

High Performance Liquid Analytics

111 Westport Plaza Dr. 6th Floor
St. Louis, MO. 63146

Product Name: Massage Oil 20MG
Manufacturer: DermaThereal
Type: Topical
Test: Non-Compliance Full-Panel

Sample ID: T086
Sample Size: 5ml
Retail Product Size: 20mg/118ml/4oz
Ordered : 06/06/20
Sampled : 06/07/20
Completed: 06/15/20
Expires: 06/15/21
Sampling Method: SOP Client Method

Certificate of Analysis

MNG 2005 INC | 1380 Ferguson Ave, Saint Louis, MO
United States 63133

D5 GG9 8

Page 2 of 5

Terpenes HYghYX

HyfYbYg'	@C8''	I b]lg''	FYgi `hfl £
5 @<5!798F9B9C	0.007	%	ND
5 @<5!<I AI @B9'	0.007	%	ND
5 @<5!D-B9B9'	0.007	%	ND
5 @<5!H9FD-B9B9'	0.007	%	ND
69H5!AMF79B9'	0.007	%	ND
69H5!D-B9B9'	0.007	%	ND
6CFB9C@	0.013	%	ND
75AD<9B9'	0.007	%	ND
75AD<CF	0.013	%	ND
75FMCD<M@@B9'CL-89'			
798FC@	0.007	%	ND
5 @<5!6-656C@@@	0.007	%	ND
G56-B9B9	0.007	%	ND
G56-B9B9'<M8F5H9	0.007	%	ND
H9FD-B9C@	0.007	%	ND
H9FD-BC@B9	0.007	%	ND
69H5!75FMCD<M@@B9'	0.007	%	ND
HF5BG!B9FC@8C@	0.007	%	ND
J5@B79B9'	0.007	%	ND
DI @; CB9'	0.007	%	ND
5 @<5!D<9 @6B8F9B9'	0.007	%	ND
C7-A9B9'	0.007	%	ND
B9FC@	0.007	%	ND
@B5 @C@	0.007	%	ND
@ACB9B9'	0.007	%	ND
; I 5-C@	0.007	%	ND
; 9F5BM@579H5H9	0.007	%	ND
; 9F5B-C@	0.007	%	ND
; 5AA5!H9FD-B9B9	0.007	%	ND
: 9B7<CB9	0.007	%	ND
: 5FB9G9B9'	0.007	%	ND
HcHJ'	\$'		

HyfYbYg'	@C8''	I b]lg''	FYgi `hfl £
9I 75 @DHC@	0.007	%	ND
6C6CFB9C@	0.007	%	ND
<9L5<M8FCH<MAC@	0.007	%	ND
: 9B7<M@5 @C<C@	0.007	%	ND
'!75F9B9	0.007	%	ND
7-GIB9FC@8C@	0.007	%	ND
6CDI @; C@	0.007	%	ND

Terpenes H9 GH9 8'

5 bUmYX'Vm K YJ \ h 9I fUWjcb'XUH '9I fUWYX'6m
ID-710 1.0045g 06/08/20 ID-710
FYj JYk YX'Cb - 06/15/20
6gffi a Ybhl gYX' Liquid Injection GCMS QP2010

FYUj Ybi	8 Ji h]cb'	7 cbgi a g"-8'
021420.11	10	180111
012120.R13		280653964

Terpenoid profile screening is performed using GC-MS with Liquid Injection (Gas Chromatography – Mass Spectrometer) which can screen 38 terpenes using Method SOP.T.40.091 Terpenoid Analysis Via GC/MS.

This report shall not be reproduced, unless in its entirety, without written approval from High Performance Liquid Analytics. This report is a High Performance Liquid Analytics certification. The results relate only to the material or product analyzed. Test results are confidential unless explicitly waived otherwise. Void after 1 year from test end date. Cannabinoid content of batch material may vary depending on sampling error. IC=In-control QC parameter, NC=Non-controlled QC parameter, ND=Not Detected, NA=Not Analyzed, ppm=Parts Per Million, ppb=Parts Per Billion. Limit of Detection (LoD) and Limit Of Quantitation (LoQ) are terms used to describe the smallest concentration that can be reliably measured by an analytical procedure. RPD=Repro-ducibility of two measurements. Action Levels are State determined thresholds for human safety for consumption and/or inhalation. The result >99% are variable based on uncertainty of measurement (UM) for the analyte. The UM error is available from the lab upon request. The "Decision Rule" for the pass/fail does not include the UM. The limits are based on F.S. Rule 64-4.310.

