



CERTIFICATE OF ANALYSIS

PRODUCT NAME: MD Organics Sports Cream
PRODUCT STRENGTH: 400 mg
LOT NUMBER: 0079A
BEST BY DATE: 10/2/2021
HEMP EXTRACT LOT NUMBER*: [CONO19-124](#)

Click on the links to view third-party reports

Physical Attributes

Test	Method	Specification	Results
Color	SOP-100	white to off white	PASS
Odor	SOP-100	Blend of Menthol, Camphor, Eucalyptus, Lavender, Rosemary, Wintergreen & Marjoram.	PASS
Appearance	SOP-100	Creamy smooth cream consistency with medium viscosity	PASS
Primary Package Eval.	SOP-132	Container clean and free of filth. Lid intact.	PASS
Secondary Package Eval.	SOP-132	Labeling Compliance Checked, Cartons sturdy and clean. Sufficient cushion material exists. Box taped and secure.	PASS

Review of Third-Party Analysis

Panel	Method	Specification	Results*	Pass/Fail
Potency - Total CBD	SOP-111	380-500 mg CBD LOQ**†: 10 PPM† (0.001%)	477.2 mg	PASS
Potency - D9-THC	SOP-111	None Detected LOQ: 10 PPM (0.001%)	ND	PASS
Compliant Pesticide Panel	SOP-111	Action Limits for Oregon Pesticides used Cannabis	ND	PASS
Microbial - Stec E.Coli	SOP-111	Complies with USP 61/62	Below LOD	PASS
Microbial - Salmonella	SOP-111	Complies with USP 61/62	Below LOD	PASS
Microbial - Mold	SOP-111	Complies with USP 61/62	Below LOD	PASS
CA Compliant Heavy Metal Panel	SOP-111	Arsenic (As): ≤1.5 PPM Cadmium (Cd): ≤0.5 PPM Mercury (Hg): ≤1.0 PPM Lead (Pb): ≤0.5 PPM	Below LOQ	PASS

* Level of Quantitation, † Parts Per Million

Quality Certified by:

Darcie Moran

04.17.2020

Darcie Moran
Manager of Quality Assurance

Date



total cannabinoids	Δ^9 -THC	THCa	total THC
477.2 mg	0 mg	0 mg	0 mg
per	CBD	CBDa	total CBD
4oz	447.3 mg	25.3 mg	447.3 mg



Stillwater Laboratories

https://portal.a2la.org/scopepdf/4961-01.pdf

Sample Handling

test ID	sample wt	113.6 g
type	order	6899
lab ID	sample date	3/24/2020
unit	unit weight	113.6 g

Methods

method	equipment
weights	MSP-7.3.1.3 AUX120.1
potency	MSP-7.5.1.5 LC-2030
terpenes	MSP-7.5.1.7 QP2020/HS20
pesticides	MSP-7.5.1.8 LC-8060
mycotoxins	MSP-7.5.1.8 LC-8060
microbial	MSP-7.5.1.9 Hardy Diag
solvents	MSP-7.5.1.6 QP2020/HS20
metals	MSP-7.5.1.1 ICPMS2030

topical



Potency	per	4oz	estimated error	Terpenes	%	estimated error	%	estimated error	%	estimated error		
tetrahydrocannabinolic acid (THCa)	0%	0 mg	± 1.87 mg	β -myrcene	0.000%	± 0.0016%	camphene	0.000%	± 0.0016%	guaiol	0.000%	± 0.0016%
Δ^9 -tetrahydrocannabinol (Δ^9 THC)	0%	0 mg	± 1.87 mg	β -caryophyllene	0.000%	± 0.0016%	Δ 3-carene	0.000%	± 0.0016%	β -bisabolol	0.000%	± 0.0016%
Δ^8 -tetrahydrocannabinol (Δ^8 THC)	0%	0 mg	± 1.87 mg	alpha-pinene	0.000%	± 0.0016%	a-terpinene	0.000%	± 0.0016%	eucalyptol	0.000%	± 0.0016%
tetrahydrocannabivarin (THCv)	0%	0 mg	± 1.87 mg	β -pinene	0.000%	± 0.0016%	para-cymene	0.000%	± 0.0016%			
cannabinolic acid (CBDA)	.02%	25.3 mg	± 2.45 mg	D-limonene	0.000%	± 0.0016%	g-terpinene	0.000%	± 0.0016%			
cannabidiol (CBD)	.39%	447.3 mg	± 6.90 mg	linalool	0.000%	± 0.0016%	(-)-isopulegol	0.000%	± 0.0016%			total terpenes
cannabidivarin (CBDv)	0%	4.6 mg	± 1.99 mg	ocimene	0.000%	± 0.0033%	geraniol	0.000%	± 0.0016%			0.00%
cannabigerolic acid (CBGa)	0%	0 mg	± 1.87 mg	terpinolene	0.000%	± 0.0016%	cis-nerolidol	0.000%	± 0.0016%			
cannabigerol (CBG)	0%	0 mg	± 1.87 mg	alpha-humulene	0.000%	± 0.0016%	trans-nerolidol	0.000%	± 0.0016%			
cannabinol (CBN)	0%	0 mg	± 1.87 mg									
cannabichromene (CBC)	0%	0 mg	± 1.87 mg									

