Cannabinoids Test

SHIMADZU INTEGRATED UPLC-PDA



Order #: 60568 Order Name: MARK3 CBD eXtreme Relief Cream 850mg -1.7oz Batch#: NA Received: 08/31/2020 Completed: 09/03/2020 Cargus International Inc. 135 N Rt 9W Congers NY, (845) 267-2600 gavinm@mark3cbd.com

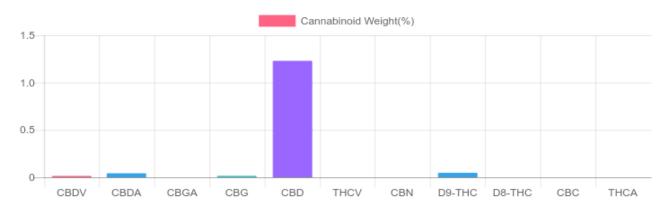


Sample



GSL SOP 400 PREPARED: 09/01/2020 14:24:13 UPLOADED: 09/02/2020 09:55:19 mg/unit Cannabinoids LOQ weight(%) mg/g D9-THC 0.048% 10 PPM 0.480 23.1 THCA 10 PPM N/D N/D N/D CBD 10 PPM 1.230% 12.297 592.6 CBDA 20 PPM 0.043% 0.427 20.6 CBDV 20 PPM 0.015% 0.151 7.3 CBC 10 PPM N/D N/D N/D CBN 10 PPM N/D N/D N/D CBG 10 PPM 0.016% 0.162 7.8 CBGA 20 PPM N/D N/D N/D D8-THC 10 PPM N/D N/D N/D THCV 10 PPM N/D N/D N/D TOTAL D9-THC 0.048% 0.048% 23.1 TOTAL CBD* 1.268% 12.671 610.7 TOTAL CANNABINOIDS 1.352% 13.517 651.4

1 unit = 48.19 grams per unit x Cannabinoid concentration



Reporting Limit 10 ppm *Total CBD = CBD + CBDA x 0.877

N/D - Not Detected, B/LOQ - Below Limit of Quantification

Dr. Andrew Hall, Ph.D., Chief Scientific Officer

Blu

Ben Witten, MS, MT., Lab Director

Green Scientific Labs info@greenscientificlabs.com 1-833 TEST CBD





Order #: 60568 Order Name: MARK3 CBD eXtreme Relief Cream 850mg -1.7oz Batch#: NA Received: 08/31/2020

Completed: 09/03/2020

TERPENES: TOTAL (4.342%)

Headspace GCMS - Shimadzu GCMS QP2020 with HS20

Terpene	Results (%)	LOQ (%)	LOD (%)
3-CARENE	0.082%	0.0067%	0.0063%
ALPHA-BISABOLOL	0.008%	0.0067%	0.0063%
ALPHA-PINENE	0.662%	0.0067%	0.0063%
ALPHA-TERPINENE	0.048%	0.0067%	0.0063%
BETA-MYRCENE	0.236%	0.0067%	0.0063%
BETA-PINENE	0.296%	0.0067%	0.0063%
CAMPHENE	0.071%	0.0067%	0.0063%
CARYOPHYLLENE	0.190%	0.0067%	0.0063%
CARYOPHYLLENE OXIDE	0.076%	0.0067%	0.0063%
EUCALYPTOL	1.182%	0.0067%	0.0063%
GAMMATERPINENE	0.041%	0.0067%	0.0016%
HUMULENE	0.013%	0.0067%	0.0063%
LIMONENE	0.737%	0.0067%	0.0063%
LINALOOL	0.343%	0.0067%	0.0063%



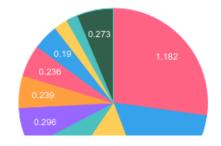
135 N Rt 9W Congers NY, (845) 267-2600 gavinm@mark3cbd.com