C. Kukowski
LAB DIRECTOR


Signature 06-15-2020
Signed On

High Performance Liquid Analytics

111 Westport Plaza Dr. 6th Floor
St. Louis, MO. 63146

Certificate of Analysis

Derma Thereal

Product Name: Massage Oil 20MG
Manufacturer: DermaThereal
Type: Topical
Test: Non-Compliance Full-Panel

Sample ID: T086
Sample Size: 5ml
Retail Product Size: 20mg/118ml/4oz
Ordered: 06/06/20
Sampled: 06/07/20
Completed: 06/15/20
Expires: 06/15/21
Sampling Method: SOP Client Method

PASSED

Page 3 of 5

Pesticides

PASSED

Pesticides	LOD	Units	Action Level	Result	Pesticides	LOD	Units	Action Level	Result
ABAMECTIN B1A	0.01	ppm	0.3	ND	METHOMYL	0.01	ppm	0.1	ND
ACEPHATE	0.01	ppm	3	ND	METHYL PARATHION	0.005	ppm	0.1	ND
ACEQUINOCYL	0.01	ppm	2	ND	MEVINPHOS	0.01	ppm	0.1	ND
ACETAMIPRID	0.01	ppm	3	ND	MYCLOBUTANIL	0.01	ppm	3	ND
ALDICARB	0.01	ppm	0.1	ND	NALED	0.025	ppm	0.5	ND
AZOXYSTROBIN	0.01	ppm	3	ND	OXAMYL	0.05	ppm	0.5	ND
BIFENAZATE	0.01	ppm	3	ND	PACLOBUTRAZOL	0.01	ppm	0.1	ND
BIFENTHRIN	0.01	ppm	0.5	ND	PHOSMET	0.01	ppm	0.2	ND
BOSCALID	0.01	ppm	3	ND	PIPERONYL BUTOXIDE	0.1	ppm	3	ND
CAPTAN	0.07	ppm	3	ND	PRALLETHRIN	0.01	ppm	0.4	ND
CARBARYL	0.05	ppm	0.5	ND	PROPICONAZOLE	0.01	ppm	1	ND
CARBOFURAN	0.01	ppm	0.1	ND	PROPOXUR	0.01	ppm	0.1	ND
CHLORANTRANILIPROLE	0.1	ppm	3	ND	PYRETHRINS	0.05	ppm	1	ND
CHLORFENAPYR	0.01	ppm	0.1	ND	PYRIDABEN	0.02	ppm	3	ND
CHLORMEQUAT CHLORIDE	0.05	ppm	3	ND	SPINETORAM	0.02	ppm	3	ND
CHLORPYRIFOS	0.01	ppm	0.1	ND	SPIROMESIFEN	0.01	ppm	3	ND
CLOFENTEZINE	0.02	ppm	0.5	ND	SPIROTETRAMAT	0.01	ppm	3	ND
COUMAPHOS	0.01	ppm	0.1	ND	SPIROXAMINE	0.01	ppm	0.1	ND
CYFLUTHRIN	0.05	ppm	1	ND	TEBUCONAZOLE	0.01	ppm	1	ND
CYPERMETHRIN	0.05	ppm	1	ND	THIACLOPRID	0.01	ppm	0.1	ND
DAMINOZIDE	0.01	ppm	0.1	ND	THIAMETHOXAM	0.05	ppm	1	ND
DIAZANON	0.01	ppm	0.2	ND	TOTAL CONTAMINANT LOAD	0	ppm	20	ND
DICHLORVOS	0.01	ppm	0.1	ND	(PESTICIDES)				
DIMETHOATE	0.01	ppm	0.1	ND	TOTAL PERMETHRIN	0.01	ppm	1	ND
DIMETHOMORPH	0.02	ppm	3	ND	TOTAL SPINOSAD	0.01	ppm	3	ND
ETHOPROPHOS	0.01	ppm	0.1	ND	TRIFLOXYSTROBIN	0.01	ppm	3	ND
ETOFENPROX	0.01	ppm	0.1	ND					
ETOXAZOLE	0.01	ppm	1.5	ND					
FENHEXAMID	0.01	ppm	3	ND					
FENOXYCARB	0.01	ppm	0.1	ND					
FENPYROXIMATE	0.01	ppm	2	ND					
FIPRONIL	0.01	ppm	0.1	ND					
FLONICAMID	0.01	ppm	2	ND					
FLUDIOXONIL	0.01	ppm	3	ND					
HEXYTHIAZOX	0.01	ppm	2	ND					
IMAZALIL	0.01	ppm	0.1	ND					
IMIDACLOPRID	0.04	ppm	3	ND					
KRESOXIM-METHYL	0.01	ppm	1	ND					
MALATHION	0.02	ppm	2	ND					
METALAXYL	0.01	ppm	3	ND					
METHIOCARB	0.01	ppm	0.1	ND					