Solvents

MT limit	0CU52	LOQ
propane	5,000	0 ppm <10ppm
butanes	5,000	0 ppm <10ppm
pentanes	5,000	0 ppm <10ppm
hexanes	290	0 ppm <10ppm
cyclohexane	3,880	0 ppm <10ppm
heptanes	5,000	0 ppm <10ppm
methanol	3,000	0 ppm <10ppm
isopropanol	5,000	0 ppm <10ppm
acetone	5,000	0 ppm <10ppm
ethyl acetate	5,000	0 ppm <10ppm
benzene	2	0 ppm <0.2ppm
toluene	890	0 ppm <10ppm
xylene	2,170	0 ppm <10ppm
chloroform	2	0 ppm <0.2ppm
dichloromethane	600	0 ppm <10ppm

Pesticides (MT)

MT limit	0CU52	LOQ
abamectin	0.00 ppm	<10ppb
acequinocyl	0.00 ppm	<10ppb
bifenazate	0.00 ppm	<10ppb
bifenthrin	0.00 ppm	<10ppb
chlormequat cl.	0.00 ppm	<10ppb
cyfluthrin	0.00 ppm	<80ppb
diaminazide	0.00 ppm	<10ppb
etoxazole	0.00 ppm	<10ppb
fenoxycarb	0.00 ppm	<10ppb
imazalil	0.00 ppm	<10ppb
imidacloprid	0.00 ppm	<10ppb
myclobutanil	0.00 ppm	<10ppb
paclobutrazol	0.00 ppm	<10ppb
pyrethrins	0.00 ppm	<10ppb
spinosad	0.00 ppm	<10ppb
spiromesifen	0.00 ppm	<10ppb
spirotetramat	0.00 ppm	<10ppb
trifloxystrobin	0.00 ppm	<10ppb

Pesticides (other)

0CU52	LOQ
acephate	0.00 ppm <10ppb
acetamiprid	0.00 ppm <10ppb
aldicarb	0.00 ppm <10ppb
azoxystrobin	0.00 ppm <10ppb
boscalid	0.00 ppm <10ppb
carbaryl	0.00 ppm <10ppb
carbofuran	0.00 ppm <10ppb
chlorantraniliprole	0.00 ppm <10ppb
chlorpyrifos	0.00 ppm <10ppb
clofentezine	0.00 ppm <10ppb
cypermethrin	0.00 ppm <10ppb
diazinon	0.00 ppm <10ppb
dichlorvos	0.00 ppm <10ppb
dimethoate	0.00 ppm <10ppb
etofenprox	0.00 ppm <10ppb
fenpyroximate	0.00 ppm <10ppb
fipronil	0.00 ppm <10ppb
flonicamid	0.00 ppm <10ppb
fludioxonil	0.00 ppm <10ppb
hexythiazox	0.00 ppm <10ppb
kresoxym-methyl	0.00 ppm <10ppb
malathion	0.00 ppm <10ppb
metalaxyl	0.00 ppm <10ppb
methiocarb	0.00 ppm <10ppb
methomyl	0.00 ppm <10ppb
oxamyl	0.00 ppm <10ppb
permethrins	0.00 ppm <10ppb
phosmet	0.00 ppm <10ppb
piperonyl butoxide	0.00 ppm <10ppb
prallethrin	0.00 ppm <10ppb
propiconazole	0.00 ppm <10ppb
pyridaben	0.00 ppm <10ppb
spiroxamine	0.00 ppm <10ppb
tebuconazole	0.00 ppm <10ppb
thiacloprid	0.00 ppm <10ppb
thiamethoxam	0.00 ppm <10ppb

Toxic Metals

MT limit	0CU52	LOQ
arsenic	2 ppm	0.0 ppm <10ppb
cadmium	4.1 ppm	0.0 ppm <10ppb
lead	1.2 ppm	0.0 ppm <10ppb
mercury	0.4 ppm	0.0 ppm <10ppb