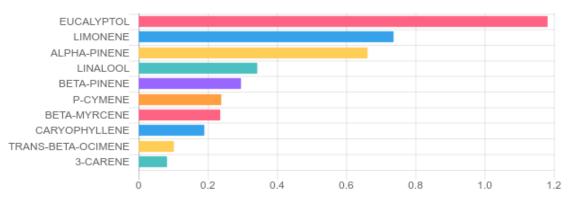
GSL SOP 404 Prepared: 08/31/2020 21:22:22 Uploaded: 09/01/2020 13:39:07

Terpene	Results (%)	LOQ (%) LOD (%)
P-CYMENE	0.239%	0.0067% 0.0063%
TERPINOLENE	0.007%	0.0067% 0.0063%
TRANS-BETA-OCIMENE	0.102%	0.0067% 0.0031%
TRANS-NEROLIDOL	0.009%	0.0067% 0.0063%

Terpenes Breakdown



Top Terpenes Results:



Tested for but not present:

CIS-BETA-OCIMENE, ISOPULEGOL, GERANIOL, CIS-NEROLIDOL, GUAIOL

Dr. Andrew Hall, Ph.D., Chief Scientific Officer

Ben Witten, MS, MT., Lab Director

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PREPARED: 08/31/2020 19:16:46



Order #: 60568 Order Name: MARK3 CBD eXtreme Relief Cream 850mg -1.7oz Batch#: NA

Received: 08/31/2020 Completed: 09/03/2020

Cargus International Inc.

135 N Rt 9W Congers NY, (845) 267-2600 gavinm@mark3cbd.com



N/D

N/D

N/D

N/D

N/D

PESTICIDE ANALYSIS:

GSL SOP 401

GCMS-MS - Shimadzu GCMS-TQ8040

Pesticide	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)
CAPTAN	0.700	N/D	0.003	0.001
CHLORDANE	0.100	N/D	0.003	0.001
CHLORFENAPYR	0.100	N/D	0.003	0.001
COUMAPHOS	0.100	N/D	0.003	0.001

Action Level Results LOQ LOD Pesticide (ppm) (ppm) (ppm) (ppm) CYFLUTHRIN 2.000 N/D 0.003 0.001 **CYPERMETHRIN** 1.000 N/D 0.001 0.003 PARATHION-METHYL 0.100 N/D 0.003 0.001 PENTACHLORONITROBENZENE 0.100 N/D 0.003 0.001

UPLOADED: 09/02/2020 09:26:39

I CMS-MS -	Shimadzu	LCMS-8060
	ommauzu	LOINO 0000

Pesticide	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)
ABAMECTIN B1A	0.100	N/D	0.005	0.001
ACEPHATE	0.100	N/D	0.001	0.001
ACEQUINOCYL	0.100	N/D	0.001	0.001
ACETAMIPRID	0.100	N/D	0.005	0.001
ALDICARB	0.100	N/D	0.005	0.001
AZOXYSTROBIN	0.100	N/D	0.001	0.001
BIFENAZATE	0.100	N/D	0.005	0.001
BIFENTHRIN	3.000	N/D	0.005	0.001
BOSCALID	0.100	N/D	0.005	0.001
CARBARYL	0.500	N/D	0.003	0.001
CARBOFURAN	0.100	N/D	0.001	0.001
CHLORANTRANILIPROLE	10.000	N/D	0.005	0.005
CHLORPYRIFOS	0.100	N/D	0.001	0.001
CLOFENTEZINE	0.100	N/D	0.001	0.001
DAMINOZIDE	0.100	N/D	0.005	0.001
DIAZINON	0.100	N/D	0.001	0.001
DICHLORVOS	0.100	N/D	0.005	0.001
DIMETHOATE	0.100	N/D	0.001	0.001
DIMETHOMORPH	2.000	N/D	0.005	0.001
ETHOPROPHOS	0.100	N/D	0.001	0.001
ETOFENPROX	0.100	N/D	0.001	0.001
ETOXAZOLE	0.100	N/D	0.010	0.005
FENHEXAMID	0.100	N/D	0.005	0.001
FENOXYCARB	0.100	N/D	0.005	0.001
FENPYROXIMATE	0.100	N/D	0.001	0.001
FIPRONIL	0.100	N/D	0.003	0.001
FLONICAMID	0.100	N/D	0.025	0.010
FLUDIOXONIL	0.100	N/D	0.003	0.001
HEXYTHIAZOX	0.100	N/D	0.005	0.001
IMAZALIL	0.100	N/D	0.005	0.001

