluoro 7-APAICA CAS:2682867-58-7	ND	ND
BZHEX	MDA 19 CAS:1048973-47-2	ND	ND
BZPOX	BZO-POXIZID CAS:1048973-64-3	ND	ND
CUCHM	CUMYL-CH-MeGACLONE CAS:2813950-07-9	ND	ND
7APICA	AP7AICA CAS:2366269-62-5	ND	ND
CMP7CA	CUMYL-P7AICA CAS:2366268-31-5	ND	ND
EDMBPIN	EDMB-PINACA CAS:2666934-55-8	ND	ND
MDMBPIN	MDMB-PINACA CAS:1971007-99-4	ND	ND
MDMBBUTI	MDMB-BUTINACA CAS:3039541-81-3	ND	ND
MDMB5INA	MDMB-5Me-INACA	ND	ND
EDMB4PIN	EDMB-4en-PINACA CAS:EDMB4PIN	ND	ND
MDMBrPIN	MDMB-5'Br-4en-PINACA CAS:MDMBrPIN	ND	ND

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This certificate was reviewed by Ivan Plantan PhD, quality control on 2025-12-12.

This certificate was approved by Tina Pungartink, director on 2025-12-12.