



# Certificate of Analysis

**Customer Name:** Lief Holdings  
**Address:** 9016 Fullbright Ave  
 Chatsworth, CA 91311  
**Sample Name:** SOOTHING MUSCLE RUB SPRAY  
**Product Code:** N/A  
**Batch/Lot#:** AI180345  
**MQL Accession #:** 190920-0267

**Tested By:** Micro Quality Labs, Inc.  
**Address:** 3125 N. Damon Way, Burbank, CA 91505  
 P: (818)845-0070 F: (818)845-0030  
**PO#:** N/A  
**Sample Description:** FG  
**Rush:** N/A  
**Received Date:** 09/20/19

## Pesticide Test Results

Pesticide, Fungicide and plant growth regular analysis utilizing Gas Chromatography – Mass Spectrometry. MQLTM-0343 (USP<561>Modified) By GC-MS

	µg/g	LOD µg/g	LOQ µg/g
Acephate	< 0.1 ppm	0.1 ppm	0.1 ppm
Alachlor	< 0.05 ppm	0.05 ppm	0.05 ppm
Aldrin and dieldrin (sum of)	< 0.05 ppm	0.05 ppm	0.05 ppm
Azinphos-ethyl	< 0.1 ppm	0.1 ppm	0.1 ppm
Azinphos-methyl	< 1 ppm	1 ppm	1 ppm
Bromide, inorganic	< 125 ppm	125 ppm	125 ppm
Bromophos-ethyl	< 0.05 ppm	0.05 ppm	0.05 ppm
Bromophos-methyl	< 0.05 ppm	0.05 ppm	0.05 ppm
Bromopropylate	< 3 ppm	3 ppm	3 ppm
Chlordane (sum of)	< 0.05 ppm	0.05 ppm	0.05 ppm
Clofenvinphos	< 0.5 ppm	0.5 ppm	0.5 ppm
Chlorpyrifos-ethyl	< 0.2 ppm	0.2 ppm	0.2 ppm
Chlorpyrifos-methyl	< 0.1 ppm	0.1 ppm	0.1 ppm
Chlorthal-dimethyl	< 0.01 ppm	0.01 ppm	0.01 ppm
Cyfluthrin (sum of)	< 0.1 ppm	0.1 ppm	0.1 ppm
λ-Cyhalothrin	< 1 ppm	1 ppm	1 ppm
Cypermethrin and isomers (sum of)	< 1 ppm	1 ppm	1 ppm
DDT (sum of)	< 1 ppm	1 ppm	1 ppm
Deltamethrin	< 0.5 ppm	0.5 ppm	0.5 ppm
Diazinon	< 0.5 ppm	0.5 ppm	0.5 ppm
Dichlofuanid	< 0.1 ppm	0.1 ppm	0.1 ppm
Dichlorvos	< 1 ppm	1 ppm	1 ppm
Dicofol	< 0.5 ppm	0.5 ppm	0.5 ppm
Dimethoate and omethoate (sum of)	< 0.1 ppm	0.1 ppm	0.1 ppm
Dithiocarbamates (expressed as CS <sub>2</sub> )	< 2 ppm	2 ppm	2 ppm
Endosulfan (sum of)	< 3 ppm	3 ppm	3 ppm
Endrin	< 0.05 ppm	0.05 ppm	0.05 ppm
Ethion	< 2 ppm	2 ppm	2 ppm
Etrifophos	< 0.05 ppm	0.05 ppm	0.05 ppm
Fenchlorophos (sum of)	< 0.1 ppm	0.1 ppm	0.1 ppm
Fenitrothion	< 0.5 ppm	0.5 ppm	0.5 ppm
Fenprophathrin	< 0.03 ppm	0.03 ppm	0.03 ppm
Fensulfthion (sum of)	< 0.05 ppm	0.05 ppm	0.05 ppm
Fenthion (sum of)	< 0.05 ppm	0.05 ppm	0.05 ppm
Fenvalerate	< 1.5 ppm	1.5 ppm	1.5 ppm
Flucythrinate	< 0.05 ppm	0.05 ppm	0.05 ppm
t-Fluvalinate	< 0.05 ppm	0.05 ppm	0.05 ppm
Fonophos	< 0.05 ppm	0.05 ppm	0.05 ppm
Heptachlor (sum of)	< 0.05 ppm	0.05 ppm	0.05 ppm
Hexachlorbenzene	< 0.1 ppm	0.1 ppm	0.1 ppm
Hexachlorocyclohexane (sum of)	< 0.3 ppm	0.3 ppm	0.3 ppm
Lindan (γ-hexachlorocyclohexane)	< 0.6 ppm	0.6 ppm	0.6 ppm
Malathion and malaoxon (sum of)	< 1 ppm	1 ppm	1 ppm
Mecarbam	< 0.05 ppm	0.05 ppm	0.05 ppm
Methacryphos	< 0.05 ppm	0.05 ppm	0.05 ppm
Methamidophos	< 0.05 ppm	0.05 ppm	0.05 ppm
Methidathion	< 0.2 ppm	0.2 ppm	0.2 ppm
Methoxychlor	< 0.05 ppm	0.05 ppm	0.05 ppm
Mirex	< 0.01 ppm	0.01 ppm	0.01 ppm

