

Chocolate Muffin PASS



SAMPLE ID
210562

SAMPLE NAME
Chocolate Muffin

MATRIX
Concentrate

BATCH ID
AMMO-VP-02

TRACK AND TRACE TEST PACKAGE
1A406030000A812000000833

TRACK AND TRACE SOURCE PACKAGE(S)
1A40603000042D4000001535

COLLECTED, RECEIVED
08/19/2020 15:08, 08/20/2020 09:32

BATCH SIZE, SAMPLE SIZE
1338 units, 36 units

PRODUCTION DATE
05/27/2020

DISTRIBUTOR INFO
**Lightwork Distributors, LLC (Ammo)
4651 West End Rd.
Arcata, CA 95521
License: C11-0000051-LIC**

MANUFACTURER INFO
**ArcataX
4651 West End Rd
Arcata, CA 95521
License: CDPH-10002992**

TOTAL CANNABINOIDS **68.14 %**

TOTAL THC **61.04 %**

TOTAL CBD **ND**

Chemical Residue **PASS**
No Analytes Detected

Chemical Residue GC **PASS**
No Analytes Detected

Residual Solvent **PASS**
Isopropyl Alcohol: <LLOQ, Acetone: <LLOQ, Ethanol: <LLOQ

Microbial qPCR **PASS**
No Analytes Detected

Heavy Metals **PASS**
Lead: <LLOQ, Mercury: <LLOQ

Mycotoxins **PASS**
No Analytes Detected

Filth and Foreign Material **PASS**
No Analytes Detected





CANNABINOID ANALYSIS

Total THC,CBD value(s) have been decarboxylated.

TOTAL THC: 610.4 mg/g (61.04 %), 305.2 mg per package
 TOTAL CBD: ND
 TOTAL CANNABINOIDS: 681.4 mg/g (68.14 %)

UNIT OF MEASUREMENT: Milligrams per Gram(mg/g)

ANALYTE	RESULT	LOD	LLOQ	ANALYTE	RESULT	LOD	LLOQ
THCa	241.3 mg/g (24.13 %)	0.2000	0.4000	CBDv	ND	0.2000	0.4000
D9THC	398.8 mg/g (39.88 %)	0.2000	0.4000	CBGa	22.72 mg/g (2.272 %)	0.2000	0.4000
D8THC	ND	0.2000	0.4000	CBG	6.817 mg/g (0.6817 %)	0.2000	0.4000
THCv	ND	0.2000	0.4000	CBN	3.326 mg/g (0.3326 %)	0.2000	0.4000
CBDa	ND	0.2000	0.4000	CBC	8.426 mg/g (0.8426 %)	0.2000	0.4000
CBD	ND	0.2000	0.4000				

ADDITIONAL INFORMATION

Method: SOP-TECH-001
 Instrument: UPLC-DAD

Sample Prepped 08/21/2020 14:54
 Sample Analyzed 08/21/2020 14:55

Sample Approved 08/25/2020 07:47



CHEMICAL RESIDUE ANALYSIS PASS

UNIT OF MEASUREMENT: Micrograms per Gram(ug/g)

ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL	ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL
Abamectin	ND	0.0200	0.0400	0.1000 Pass	Acephate	ND	0.0200	0.0400	0.1000 Pass
Acequinocyl	ND	0.0200	0.0400	0.1000 Pass	Acetamiprid	ND	0.0200	0.0400	0.1000 Pass
Aldicarb	ND	0.0200	0.0400	0.0 Pass	Azoxystrobin	ND	0.0200	0.0400	0.1000 Pass
Bifenazate	ND	0.0200	0.0400	0.1000 Pass	Bifenthrin	ND	0.0200	0.0400	3.000 Pass
Boscalid	ND	0.0200	0.0400	0.1000 Pass	Carbaryl	ND	0.0200	0.0400	0.5000 Pass
Carbofuran	ND	0.0200	0.0400	0.0 Pass	Chlorantraniliprole	ND	0.0200	0.0400	10.00 Pass
Clofentezine	ND	0.0200	0.0400	0.1000 Pass	Coumaphos	ND	0.0200	0.0400	0.0 Pass
Cyfluthrin	ND	0.4000	1.000	2.000 Pass	Cypermethrin	ND	0.4000	1.000	1.000 Pass
Daminozide	ND	0.0200	0.0400	0.0 Pass	Diazinon	ND	0.0200	0.0400	0.1000 Pass
Dichlorvos	ND	0.0200	0.0400	0.0 Pass	Dimethoate	ND	0.0200	0.0400	0.0 Pass
Dimethomorph	ND	0.0200	0.0400	2.000 Pass	Ethoprophos	ND	0.0200	0.0400	0.0 Pass
Etofenprox	ND	0.0200	0.0400	0.0 Pass	Etoxazole	ND	0.0200	0.0400	0.1000 Pass
Fenhexamid	ND	0.0200	0.0400	0.1000 Pass	Fenoxycarb	ND	0.0200	0.0400	0.0 Pass
Fenpyroximate	ND	0.0200	0.0400	0.1000 Pass	Fipronil	ND	0.0400	0.1000	0.0 Pass
Flonicamid	ND	0.0200	0.0400	0.1000 Pass	Fludioxonil	ND	0.0200	0.0400	0.1000 Pass
Hexythiazox	ND	0.0200	0.0400	0.1000 Pass	Imazalil	ND	0.0200	0.0400	0.0 Pass
Imidacloprid	ND	0.0200	0.0400	5.000 Pass	Kresoxim methyl	ND	0.0200	0.0400	0.1000 Pass
Malathion	ND	0.0200	0.0400	0.5000 Pass	Metalaxyl	ND	0.0200	0.0400	2.000 Pass
Methiocarb	ND	0.0200	0.0400	0.0 Pass	Methomyl	ND	0.0200	0.0400	1.000 Pass
Mevinphos	ND	0.0200	0.0400	0.0 Pass	Myclobutanil	ND	0.0200	0.0400	0.1000 Pass
Naled	ND	0.0200	0.0400	0.1000 Pass	Oxamyl	ND	0.0200	0.0400	0.5000 Pass
Paclobutrazol	ND	0.0200	0.0400	0.0 Pass	Permethrins	ND	0.0400	0.1000	0.5000 Pass
Phosmet	ND	0.0200	0.0400	0.1000 Pass	Piperonyl butoxide	ND	0.0200	0.0400	3.000 Pass



Prallethrin	ND	0.0200	0.0400	0.1000	Pass	Propiconazole	ND	0.0200	0.0400	0.1000	Pass
Propoxur	ND	0.0200	0.0400	0.0	Pass	Pyrethrins	ND	0.0200	0.0400	0.5000	Pass
Pyridaben	ND	0.0200	0.0400	0.1000	Pass	Spinetoram	ND	0.0200	0.0400	0.1000	Pass
Spinosad	ND	0.0300	0.0700	0.1000	Pass	Spiromesifen	ND	0.0200	0.0400	0.1000	Pass
Spirotetramat	ND	0.0200	0.0400	0.1000	Pass	Spiroxamine	ND	0.0200	0.0400	0.0	Pass
Tebuconazole	ND	0.0200	0.0400	0.1000	Pass	Thiacloprid	ND	0.0200	0.0400	0.0	Pass
Thiamethoxam	ND	0.0200	0.0400	5.000	Pass	Trifloxystrobin	ND	0.0200	0.0400	0.1000	Pass

ADDITIONAL INFORMATION

Method: SOP-TECH-002 Sample Prepped 08/24/2020 12:26 Sample Approved 08/24/2020 20:41
 Instrument: LC-MS/MS Sample Analyzed 08/24/2020 12:31

CHEMICAL RESIDUE GC ANALYSIS PASS

UNIT OF MEASUREMENT: Micrograms per Gram(ug/g)

ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL	ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL
Captan	ND	0.1000	0.2000	0.7000 Pass	Chlordane	ND	0.0109	0.0136	0.0 Pass
Methyl parathion	ND	0.0400	0.1000	0.0 Pass	PCNB	ND	0.0200	0.0400	0.1000 Pass
Chlorfenapyr	ND	0.0800	0.1000	0.0 Pass	Chlorpyrifos	ND	0.0800	0.1000	0.0 Pass

ADDITIONAL INFORMATION

Method: SOP-TECH-010 Sample Prepped 08/24/2020 12:25 Sample Approved 08/24/2020 20:23
 Instrument: GC-MS/MS Sample Analyzed 08/24/2020 12:31

RESIDUAL SOLVENT ANALYSIS PASS

UNIT OF MEASUREMENT: Micrograms per Gram(ug/g)

ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL	ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL
Acetone	<LLOQ	5.000	250.0	5000 Pass	Acetonitrile	ND	5.000	50.00	410.0 Pass
Benzene	ND	0.5000	1.000	1.000 Pass	Butane	ND	76.80	96.00	5000 Pass
Chloroform	ND	0.5000	1.000	1.000 Pass	Ethanol	<LLOQ	10.00	50.00	5000 Pass
Ethyl Acetate	ND	5.000	50.00	5000 Pass	Ethyl Ether	ND	25.00	50.00	5000 Pass
Ethylene oxide	ND	0.5000	1.000	1.000 Pass	Heptane	ND	1.000	5.000	5000 Pass
Hexane	ND	0.5000	5.000	290.0 Pass	Isopropyl Alcohol	<LLOQ	5.000	50.00	5000 Pass
Methanol	ND	10.00	50.00	3000 Pass	Methylene chloride	ND	0.5000	1.000	1.000 Pass
Pentane	ND	1.000	50.00	5000 Pass	Propane	ND	16.00	20.00	5000 Pass
Toluene	ND	0.5000	1.000	890.0 Pass	Xylenes	ND	6.000	100.0	2170 Pass
Trichloroethylene	ND	0.2500	1.000	1.000 Pass	1,2-Dichloroethane	ND	0.5000	1.000	1.000 Pass

ADDITIONAL INFORMATION

Method: SOP-TECH-021 Sample Prepped 08/22/2020 14:34 Sample Approved 08/24/2020 15:13
 Instrument: HS-GC-MS/FID Sample Analyzed 08/22/2020 14:37



MICROBIAL qPCR ANALYSIS PASS

UNIT OF MEASUREMENT: Cycle Threshold (Ct)

ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL		ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL	
A.fumigatus	ND	33.00	0.0	0.0	Pass	A. flavus	ND	33.00	0.0	0.0	Pass
A. niger	ND	33.00	0.0	0.0	Pass	A. terreus	ND	33.00	0.0	0.0	Pass
STEC	ND	33.00	0.0	0.0	Pass	Salmonella spp	ND	33.00	0.0	0.0	Pass

ADDITIONAL INFORMATION

Method: SOP-TECH-016, SOP-TECH-022 Sample Prepped 08/21/2020 05:53 Sample Approved 08/21/2020 13:26
 Instrument: qPCR Sample Analyzed 08/21/2020 05:55

HEAVY METALS ANALYSIS PASS

UNIT OF MEASUREMENT: Micrograms per Gram(ug/g)

ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL		ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL	
Arsenic	ND	0.0200	0.0500	0.2000	Pass	Cadmium	ND	0.0050	0.0500	0.2000	Pass
Lead	<LLOQ	0.0100	0.0500	0.5000	Pass	Mercury	<LLOQ	0.0030	0.0500	0.1000	Pass

ADDITIONAL INFORMATION

Method: SOP-TECH-013 Sample Prepped 08/24/2020 06:19 Sample Approved 08/24/2020 15:35
 Instrument: ICP-MS Sample Analyzed 08/24/2020 06:24

MYCOTOXINS ANALYSIS PASS

UNIT OF MEASUREMENT: Micrograms per Kilogram(ug/kg)

ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL		ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL	
Aflatoxin B1	ND	1.000	2.000	N/A		Aflatoxin B2	ND	2.000	5.000	N/A	
Aflatoxin G1	ND	2.000	5.000	N/A		Aflatoxin G2	ND	2.000	5.000	N/A	
Total Aflatoxins	ND	10.00	14.00	20.00	Pass	Ochratoxin A	ND	1.000	2.000	20.00	Pass

ADDITIONAL INFORMATION

Method: SOP-TECH-020 Sample Prepped 08/21/2020 08:08 Sample Approved 08/24/2020 11:30
 Instrument: LC-MS/MS Sample Analyzed 08/21/2020 08:08

FILTH & FOREIGN MATERIAL ANALYSIS PASS

UNIT OF MEASUREMENT: Filth and Foreign Matter (%)

ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL		ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL	
IF RH ME	ND	0.0	0.0	3.000	Pass	IFM	ND	0.0	0.0	25.00	Pass
Mold	ND	0.0	0.0	25.00	Pass	SSCD	ND	0.0	0.0	25.00	Pass

ADDITIONAL INFORMATION

Method: SOP-TECH-009 Sample Prepped 08/20/2020 15:01 Sample Approved 08/20/2020 15:08
 Instrument: Visual Inspection Sample Analyzed 08/20/2020 15:01

This report applies to the sample investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. This report provides technical results for a specific sample and the report shall not be altered, modified, supplemented, or abstracted in any manner. Any violation of these conditions renders the report and its results void.

All LQC samples required by state regulations were performed and met the acceptance criteria.

THIS COA WAS REVIEWED AND APPROVED ON 08/25/2020, BY THE FOLLOWING:



Cody Sheppard, PhD
Co-Scientific Director



Kathryn Riker
Quality Control Manager

