

PharmLabs San Diego Certificate of Analysis

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 ISO/IEC 17025:2017 Certification L17-427-1 | Accreditation #85368



Sample **GMO Cookies HHC 2mL Disposable**

Sample ID	SD230203-057 (61055)	Matrix	Concentrate (Inhalable Cannabis Good)
Tested for	Arvida Labs	Received	Feb 02, 2023
Sampled	-	Reported	Feb 13, 2023
Analyses executed	CANX, RES, MIBIG, MTO, PES, HME, FVI	Unit Volume (mL)	2.0
		Density (g/mL)	1.0

Laboratory note: The estimated concentration of the unknown peak in the sample is 1.13%. Currently PharmLabs laboratory can not confirm an unidentified peak in your chromatogram due to interference (only with highly concentrated D8 products) from which we believe to be either (+)-8-THC or d9-THC. At this time there are no reference standards available for (+)-8-THC. (+)-8-THC is a different compound from the main (-)-8-THC cannabinoid and, therefore, these two compounds may have different efficacies. Using the most advanced instruments and techniques available, the separation of (+)-8-THC and d9-THC is problematic for the scientific community as a whole. PharmLabs believes the unidentified peak to be a combination of (+)-8-THC and d9-THC with the majority, if not all, of the concentration being (+)-8-THC. Total d8-THC is estimated to be 2.43%.

CANX - Cannabinoids Analysis

Analyzed Feb 13, 2023 | Instrument HPLC
 Measurement Uncertainty at 95% confidence 7.806%

Analyte	LOD mg/g	LOQ mg/g	Result %	Result mg/mL	Result mg/Unit	Sample photography
11-Hydroxy-Δ8-Tetrahydrocannabinol (11-Hyd-Δ8-THCV)	0.013	0.041	ND	ND	ND	
Cannabidiol (CBDO)	0.002	0.007	ND	ND	ND	
Abnormal Cannabidiol (a-CBDO)	0.01	0.031	ND	ND	ND	
(+/-)-9B-Hydroxy-Hexahydrocannabinol (9b-HHC)	0.012	0.036	ND	ND	ND	
11-Hydroxy-Δ8-Tetrahydrocannabinol (11-Hyd-Δ8-THC)	0.007	0.021	ND	ND	ND	
Cannabidiolic Acid (CBDA)	0.001	0.16	ND	ND	ND	
Cannabigerol Acid (CBGA)	0.001	0.16	ND	ND	ND	
Cannabigerol (CBG)	0.001	0.16	ND	ND	ND	
Cannabidiol (CBD)	0.001	0.16	ND	ND	ND	
1(S)-THD (s-THD)	0.013	0.041	ND	ND	ND	
1(R)-THD (r-THD)	0.025	0.075	ND	ND	ND	
Tetrahydrocannabinol (THCV)	0.001	0.16	ND	ND	ND	
Δ8-tetrahydrocannabinol (Δ8-THCV)	0.021	0.064	ND	ND	ND	
Cannabidihexol (CBDH)	0.005	0.16	ND	ND	ND	
Tetrahydrocannabinol (Δ9-THCB)	0.013	0.038	ND	ND	ND	
Cannabinol (CBN)	0.001	0.16	0.70	7.02	14.05	
Cannabidiphoral (CBDP)	0.015	0.047	ND	ND	ND	
exo-THC (exo-THC)	0.005	0.16	ND	ND	ND	
Tetrahydrocannabinol (Δ9-THC)	0.003	0.16	UI	UI	UI	
Δ8-tetrahydrocannabinol (Δ8-THC)	0.004	0.16	2.43	24.30	48.60	
(6aR,9S)-Δ10-Tetrahydrocannabinol ((6aR,9S)-Δ10)	0.015	0.16	ND	ND	ND	
Hexahydrocannabinol (S Isomer) (9s-HHC)	0.017	0.16	20.29	202.92	405.85	
(6aR,9R)-Δ10-Tetrahydrocannabinol ((6aR,9R)-Δ10)	0.007	0.16	ND	ND	ND	
Hexahydrocannabinol (R Isomer) (9r-HHC)	0.016	0.16	76.57	765.71	1531.43	
Tetrahydrocannabinolic Acid (THCA)	0.001	0.16	ND	ND	ND	
Δ9-Tetrahydrocannabinol (Δ9-THCH)	0.024	0.071	ND	ND	ND	
Cannabinol Acetate (CBNO)	0.014	0.043	ND	ND	ND	
Δ9-Tetrahydrocannabinol (Δ9-THCP)	0.017	0.16	ND	ND	ND	
Δ8-Tetrahydrocannabinol (Δ8-THCP)	0.041	0.16	ND	ND	ND	
Cannabicitran (CBT)	0.005	0.16	ND	ND	ND	
Δ8-THC-O-acetate (Δ8-THCO)	0.076	0.16	ND	ND	ND	
9(S)-HHCP (s-HHCP)	0.031	0.094	ND	ND	ND	
Δ9-THC-O-acetate (Δ9-THCO)	0.066	0.16	ND	ND	ND	
9(R)-HHCP (r-HHCP)	0.026	0.079	ND	ND	ND	
9(S)-HHC-O-acetate (s-HHCO)	0.005	0.16	ND	ND	ND	
3-octyl-Δ8-Tetrahydrocannabinol (Δ8-THC-C8)	0.067	0.204	ND	ND	ND	
Total THC (THCa * 0.877 + Δ9THC)			ND	ND	ND	
Total THC + Δ8THC + Δ10THC (THCa * 0.877 + Δ9THC + Δ8THC + Δ10THC)			2.43	24.30	48.60	
Total CBD (CBDA * 0.877 + CBD)			ND	ND	ND	
Total CBG (CBGA * 0.877 + CBG)			ND	ND	ND	
Total HHC (9r-HHC + 9s-HHC)			96.86	968.64	1937.27	
Total Cannabinoids			100.00	999.96	1999.92	