Pesticide	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)
IMIDACLOPRID	5.000	N/D	0.005	0.001
KRESOXIM-METHYL	0.100	N/D	0.010	0.005
MALATHION	0.500	N/D	0.005	0.001
METALAXYL	2.000	N/D	0.001	0.001
METHIOCARB	0.100	N/D	0.005	0.001
METHOMYL	1.000	N/D	0.001	0.001
MEVINPHOS	0.100	N/D	0.001	0.001
MYCLOBUTANIL	0.100	N/D	0.005	0.001
NALED	0.100	N/D	0.005	0.001
OXAMYL	0.500	N/D	0.001	0.001
PACLOBUTRAZOL	0.100	N/D	0.005	0.001
PERMETHRINS	0.500	N/D	0.005	0.001
PHOSMET	0.100	N/D	0.005	0.001
PIPERONYL BUTOXIDE	3.000	N/D	0.001	0.001
PRALLETHRIN	0.100	N/D	0.005	0.005
PROPICONAZOLE	0.100	N/D	0.010	0.005
PROPOXUR	0.100	N/D	0.001	0.001
PYRETHRINS (PYRETHRIN I)	0.500	N/D	0.005	0.005
PYRIDABEN	0.100	N/D	0.005	0.001
SPINETORAM	0.100	N/D	0.001	0.001
SPINOSAD	0.100	N/D	0.001	0.001
SPIROMESIFEN	0.100	N/D	0.005	0.001
SPIROTETRAMAT	0.100	N/D	0.001	0.001

N/D = Not Detected, A/LOQ = Above LOQ Level, B/LOQ = Below LOQ Level, B/LOD = Below LOD Level



Dr. Andrew Hall, Ph.D., Chief Scientific Officer

Ben Witten, MS, MT., Lab Director

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0.100

0.100

0.100

5.000

0.100



0.001

0.005

0.001

0.001

0.001

0.001

0.001

0.001

0.001

0.001

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SPIROXAMINE

THIACLOPRID

TEBUCONAZOLE

THIAMETHOXAM

TRIFLOXYSTROBIN



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Received: 08/31/2020 Completed: 09/03/2020 Cargus International Inc. 135 N Rt 9W Congers NY, (845) 267-2600 gavinm@mark3cbd.com



RESIDUAL SOLVENTS:

Headspace GCMS - Shimadzu GCMS QP2020 with HS20

GSL SOP 405 Prepared: 08/31/2020 21:54:31 Uploaded: 09/01/2020 13:30:32

Residual Solvent	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)
1,1-DICHLOROETHENE	8	N/D	0.63	0.63
1,2- DICHLOROETHANE	2	N/D	0.12	0.02
ACETONE	5,000	N/D	140	20
ACETONITRILE	410	N/D	25	1
BENZENE	1	N/D	1	0.5
BUTANE	5,000	N/D	50	10
CHLOROFORM	1	N/D	1	0.5
CIS 1,2-DICHLOROETHENE	5	N/D	0.73	0.18
ETHANOL	5,000	N/D	140	20
ETHYL ACETATE	5,000	N/D	140	20
ETHYL ETHER	5,000	N/D	140	20
ETHYLENE OXIDE	1	N/D	0	0
SOPROPYL ALCOHOL	5,000	B/LOQ	140	20
METHANOL	3,000	B/LOQ	100	20
METHYLENE CHLORIDE	125	N/D	0.15	0.15
N-HEPTANE	5,000	N/D	140	20
N-HEXANE	290	N/D	18	10
PENTANE	5,000	N/D	140	20
PROPANE	5,000	N/D	20	1
TOLUENE	890	N/D	53	1
TRANS 1,2-DICHLOROETHENE	5	N/D	0.73	0.18
TRICHLOROETHENE	1	N/D	1	0.5
XYLENES	150	N/D	130	20