Comments

Microbial	MT limit	0CU52	LOQ
<i>E. coli</i>	10 CFU	0 CFU	<10 CFU/g
Salmonella sp.	10 CFU	0 CFU	<10 CFU/g
molds	10000 CFU	0 CFU	<10k CFU/g
Aflatoxin B1,B2,G1,G2	20 ppb	0 ppb	<20 ppb
Ochratoxin A	20 ppb	0 ppb	<20 ppb

• All testing was completed onsite at 6073 US93N, Olney MT • Potency (cannabinoid concentration) is calculated from the equation: [cannabinoid] = [cannabinoid]_{HPLC} x volume_{dilution}/m_{dry}. Terpene concentration is calculated from the equation: [terpene] = (terpene mass)_{GCMS} / m_{dry}. ••• Decarboxyted cannabinoid concentration is calculated from the equation XXX_{total} = 0.877 x XXX_a + XXX ••• Standards are used to calibrate the resulting data and estimate error using a standard estimate of error method; this is combined with error from weighing and dilution using the propagation of error formula s_g² = $\sum (\partial f/\partial i)^2 s_i^2$ where i is the contributor to error. The 95% confidence range is calculated from the equation: (concentration) ± t_{CL90} x s_g. Sampling error is not

Certified by:

Paula Kosted, PhD (Biochem)
Deputy Director
6073 US93N, Olney MT 59927
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total cannabinoids **85.3%**
 CBD decarb total 84.31%
 Δ9-THC ND

This Product Has Been Tested and Complies with 7USC1639o(1) Definition of Hemp



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https://portal.a2la.org/scopepdf/4961-01.pdf

Sample Handling

test ID sample date 3/9/20 11:06 AM
 order 6767 labID OCG24 weight
 source

Methods

method	equipment
weights MSP-7.3.1.3	AUX120.1
potency MSP-7.5.1.5	LC-2030
terpenes MSP-7.5.1.7	QP2020/HS20
pesticides MSP-7.5.1.8	LC-8060
mycotoxins MSP-7.5.1.8	LC-8060
microbial MSP-7.5.1.9	Hardy Diag
solvents MSP-7.5.1.6	QP2020/HS20
metals MSP-7.5.1.10	ICPMS2030



concentrate



Potency	%	estimated error	Terpenes	%	estimated error	%	estimated error	%	estimated error		
tetrahydrocannabinolic acid (THCa)	ND	± 0.02 %	β-myrcene	0.000%	± 0.0016%	camphene	0.000%	± 0.0016%	guaiol	0.001%	± 0.0017%
Δ ⁹ -tetrahydrocannabinol (Δ ⁹ THC)	ND	± 0.02 %	β-caryophyllene	0.005%	± 0.0018%	Δ ³ -carene	0.000%	± 0.0016%	β-bisabolol	0.000%	± 0.0016%
Δ ⁸ -tetrahydrocannabinol (Δ ⁸ THC)	ND	± 0.02 %	alpha-pinene	0.002%	± 0.0017%	a-terpinene	0.000%	± 0.0016%	eucalyptol	0.003%	± 0.0017%
tetrahydrocannabinavarin (THCv)	ND	± 0.02 %	β-pinene	0.000%	± 0.0016%	para-cymene	0.010%	± 0.0019%			
cannabidiolic acid (CBDa)	ND	± 0.02 %	D-limonene	0.000%	± 0.0016%	g-terpinene	0.008%	± 0.0019%			
cannabidiol (CBD)	84.31%	± 0.75 %	linalool	0.006%	± 0.0018%	(-)-isopulegol	0.000%	± 0.0016%			total terpenes
cannabidiavarin (CBDv)	.92%	± 0.08 %	ocimene	0.000%	± 0.0033%	geraniol	0.000%	± 0.0016%			0.06%
cannabigerolic acid (CBGa)	ND	± 0.02 %	terpinolene	0.000%	± 0.0016%	cis-nerolidol	0.000%	± 0.0016%			
cannabigerol (CBG)	.04%	± 0.02 %	alpha-humulene	0.006%	± 0.0018%	trans-nerolidol	0.000%	± 0.0016%			
cannabinol (CBN)	ND	± 0.02 %									
cannabichromene (CBC)	ND	± 0.02 %									