HME - Heavy Metals Detection Analysis

Analyzed Feb 09, 2023 | Instrument ICP/MSMS | Method SOP-005

Analyte	LOD ug/g	LOQ ug/g	Result ug/g	Limit ug/g	Analyte	LOD ug/g	LOQ ug/g	Result ug/g	Limit ug/g
Arsenic (As)	0.0002	0.0005	<LOQ	0.2	Cadmium (Cd)	3.0e-05	0.0005	ND	0.2
Mercury (Hg)	1.0e-05	0.0001	ND	0.1	Lead (Pb)	1.0e-05	0.00125	0.02	0.5

UI Not Identified
 ND Not Detected
 N/A Not Applicable
 NT Not Reported
 LOD Limit of Detection
 LOQ Limit of Quantification
 <LOQ Detected
 >ULOL Above upper limit of linearity
 CFU/g Colony Forming Units per 1 gram
 TNTC Too Numerous to Count



Scan the QR code to verify authenticity.

Authorized Signature

Brandon Starr

Brandon Starr, Lab Manager
 Mon, 13 Feb 2023 11:09:22 -0800

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MIBIG - Microbial Testing Analysis

Analyzed Feb 06, 2023 | Instrument qPCR and/or Plating | Method SOP-007

Analyte	Result CFU/g	Limit	Analyte	Result CFU/g	Limit
Shiga toxin-producing Escherichia Coli	ND	ND per 1 gram	Salmonella spp.	ND	ND per 1 gram
Aspergillus fumigatus	ND	ND per 1 gram	Aspergillus flavus	ND	ND per 1 gram
Aspergillus niger	ND	ND per 1 gram	Aspergillus terreus	ND	ND per 1 gram

MTO - Mycotoxin Testing Analysis

Analyzed Feb 06, 2023 | Instrument LC/MSMS | Method SOP-004

Analyte	LOD ug/kg	LOG ug/kg	Result ug/kg (ppb)	Limit ug/kg	Analyte	LOD ug/kg	LOG ug/kg	Result ug/kg (ppb)	Limit ug/kg
Ochratoxin A	5.0	20.0	ND	20	Aflatoxin B1	2.5	5.0	ND	-
Aflatoxin B2	2.5	5.0	ND	-	Aflatoxin G1	2.5	5.0	ND	-
Aflatoxin G2	2.5	5.0	ND	-	Total Aflatoxins	10.0	20.0	ND	20

UI Not Identified
 ND Not Detected
 N/A Not Applicable
 NT Not Reported
 LOD Limit of Detection
 LOQ Limit of Quantification
 <LOQ Detected
 >ULOL Above upper limit of linearity
 CFU/g Colony Forming Units per 1 gram
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PES - Pesticides Screening Analysis

