



BATCH #: 20190121-19054 MN

PRODUCT: Curaleaf Hemp Menthol, Topical Lotion with CBD 4oz

BATCH DATE: 2/4/2019

EXPIRATION DATE: 2/4/2021

BATCH SIZE: 4,480 lbs

TOTAL QUANTITY PRODUCED: 16,767 4oz JARS

(i) ingredient name;	Name of ingredient manufacturer	Ingredient Lot #
Aqua	Confidential	N/A
Butyrospermum Parkii (Shea) Butter	Confidential	93493
Cetearyl Alcohol & Cetearyl Glucoside	Confidential	180531012296
Tapioca Starch Modified	Confidential	X903105
Organic Aloe Barbadensis (Aloe Vera) Leaf Juice	Confidential	1807380
Caprylic Capric Triglyceride	Confidential	46747308HT523
Menthol	Confidential	20182404
Helianthus Annuus (Sunflower) Seed Oil	Confidential	1093898
Organic Argania Spinosa (Argan) Kernel oil	Confidential	22345
Organic Cocos Nucifera (Coconut) Oil	Confidential	098180129008
CBD Hemp Extract	GenCanna Global	CC18558, CC18510, CC18163
Glycerin	Confidential	PA1083C
Citric Acid	Confidential	0005702638
Organic Rosmarinus Officinalis (Rosemary) Leaf Extract	Confidential	20190106
Xanthan Gum	Confidential	2538062
Glyceryl Caprylate	Confidential	HF8773
Caprylhydroxamic Acid	Confidential	HF8773



Royal Labs Natural Cosmetics, Inc.
2671 Fort Trenholm Road Johns Island, SC 29455
(843) 559-7541
Fax: (843) 559-7542
E-Mail: lab3@royallabs.com
www.royallabs.com



Certificate of Analysis

Order Information

Customer: Curaleaf Hemp
Product Name: Lemongrass Lotion, Topical Lotion with CBD, 4oz.

Batch Information

Date of Manufacture: 02-04-2019
Lot Number: 20190121
Fill Date Code: 19053 LM

Analysis Specification	Range Specification	Actual Specification	Result
Viscosity (spindle 5 @ 12rpm)	10,000-25,000	15,000	Pass
pH Value	4.50-5.50	5.05	Pass
Color	Off White	Off White	Pass
Appearance @ 25°C	Viscous Cream	Viscous Cream	Pass
Odor/Scent	Lemongrass	Lemongrass	Pass
Specific Gravity @ 25°C	0.90 – 1.10	0.9962	Pass
Lot Code/Fill Date Code	Present, correctly placed, legible, correct	Present, correctly placed, legible, correct	Pass
CBD Compound	300 mg/ml – 305 mg/ml	302.7 mg/ml	Pass

Bioburden Specification	Range Specification	Actual Specification	Result
Escherichia Coli	Not Detected (<10cfu/g)	Not Detected	Pass
Pseudomonas Aeruginosa	Not Detected (<10cfu/g)	Not Detected	Pass
Staphylococcus Aureus	Not Detected (<10cfu/g)	Not Detected	Pass
Candida Albicans	Not Detected (<10cfu/g)	Not Detected	Pass
Aspergillus Niger	Not Detected (<10cfu/g)	Not Detected	Pass
APC (Total Aerobic Plate Count)	<10cfu/g	<10cfu/g	Pass
MPC (Total Combined Mold-Yeast Plate Count)	<10cfu/g	<10cfu/g	Pass

Cannabinoid Analysis Identification	Method	Actual Result	Result
Cannabinoid	HPLC-DAD	%wt/wt	
Cannabidiolic Acid (CBDA)	HPLC-DAD	Not Detected	Pass
Cannabidiol (CBD)	HPLC-DAD	99.33%	Pass
Cannabidivarin (CBDV)	HPLC-DAD	0.32%	Pass
Tetrahydrocannabinolic Acid (THCA)	HPLC-DAD	Not Detected	Pass
Δ-9-Tetrahydrocannabinol (Δ-9-THC)	HPLC-DAD	Not Detected	Pass
Cannabinol (CBN)	HPLC-DAD	Not Detected	Pass
Cannabichromene (CBC)	HPLC-DAD	Not Detected	Pass

COA Approved by:

Quality Control Technician

Date: 02-14-2019

CERTIFICATE OF ANALYSIS:

LEMONGRASS TOPICAL CREAM

Product Name

Lemongrass Topical Cream

Formulation

300mg/4oz Lemongrass

Batch Number

20190121

Manufacture Date

February 1, 2019

Expiration Date

February 2021

Product Ingredients

Aqua, shea butter, cetearyl alcohol (and) cetearyl glucoside, modified tapioca starch, organic aloe vera leaf juice, caprylic capric triglycerides, aroma (lemongrass), sunflower seed oil, organic argan kernel oil, organic coconut oil, hemp derived crystalline cannabidiol, glycerin, citric acid, organic rosemary leaf extract, xanthan gum, glyceryl caprylate, caprylhydroxamic acid.

Botanical Source

Industrial Hemp, grown and processed in Kentucky, USA in compliance with Section 7606 of the Farm Bill and applicable Kentucky State Law and State Department of Agriculture regulations.

Qualitative Analysis

OBSERVATION	METHOD	SPECIFICATION	RESULT
Foreign Matter	Gross Visual/Microscopic	None	CONFORMS
Color	Gross Visual/Microscopic	White/Off-White	CONFORMS
Molds & Mildews	Gross Visual/Microscopic	None	CONFORMS
Smell	Olfactory	Lemongrass	CONFORMS
Product Feel	Tactile	Creamy, Viscous	CONFORMS

Quantitative Analysis

Cannabinoid Analysis

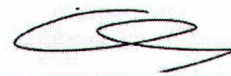
RESULT: PASS

IDENTIFICATION	METHOD	RESULT	
Cannabinoid	HPLC-DAD	%wt/wt	mg/jar
Cannabidiolic Acid (CBDA)	HPLC-DAD	N/D	N/D
Cannabidiol (CBD)	HPLC-DAD	0.26%	302.7
Cannabidivarin (CBDV)	HPLC-DAD	N/D	N/D
Tetrahydrocannabinolic Acid (THCA)	HPLC-DAD	N/D	N/D
Δ -9-Tetrahydrocannabinol (Δ -9-THC)	HPLC-DAD	N/D	N/D
Cannabinol (CBN)	HPLC-DAD	N/D	N/D
Cannabichromene (CBC)	HPLC-DAD	N/D	N/D

**Denotes third party analysis. Source data available upon request.

N/A NOT APPLICABLE TO PRODUCT TYPE

N/D NOT DETECTED



Christopher E Stubbs, CSO