Pesticides

PASSED

Analyzed by: ID-710 Weight: 1.0501g Extraction date: 06/08/20 Extracted By: ID-710

Reviewed On: 06/15/20
Instrument Used: Liquid Injection GCMS QP2010

Reagent	Dilution	Consums. ID
013120.28	10	180111
031220.R10		280653964
032320.R17		

This report shall not be reproduced, unless in its entirety, without written approval from High Performance Liquid Analytics. This report is a High Performance Liquid Analytics certification. The results relate only to the material or product analyzed. Test results are confidential unless explicitly waived otherwise. Void after 1 year from test end date. Cannabinoid content of batch material may vary depending on sampling error. IC=In-control QC parameter, NC=Non-controlled QC parameter, ND=Not Detected, NA=Not Analyzed, ppm=Parts Per Million, ppb=Parts Per Billion. Limit of Detection (LoD) and Limit Of Quantitation (LoQ) are terms used to describe the smallest concentration that can be reliably measured by an analytical procedure. RPD=Repro-ducibility of two measurements. Action Levels are State determined thresholds for human safety for consumption and/or inhalation. The result >99% are variable based on uncertainty of measurement (UM) for the analyte. The UM error is available from the lab upon request. The "Decision Rule" for the pass/fail does not include the UM. The limits are based on F.S. Rule 64-4.310.

C. Kukowski
LAB DIRECTOR


Signature

06-15-2020
Signed On

High Performance Liquid Analytics

111 Westport Plaza Dr. 6th Floor
St. Louis, MO. 63146

Product Name: Massage Oil 20MG
Manufacturer: DermaThereal
Type: Topical
Test: Non-Compliance Full-Panel

Sample ID: T086
Sample Size: 5ml
Retail Product Size: 20mg/118ml/4oz
Ordered : 06/06/20
Sampled : 06/07/20
Completed: 06/15/20
Expires: 06/15/21
Sampling Method: SOP Client Method

Certificate of Analysis

Derma Thereal

PASSED

Page 4 of 5

Residual solvents

PASSED

Solvent	LOD	Units	Action Level (PPM)	Pass/Fail	Result	Analyzed by	Weight	Extraction date	Extracted By
1,1-DICHLOROETHENE	1	ppm	8	PASS	ND	ID-710	0.0294g	06/08/20	ID-710
1,2-DICHLOROETHANE	0.18	ppm	2	PASS	ND	Reviewed On - 06/15/20			
2-PROPANOL	45	ppm	500	PASS	ND	Instrument Used : Headspace GCMS			
ACETONE	67.5	ppm	750	PASS	ND	Reagent	Dilution	Consums. ID	
ACETONITRILE	5.4	ppm	60	PASS	ND		1	00279984	
BENZENE	0.09	ppm	1	PASS	ND			161291-1	
BUTANES (N-BUTANE)	96	ppm	5000	PASS	ND			24154107	
CHLOROFORM	0.18	ppm	2	PASS	ND				
DICHLOROMETHANE	3.75	ppm	125	PASS	ND				
ETHANOL	90	ppm	000000	PASS	776.749				
ETHYL ACETATE	36	ppm	400	PASS	ND				
ETHYL ETHER	45	ppm	500	PASS	ND				
ETHYLENE OXIDE	0.6	ppm	5	PASS	ND				
HEPTANE	45	ppm	5000	PASS	ND				
METHANOL	22.5	ppm	250	PASS	ND				
N-HEXANE	4.5	ppm	250	PASS	ND				
PENTANES (N-PENTANE)	67.5	ppm	750	PASS	ND				
PROPANE	120	ppm	5000	PASS	ND				
TOLUENE	13.5	ppm	150	PASS	ND				
TOTAL XYLENES	13.5	ppm	150	PASS	ND				
TRICHLOROETHYLENE	2.25	ppm	25	PASS	ND				

This report shall not be reproduced, unless in its entirety, without written approval from High Performance Liquid Analytics. This report is a High Performance Liquid Analytics certification. The results relate only to the material or product analyzed. Test results are confidential unless explicitly waived otherwise. Void after 1 year from test end date. Cannabinoid content of batch material may vary depending on sampling error. IC=In-control QC parameter, NC=Non-controlled QC parameter, ND=Not Detected, NA=Not Analyzed, ppm=Parts Per Million, ppb=Parts Per Billion. Limit of Detection (LoD) and Limit Of Quantitation (LoQ) are terms used to describe the smallest concentration that can be reliably measured by an analytical procedure. RPD=Repro-ducibility of two measurements. Action Levels are State determined thresholds for human safety for consumption and/or inhalation. The result >99% are variable based on uncertainty of measurement (UM) for the analyte. The UM error is available from the lab upon request. The "Decision Rule" for the pass/fail does not include the UM. The limits are based on F.S. Rule 64-4.310.

