

High Performance Liquid Analytics

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

Certificate of Analysis

June 15, 2020
Derma Thereal
SAFETY RESULTS

For informational purposes only.

Product Name: Immune Support Pet Spray
Manufacturer: DermaThereal
Type: Topical
Test: Non-Compliance Full-Panel

PRODUCT IMAGE



Sample ID:-S009
Sample Size: 1ml
Retail Product Size: 50mg/8ml/.25oz
Ordered : 06/06/20
Sampled : 06/07/20
Completed: 06/15/20
Expires: 06/15/21
Sampling Method: SOP Client Method

PASSED

Page 1 of 5

MISC.

Pesticides	Heavy Metals	Microbials	Mycotoxins	Residuals	Filth	Water Activity	Moisture	Terpenes
PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	NOT TESTED	NOT TESTED	TESTED

CANNABINOID RESULTS

Total THC
0.0%

Total CBD
6.05mg/ml
CBD/Container: 48.40mg

Total Cannabinoids
48.40mg
Total Cannabinoids/Container: 48.40mg

CBC	CBGA	CBG	CBN	THCV	D-8 THC	CBDV	CBDA	CBD	D-9 THC	THCA
ND	ND	ND	ND	ND	ND	ND	0.05	30.25	ND	ND
mg/v	mg/v	mg/v	mg/v	mg/v	mg/v	mg/v	mg/v	mg/v	mg/v	mg/v
ND	ND	ND	ND	ND	ND	ND	0.01	6.05	ND	ND
mg/v	mg/v	mg/v	mg/v	mg/v	mg/v	mg/v	mg/v	mg/v	mg/v	mg/v
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
LOD	LOD	LOD	LOD	LOD	LOD	LOD	LOD	LOD	LOD	LOD

Foreign Matter PASSED

Analyzed By Weight Date LOD(ppm)
ID-710 .25ml. 06/12/20 N/A

Reviewed On - 06/15/20

Instrument Used : Filth/Foreign Material Microscope

This includes but is not limited to hair, insects, feces, packaging contaminants, and manufacturing waste and by-products.

Cannabinoid Profile Test

Analyzed By	Weight	Extraction date	Extracted By
ID-710	5ml	06/07/20	ID-710
Reviewed On - 06/15/20			
Instrument Used : HPLA-1100-DAD-#01			
Reagent	Dilution		
030520.03	400		

Full spectrum cannabinoid analysis utilizing High Performance Liquid Chromatography with UV detection (HPLC-UV).

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C. Kukowski
LAB DIRECTOR

Signature

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D5 GG9 8

Page 2 of 5

Terpenes

HYghYX

HyfYbYg'	@C8''	I b]hg''	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
6 CFB9C @	0.013	%	ND
7 5 AD<9B9'	0.007	%	ND
7 5 AD<CF	0.013	%	ND
7 5 FMCD<M@@B9'CL-89'			
7 98 FC @	0.007	%	ND
5 @<5!6-G56C@@	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!75 FMCD<M@@B9'	0.007	%	ND
HF5 BG!B9FC @8C @	0.007	%	ND
J5 @B79B9'	0.007	%	ND
DI @; CB9'	0.007	%	ND
5 @<5!D<9 @G B8F9B9'	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]hg''	FYgi `hfl £
9I 75 @DHC @	0.007	%	ND
-GC6 CFB9C @	0.007	%	ND
<9L5<M8FCH<MAC @	0.007	%	ND
: 9B7<M@5 @7C<C @	0.007	%	ND
'!75F9B9	0.007	%	ND
7-G!B9FC @8C @	0.007	%	ND
-GCDI @; C @	0.007	%	ND

Terpenes

H9 GH9 8'

5 bUmYX'Vmi K YJ[\ h	9I HfUWjcb'XUH	'9I HfUWYX'6m
ID-710	1.0045g 06/08/20	ID-710
FYj JYk YX'Cb - 06/15/20		
-ghfi a Ybhl gYX'. Liquid Injection GCMS QP2010		

FYU[Ybhi	8 Ji Hcb'	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.

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LAB DIRECTOR


Signature
06-15-2020
Signed On

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

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PASSED

Page 4 of 5

Residual solvents

PASSED

Solvent	LOD	Units	Action Level (PPM)	Pass/Fail	Result	Analyzed by	Weight	Extraction date	Extracted By
						ID-710	0.0294g	06/08/20	ID-710
1,1-DICHLOROETHENE	1	ppm	8	PASS	ND	<div>Reviewed On - 06/15/20</div> <div>Instrument Used : Headspace GCMS</div>			
1,2-DICHLOROETHANE	0.18	ppm	2	PASS	ND				
2-PROPANOL	45	ppm	500	PASS	ND				
ACETONE	67.5	ppm	750	PASS	ND				
ACETONITRILE	5.4	ppm	60	PASS	ND	Reagent	Dilution	Consums. ID	
BENZENE	0.09	ppm	1	PASS	ND				
BUTANES (N-BUTANE)	96	ppm	5000	PASS	ND				
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				

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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

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

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

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.

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