

Lot # 102419-05

CERTIFICATE OF ANALYSIS

BOSWELLIA SERRATA 65% EP

LATIN NAME: <i>Boswellia serrata</i>	COMMON NAME: Boswellia	HARVEST SEASON: March - June ¹	LOT NUMBER: 401K184597
ORIGIN: India	PLANT PART USED: Gum Resin	HARVEST METHOD: Wild Crafted	MFG. DATE: November 2018

Product code: BSA065EPPH

PHYSICAL CHARACTERISTIC	SPECIFICATION	TEST METHOD	RESULTS (-)
Identification	Positive	TLC/HPLC	Confirms
Appearance	Powder	Visual	Confirms
Color	Creamish Yellow ²	Visual	Confirms
Odor	Characteristic	Organoleptic	Confirms
Taste	Characteristic	Organoleptic	Confirms
Particle Size	NLT 80.00% thru 80 mesh	USP <786>/ASTA	Confirms
Bulk Density	NLT 0.20 g/mL	USP <616>/ASTA	0.39 g/mL
Tap Density	NLT 0.30 g/mL	USP <616>/ASTA	0.49 g/mL
CHEMICAL ANALYSIS	SPECIFICATION	TEST METHOD	RESULTS (-)
Assay for Actives			
a. Total Organic Acids	NLT 65.00%	Titration	72.97%
Loss on Drying	NMT 6.00%	USP <731>/In-house method	2.83%
Herb Extract Ratio	5:1	In-house specification	Confirms
Acid Insoluble Ash	NMT 8.00%	USP <281>	0.78%
IMPURITIES	SPECIFICATION	TEST METHOD	RESULTS (+)
Lead	< 1 ppm	AAS/ICP-MS	0.11 ppm (ICP-MS)
Mercury	< 2 ppm	AAS/ICP-MS	< 0.10 ppm (ICP-MS)
Arsenic	< 1 ppm	AAS/ICP-MS	< 0.50 ppm (ICP-MS)
Cadmium	< 1 ppm	AAS/ICP-MS	< 0.25 ppm (ICP-MS)
MICROBIOLOGY	SPECIFICATION	TEST METHOD	RESULTS (+)
Total plate count	< 10000 cfu/g	USP/BAM	< 100 cfu/g (USP)
Yeast & mold	< 1000 cfu/g	USP/BAM	< 20 cfu/g (USP)
Escherichia coli	Absent/10g	USP/BAM	Negative/10g (USP)
Salmonella	Absent/10g	USP/BAM	Negative/25g (USP)
Coliforms	< 100 cfu/g	USP/BAM	< 10 cfu/g (USP)
Staph Aureus	Absent/10g	USP/BAM	Negative/10g (USP)
Enterobacteriaceae	< 100 cfu/g	USP/BAM	< 10 cfu/g (USP)

Extract ratio: ~5:1 Extract solvent: Alcohol

Excipient: None

¹Harvest season is subject to change based on environmental changes.

²Color of botanical products is subject to seasonal conditions and may vary from lot to lot.

NOTE: Material has an inherent tendency to form clumps due to its hygroscopic nature.

(-) The result shown is obtained from the supplier's Certificate of Analysis.

(+) The result shown is from third party analysis.

Shelf Life: 48 months from date of manufacture

Storage: At room temperature, away from sunlight and moisture

Approved by: Melissa Wilson Date: September 17, 2019
V1.R12



17150 Metro Park Court, Noblesville, IN 46060 USA

+1.317.776.3600 fax: +1.317.776.3650 email: info@vs-corp.com

© 2019 Verdure Sciences. All Rights Reserved.

Product information based on available data and information. No representations regarding specifications or testing methods not shown.

Company's standard terms & conditions govern the transaction and product use, are incorporated by reference, and may be reviewed at <http://vs-corp.com/terms-conditions/>



Advanced Botanical Consulting & Testing Inc.

1169 Warner Ave, Tustin, CA 92780, Phone:(714)259-0384 Fax: (714)259-0385

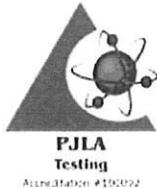


Sample Name: Boswellia Serrata Powder

Item#	Lot#	102419-05	
Lab# 281251	PO#	102519-05/RG	
Analysis:	Method:	Result:	Spec:
Appearance/Odor (organoleptic)	visual	Beige/acidic	Creamish yellow
Identification (TLC)	SOP3.8.403	Confirmed	Positive
Identification for boswellic acids (HPLC)	USP/NF	Confirmed	
Particle Size (USP)	USP	Conforms	NLT 80% through
>mesh 80		8.64%	
Thru mesh 80		91.35%	
Total Organic Acids (titration)	AWC405A	64.16%	NLT 65%

Analyzed by: 
Chemist

Approved by: 
Wendi Wang, PhD, President



Cannabis Analytical
Science Program



Advanced Botanical Consulting & Testing Inc.

1169 Warner Ave, Tustin, CA 92780, Phone:(714)259-0384 Fax: (714)259-0385



Sample Name: Boswellia Serrata Powder

Item#

Lot# 102419-05

Lab# 283375 (281251) - retest

PO#

Analysis:

Total Organic Acids (vendor method) - test 1

Method:

Verdure

Result:

76.60 %*

Spec:

NLT 65 %

*average of triplicate testing

Analyzed by:


Chemist

Approved by:


Wendi Wang, PhD, President



Cannabis Analytical Science Program