Analyzed Feb 06, 2023 | Instrument LC/MSMS GC/MSMS | Method SOP-003

Analyte	LOD ug/g	LOQ ug/g	Result ug/g	Limit ug/g	Analyte	LOD ug/g	LOQ ug/g	Result ug/g	Limit ug/g
Aldicarb	0.0078	0.02	ND	0.0078	Carbofuran	0.01	0.02	ND	0.01
Dimethoate	0.01	0.02	ND	0.01	Etofenprox	0.02	0.1	ND	0.02
Fenoxycarb	0.01	0.02	ND	0.01	Thiachloprid	0.01	0.02	ND	0.01
Daminozide	0.01	0.03	ND	0.01	Dichlorvos	0.02	0.07	ND	0.02
Imazail	0.02	0.07	ND	0.02	Methiocarb	0.01	0.02	ND	0.01
Spiroxamine	0.01	0.02	ND	0.01	Coumaphos	0.01	0.02	ND	0.01
Fipronil	0.01	0.1	ND	0.01	Paclbutrazol	0.01	0.03	ND	0.01
Chlorpyrifos	0.01	0.04	ND	0.01	Ethoprophos (Prophos)	0.01	0.02	ND	0.01
Baygon (Propoxur)	0.01	0.02	ND	0.01	Chlordane	0.04	0.1	ND	0.04
Chlorfenapyr	0.03	0.1	ND	0.03	Methyl Parathion	0.02	0.1	ND	0.02
Mevinphos	0.05	0.08	ND	0.03	Abamectin	0.03	0.08	ND	0.1
Acephate	0.02	0.05	ND	0.1	Acetamiprid	0.01	0.05	ND	0.1
Azoxystrobin	0.01	0.02	ND	0.1	Bifenazate	0.01	0.05	ND	0.1
Bifenthrin	0.02	0.35	ND	3	Boscalid	0.01	0.03	ND	0.1
Carbaryl	0.01	0.02	ND	0.5	Chlorantraniliprole	0.01	0.04	ND	10
Clofentezine	0.01	0.03	ND	0.1	Diazinon	0.01	0.02	ND	0.1
Dimethomorph	0.02	0.06	ND	2	Etoxazole	0.01	0.05	ND	0.1
Fenpyroximate	0.02	0.1	ND	0.1	Fonicamid	0.01	0.02	ND	0.1
Fludioxonil	0.01	0.05	ND	0.1	Hexythiazox	0.01	0.03	ND	0.1
Imidacloprid	0.01	0.05	ND	5	Kresoxim-methyl	0.01	0.03	ND	0.1
Malathion	0.01	0.05	ND	0.5	Metalaxyl	0.01	0.02	ND	2
Methomyl	0.02	0.05	ND	1	Myclobutanil	0.02	0.07	ND	0.1
Naled	0.01	0.02	ND	0.1	Oxamyl	0.01	0.02	ND	0.5
Permethrin	0.01	0.02	ND	0.5	Phosmet	0.01	0.02	ND	0.1
Piperonyl Butoxide	0.02	0.06	ND	3	Propiconazole	0.03	0.08	ND	0.1
Prallethrin	0.02	0.05	ND	0.1	Pyrethrin	0.05	0.41	ND	0.5
Pyridaben	0.02	0.07	ND	0.1	Spinosad A	0.01	0.05	ND	0.1
Spinosad D	0.01	0.05	ND	0.1	Spiromesifen	0.02	0.06	ND	0.1
Spirotetramat	0.01	0.02	ND	0.1	Tebuconazole	0.01	0.02	ND	0.1
Thiamethoxam	0.01	0.02	ND	5	Trifloxystrobin	0.01	0.02	ND	0.1
Acequinocyl	0.02	0.09	ND	0.1	Captan	0.01	0.02	ND	0.7
Cypermethrin	0.02	0.1	ND	1	Cyfluthrin	0.04	0.1	ND	2
Fenhexamid	0.02	0.07	ND	0.1	Spinetoram J.L	0.02	0.07	ND	0.1
Pentachloronitrobenzene	0.01	0.1	ND	0.1					

RES - Residual Solvents Testing Analysis

Analyzed Feb 08, 2023 | Instrument GC/FID with Headspace Analyzer | Method SOP-006

Analyte	LOD ug/g	LOQ ug/g	Result ug/g	Limit ug/g	Analyte	LOD ug/g	LOQ ug/g	Result ug/g	Limit ug/g
Propane (Prop)	0.4	40.0	ND	5000.0	Butane (But)	0.4	40.0	ND	5000.0
Methanol (Metha)	0.4	40.0	ND	3000.0	Ethylene Oxide (EthOx)	0.4	0.8	ND	1.0
Pentane (Pen)	0.4	40.0	ND	5000.0	Ethanol (Ethan)	0.4	40.0	ND	5000.0
Ethyl Ether (EthEt)	0.4	40.0	ND	5000.0	Acetone (Acet)	0.4	40.0	ND	5000.0
Isopropanol (2-Pro)	0.4	40.0	<LOQ	5000.0	Acetonitrile (Acetonit)	0.4	40.0	ND	410.0
Methylene Chloride (MetCh)	0.4	0.8	ND	1.0	Hexane (Hex)	0.4	40.0	ND	290.0
Ethyl Acetate (EthAc)	0.4	40.0	ND	5000.0	Chloroform (Clo)	0.4	0.8	ND	1.0
Benzene (Ben)	0.4	0.8	ND	1.0	1,2-Dichloroethane (1,2-Dich)	0.4	0.8	ND	1.0
Heptane (Hep)	0.4	40.0	<LOQ	5000.0	Trichloroethylene (TriClEtH)	0.4	0.8	ND	1.0
Toluene (Toluene)	0.4	40.0	ND	890.0	Xylenes (Xyl)	0.4	40.0	ND	2170.0

FVI - Filth & Foreign Material Inspection Analysis

Analyzed Feb 03, 2023 | Instrument Microscope | Method SOP-010

Analyte / Limit	Result	Analyte / Limit	Result
> 1/4 of the total sample area covered by sand, soil, cinders, or dirt	ND	> 1/4 of the total sample area covered by mold	ND
> 1 insect fragment, 1 hair, or 1 count mammalian excreta per 3g	ND	> 1/4 of the total sample area covered by an imbedded foreign material	ND

UI Not Identified
 ND Not Detected
 N/A Not Applicable
 NT Not Reported
 LOD Limit of Detection
 LOQ Limit of Quantification
 <LOQ Detected
 >ULOL Above upper limit of linearity
 CFU/g Colony Forming Units per 1 gram
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