C. Kukowski
LAB DIRECTOR


Signature

06-15-2020
Signed On

High Performance Liquid Analytics

111 Westport Plaza Dr. 6th Floor
St. Louis, MO. 63146

Product Name: Massage Oil 20MG
Manufacturer: DermaThereal
Type: Topical
Test: Non-Compliance Full-Panel

Sample ID: -T086
Sample Size: 5ml
Retail Product Size: 20mg/118ml/4oz
Ordered : 06/06/20
Sampled : 06/07/20
Completed: 06/15/20
Expires: 06/15/21
Sampling Method: SOP Client Method

Certificate of Analysis

Derma Thereal

PASSED

Page 5 of 5

Mycotoxins

PASSED

Analyte	LOD	Units	Result	Action Level (PPM)
AFLATOXIN G2	0.002	ppm	ND	0.02
AFLATOXIN G1	0.002	ppm	ND	0.02
AFLATOXIN B2	0.002	ppm	ND	0.02
AFLATOXIN B1	0.002	ppm	ND	0.02
OCHRATOXIN A+	0.002	ppm	ND	0.02

Aflatoxins B1, B2, G1, G2, and Ochratoxins A testing using LC-MS. (Method: SOP.T.30.065 for Sample Preparation and SOP.T.40.065 Procedure for Mycotoxins Quantification Using LCMS. LOQ 1.0 ppb). Aflatoxin B1, B2, G1, and G2 must individually be <20ug/Kg. Ochratoxins must be <20ug/Kg.

Heavy Metals

PASSED

Reagent	Dilution
032420.R01	50
031820.R03	
031820.R02	
031920.R01	
111319.02	

Metal	LOD	Unit	Result	Action Level (PPM)
ARSENIC	0.02	ppm	ND	.5
CADMIUM	0.02	ppm	ND	0.5
LEAD	0.05	ppm	ND	0.5
MERCURY	0.02	ppm	ND	3

Microbials

PASSED

Analyte	Result
ASPERGILLUS_FLAVUS	not present in 1 gram.
ASPERGILLUS_FUMIGATUS	not present in 1 gram.
ASPERGILLUS_NIGER	not present in 1 gram.
ASPERGILLUS_TERREUS	not present in 1 gram.
ESCHERICHIA_COLI_SHIGELLA_SPP	not present in 1 gram.
SALMONELLA_SPECIFIC_GENE	not present in 1 gram.
TOTAL_YEAST_AND_MOLD	<100

Analyzed by	Weight	Extraction date	Extracted By
ID-710	0.2808g	06/07/20	ID-710

Reviewed On - 06/15/20
Instrument Used : ICPMS-2030 B

Reviewed On - 06/15/20
Instrument Used : PathogenDX PCR_Array Scanner, PathogenDX PCR_DA-171

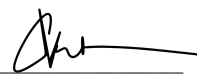
Analyzed by	Weight	Extraction date	Extracted By
ID-710	1.0197g	06/07/20	ID-710

Reagent	Dilution	Consums. ID
		181019-274

Microbiological testing for Fungal and Bacterial Identification via Polymerase Chain Reaction (PCR) method consisting of sample DNA amplified via tandem Polymerase Chain Reaction (PCR) as a crude lysate which avoids purification. (Method SOP.T.40.043) If a pathogenic Escherichia Coli, Salmonella, Aspergillus fumigatus, Aspergillus flavus, Aspergillus niger, or Aspergillus terreus is detected in 1g of a sample, the sample fails the microbiological-impurity testing.

This report shall not be reproduced, unless in its entirety, without written approval from High Performance Liquid Analytics. This report is a High Performance Liquid Analytics certification. The results relate only to the material or product analyzed. Test results are confidential unless explicitly waived otherwise. Void after 1 year from test end date. Cannabinoid content of batch material may vary depending on sampling error. IC=In-control QC parameter, NC=Non-controlled QC parameter, ND=Not Detected, NA=Not Analyzed, ppm=Parts Per Million, ppb=Parts Per Billion. Limit of Detection (LoD) and Limit Of Quantitation (LoQ) are terms used to describe the smallest concentration that can be reliably measured by an analytical procedure. RPD=Repro-ducibility of two measurements. Action Levels are State determined thresholds for human safety for consumption and/or inhalation. The result >99% are variable based on uncertainty of measurement (UM) for the analyte. The UM error is available from the lab upon request. The "Decision Rule" for the pass/fail does not include the UM. The limits are based on F.S. Rule 64-4.310.

C. Kukowski
LAB DIRECTOR


Signature
06-15-2020
Signed On