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Order #: 60568 Order Name: MARK3 CBD eXtreme Relief Cream 850mg -1.7oz Batch#: NA Received: 08/31/2020

Completed: 09/03/2020

Cargus International Inc. 135 N Rt 9W Congers NY, (845) 267-2600 gavinm@mark3cbd.com



Microbial Analysis GSL SOP 406

Uploaded: 09/02/2020 16:49:46

Microbial Analysis:

PCR - Agilent AriaMX

MICROBIAL ANALYSIS:

PCR - Agilent AriaMX

Test	SOP	Test Method	Device Used	LOD	Allowable Criteria	Actual Result	Pass/Fail
ASPERGILLUS FUMIGATUS***	406.01	USP 61/62†	ARIAMX PCR	1 CFU/G**	DETECT/NOT DETECTED	NOT DETECTED	PASS
ASPERGILLUS TERREUS***	406.01	USP 61/62†	ARIAMX PCR	1 CFU/G**	DETECT/NOT DETECTED	NOT DETECTED	PASS
ASPERGILLUS FLAVUS***	406.01	USP 61/62†	ARIAMX PCR	1 CFU/G**	DETECT/NOT DETECTED	NOT DETECTED	PASS
ASPERGILLUS NIGER***	406.01	USP 61/62†	ARIAMX PCR	1 CFU/G**	DETECT/NOT DETECTED	NOT DETECTED	PASS
STEC E. COLI*	406.01	USP 61/62†	ARIAMX PCR	1 CFU/G**	DETECT/NOT DETECTED	NOT DETECTED	PASS
SALMONELLA*	406.01	USP 61/62†	ARIAMX PCR	1 CFU/G**	DETECT/NOT DETECTED	NOT DETECTED	PASS

† USP 61 (enumeration of bacteria TAC, TYM, and ENT/Coliform), USP 62 (identifying specific species E.coli Aspergillus etc)

* STEC and Salmonella run as Multiplex

** CFU/g Calculation based on MIP/Extract matrix

*** Flavus = 2 Copies of DNA / Fumigatis = 2 Copies of DNA Niger = 20 Copies of DNA / Terrus = 10 copies of DNA

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Received: 08/31/2020 Completed: 09/03/2020

Cargus International Inc.

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Mycotoxin Analysis:

LC-MS - Shimadzu LCMS-8060 GSL SOP 401

Uploaded: 09/02/2020 09:26:39

Analyte	Action Lvl (ppb)	Results (ppb)
AFLATOXIN B1	20	N/D
AFLATOXIN B2	20	N/D
AFLATOXIN G1	20	N/D
AFLATOXIN G2	20	N/D
OCHRATOXIN A	20	N/D

ICP-MS - Shimadzu ICPMS-2030 GSL SOP 403

Heavy Metals Analysis:

Uploaded: 09/02/2020 15:54:43

Metal	Action Level (ppb)	Result (ppb)
ARSENIC (AS)	200	B/LOQ
CADMIUM (CD)	200	B/LOQ
MERCURY (HG)	100	B/LOQ
LEAD (PB)	500	B/LOQ

Lower Limit of Quantitation (LOQ) is 75 ppb

LOQ is 1ppb, LOD is 1ppb

Water Activity:

HD-3A Water Activity Meter - GSL SOP 407

Uploaded: 09/01/2020 08:13:06

Water

0.94

Filth and Foreign Materials Analysis:

Microscope - Amscope Simul-Focal Trinocular Stereo Zoom Microscope - GSL SOP 409

Uploaded: 08/31/2020 22:02:19

Pass: No Foreign Materials Detected

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