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	µg/g	LOD µg/g	LOQ µg/g
Monocrotophos	< 0.1 ppm	0.1 ppm	0.1 ppm
Parathion-ethyl and paraoxon-ethyl (sum of)	< 0.5 ppm	0.5 ppm	0.5 ppm
Parathion-methyl and paraoxon-methyl (sum of)	< 0.2 ppm	0.2 ppm	0.2 ppm
Pendimethalin	< 0.1 ppm	0.1 ppm	0.1 ppm
Pentachloranisole	< 0.01 ppm	0.01 ppm	0.01 ppm
Permethrin and isomers (sum of)	< 1 ppm	1 ppm	1 ppm
Phosalone	< 0.1 ppm	0.1 ppm	0.1 ppm
Phosmet	< 0.05 ppm	0.05 ppm	0.05 ppm
Piperonyl butoxide	< 3 ppm	3 ppm	3 ppm
Pirimiphos-ethyl	< 0.05 ppm	0.05 ppm	0.05 ppm
Pirimiphos-methyl (sum of)	< 4 ppm	4 ppm	4 ppm
Procymidone	< 0.1 ppm	0.1 ppm	0.1 ppm
Profenophos	< 0.1 ppm	0.1 ppm	0.1 ppm
Prothiophos	< 0.05 ppm	0.05 ppm	0.05 ppm
Pyrethrum (sum of)	< 3 ppm	3 ppm	3 ppm
Quinalphos	< 0.05 ppm	0.05 ppm	0.05 ppm
Quintozene (sum of)	< 1 ppm	1 ppm	1 ppm
S-421	< 0.02 ppm	0.02 ppm	0.02 ppm
Tecnazene	< 0.05 ppm	0.05 ppm	0.05 ppm
Tetradifon	< 0.3 ppm	0.3 ppm	0.3 ppm
Vinclozolin	< 0.4 ppm	0.4 ppm	0.4 ppm

## Heavy Metal Test Results

Heavy metal analysis utilizing Inductively Coupled Mass Spectrometry (ICP-MS) MQLTM-0278 by ICP-MS.

	µg/g	LOD µg/g	LOQ µg/g
Lead	0.037 ppm	0.2 ppb	3 ppb
Arsenic	0.033 ppm	0.5 ppb	3 ppb
Cadmium	Not Detected (MDL 0.003 ppm)	0.1 ppb	3 ppb
Mercury	Not Detected (MDL 0.001 ppm)	0.07 ppb	1 ppb

## Sample Certification

California Code of Regulations Title 16 Effect Date January 16, 2019  
 Authority: Section 26013, Business and Professions Code.  
 Reference: Sections 26100, 26104 and 26110, Business and Professions Code.

Prepared By: SEP 30 2019

Desiree Rodriguez/ Quality Assurance Assistant 09/30/19

Reviewed By: SEP 30 2019

Raffie Avakian/Quality Assurance Reviewer 09/30/19



Scan to verify at [microqualitylabs.com](http://microqualitylabs.com)

The aforementioned results on this report are representative of the samples submitted and may not be indicative of the entire manufacture, batch, and/or lot. Applicable current GMP's shall always be used when sampling. GLP's shall always be practiced by Micro Quality Labs to ensure the most accurate results.

## Aflatoxin Test Results

Aflatoxin analysis utilizing MQLTM-1129 by LCMS

Aflatoxin	µg/g	LOD µg/g	LOQ µg/g
Aflatoxin	< 0.01 ppm	0.01 ppm	0.01 ppm

Form # 3B.8 Rev 08-19-2019 DCR2019-0078

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## Residual Solvents Test Results

Residual Solvent analysis utilizing Gas Chromatography - Mass Spectrometry (GC-MS), USP<42> Modified [467] By GC-FID

## Foreign Material Test Results

[Test method information]

Class I:	USP Limit	Results
1,1 Dichloroethene	8 ppm	
1,1,1 Trichloroethane	1500 ppm	
Carbon Tetrachloride	4 ppm	
Benzene	2 ppm	
1,2-Dichloroethane	5 ppm	
<b>Class IIA:</b>		
Methanol	3000 ppm	
Acetonitrile	410 ppm	
Dichloromethane	600 ppm	
1,2-dichloroethene	1870 ppm	
Cis-1,2-dichloroethene	900 ppm	
Tetrahydrofuran	720 ppm	
Cyclohexane	3880 ppm	
Methylcyclohexane	1180 ppm	
Toluene	380 ppm	
1,4-dioxane	890 ppm	
Chlorobenzene	360 ppm	
Ethylbenzene	1605 ppm	
m/p-Xylene	195 ppm	
o-Xylene	195 ppm	
Cumene	70 ppm	
<b>Class IIB:</b>		
Hexane	290 ppm	
1,2 Dimethoxyethane	100 ppm	
trichloroethylene	80 ppm	
Chloroform	60 ppm	
2-Hexanone	50 ppm	
Nitromethane	50 ppm	
Tetralin	200 ppm	
Pyridine	100 ppm	
<b>Class III:</b>		
Ethanol	800 ppm	
Acetone	62 ppm	
IPA	63 ppm	
Methyl Acetate	62 ppm	
Tert Butyl Methyl ether	62 ppm	
Tributylamine	65 ppm	
Acetic Acid	506 ppm	

MIA

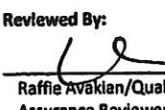
## Notes

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Prepared By:  SEP 30 2019  
 Desiree Rodriguez/ Quality Assurance Assistant 09/30/19



Reviewed By:  SEP 30 2019  
 Raffie Avakian/Quality Assurance Reviewer 09/30/19

## Microbiological Test Results

Acc# 846392

USP 61 & USP 62

	Specification	Results
TPC	N/A	<10cfu/gm
Yeast/ Mold	N/A	<10cfu/gm
Enrichment	N/A	No Growth
Coliforms	N/A	<10cfu/gm
E.Coli	N/A	Absent
S.Aureus	N/A	Absent
Salmonella/ Shigella	N/A	Absent

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COMMENT: REV-01 ADDED MICRO RESULTS AND BATCH PHOTO.