Solvents	MT limit	OCG24	LOQ	Pesticides (MT)	MT limit	OCG24	LOQ	Pesticides (other)	OCG24	LOQ
propane	5,000	0 ppm	<10ppm	abamectin	2.50 ppm	0.00 ppm	<10ppb	acephate	0.00 ppm	<10ppb
butanes	5,000	0 ppm	<10ppm	acequinocyl	10.00 ppm	0.00 ppm	<10ppb	acetamiprid	0.00 ppm	<10ppb
pentanes	5,000	0 ppm	<10ppm	bifenazate	1.00 ppm	0.00 ppm	<10ppb	aldicarb	0.00 ppm	<10ppb
hexanes	290	0 ppm	<10ppm	bifenthrin	1.00 ppm	0.00 ppm	<10ppb	azoxystrobin	0.00 ppm	<10ppb
cyclohexane	3,880	0 ppm	<10ppm	chlormequat cl.	5.00 ppm	0.00 ppm	<10ppb	boscalid	0.00 ppm	<10ppb
heptanes	5,000	0 ppm	<10ppm	cyfluthrin	5.00 ppm	0.00 ppm	<80ppb	carbaryl	0.00 ppm	<10ppb
methanol	3,000	0 ppm	<10ppm	diaminozide	5.00 ppm	0.00 ppm	<10ppb	carbofuran	0.00 ppm	<10ppb
isopropanol	5,000	0 ppm	<10ppm	etoxazole	1.00 ppm	0.00 ppm	<10ppb	chloantraniliprole	0.00 ppm	<10ppb
acetone	5,000	0 ppm	<10ppm	fenoxycarb	1.00 ppm	0.00 ppm	<10ppb	chlorpyrifos	0.00 ppm	<10ppb
ethyl acetate	5,000	0 ppm	<10ppm	imazail	1.00 ppm	0.00 ppm	<10ppb	clofentezine	0.00 ppm	<10ppb
benzene	2	0 ppm	<0.2ppm	imidacloprid	2.00 ppm	0.00 ppm	<10ppb	cypermethrin	0.00 ppm	<10ppb
toluene	890	0 ppm	<10ppm	myclobutanil	0.60 ppm	0.00 ppm	<10ppb	diazinon	0.00 ppm	<10ppb
xylene	2,170	0 ppm	<10ppm	paclobutrazol	2.00 ppm	0.03 ppm	<10ppb	dichlorvos	0.00 ppm	<10ppb
chloroform	2	0 ppm	<0.2ppm	pyrethrins	5.00 ppm	0.00 ppm	<10ppb	dimethoate	0.00 ppm	<10ppb
dichloromethane	600	0 ppm	<10ppm	spinosad	1.00 ppm	0.00 ppm	<10ppb	etofenprox	0.00 ppm	<10ppb
				spiromesifen	1.00 ppm	0.00 ppm	<10ppb	fenpyroximate	0.00 ppm	<10ppb
				spirotetramat	1.00 ppm	0.00 ppm	<10ppb	flupyrifluorid	0.00 ppm	<10ppb
				trifloxystrobin	1.00 ppm	0.00 ppm	<10ppb	flonicamid	0.00 ppm	<10ppb
								fludioxonil	0.00 ppm	<10ppb
								hexythiazox	0.00 ppm	<10ppb
								kresoxym-methyl	0.00 ppm	<10ppb
								malathion	0.00 ppm	<10ppb
								metalaxyl	0.01 ppm	<10ppb
								methiocarb	0.00 ppm	<10ppb
								methomyl	0.00 ppm	<10ppb
								oxamyl	0.00 ppm	<10ppb
								permethrin	0.00 ppm	<10ppb
								phosmet	0.00 ppm	<10ppb
								piperonyl butoxide	0.00 ppm	<10ppb
								prallethrin	0.00 ppm	<10ppb
								propiconazole	0.00 ppm	<10ppb
								pyridaben	0.00 ppm	<10ppb
								spiroxamine	0.00 ppm	<10ppb
								tebuconazole	0.00 ppm	<10ppb
								thiacloprid	0.00 ppm	<10ppb
								thiamethoxam	0.00 ppm	<10ppb

Toxic Metals

metals not tested / not required

Comments

Microbial	MT limit	OCG24	LOQ
<i>E. coli</i>	10 CFU	0 CFU	<10 CFU/g
<i>Salmonella</i> sp.	10 CFU	0 CFU	<10 CFU/g
molds	10000 CFU	0 CFU	<10k CFU/g
Aflatoxin B1,B2,G1,G2	20 ppb	0 ppb	<20 ppb
Ochratoxin A	20 ppb	0 ppb	<20 ppb

Certified by:

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