

CERTIFICATE OF ANALYSIS

PANAX GINSENG RT

LOT#: SB14-H071237

BOTANICAL NAME:	PANAX GINSENG	PART USED:	ROOT
CARRIER:	DEXTRIN	SOLVENT:	WATER & ETHANOL

	<u>METHOD</u>	<u>SPECIFICATIONS</u>	<u>RESULTS</u>
APPEARANCE:	VISUAL	POWDER	CONFORMS
COLOR:	VISUAL	CREAM	CONFORMS
TASTE:	ORGANOLEPTIC	CHARACTERISTIC	CONFORMS
ODOR:	ORGANOLEPTIC	CHARACTERISTIC	CONFORMS
IDENTIFICATION:	FTIR	VERIFIED	VERIFIED
EXTRACTION METHOD:	WATER/AND OR ALCOHOL	WATER/AND OR ALCOHOL	WATER & ETHANOL
MESH SIZE:	RO-TAP	100% THRU 60 MESH	CONFORMS
LOSS ON DRYING:	MF-50 MOISTURE ANALYZER	<6%	3.75%
HEAVY METALS:	AOAC 993.14	<5 PPM	<2 PPM
LEAD:	AOAC 993.14	REPORT ONLY	0.087 PPM
ARSENIC:	AOAC 993.14	REPORT ONLY	0.010 PPM
CADMIUM:	AOAC 993.14	REPORT ONLY	<0.001 PPM
MERCURY:	AOAC 993.14	REPORT ONLY	0.052 PPM
<u>MICROBIOLOGICAL ANALYSIS:</u>			
TOTAL AEROBIC			
PLATE COUNT:	AOAC 966.23	<10,000 cfu/g	<10,000 cfu/g
YEAST & MOLD:	FDA-BAM 7th -ED	<300 cfu/g	<300 cfu/g
TOTAL COLIFORM:	AOAC 966.24	NEGATIVE	NEGATIVE
E. COLI:	AOAC 966.24	NEGATIVE	NEGATIVE
SALMONELLA:	AOAC 2004.03	NEGATIVE	NEGATIVE
S. AUREUS:	AOAC 975.55	NEGATIVE	NEGATIVE

MANUFACTURE DATE:	JUNE 2014
RE-CERTIFICATION DATE:	JUNE 2017

STORAGE: MINIMUM 3 YEARS WHEN PROPERLY STORED IN ORIGINALLY SEALED UNOPENED CONTAINER. STORE CONTAINER IN A COOL AND DRY PLACE AWAY FROM LIGHT, WATER, HUMIDITY, AND EXTREME VARIATIONS IN TEMPERATURE.

STRYKA BOTANICS

CERTIFICATE OF ANALYSIS

SAW PALMETTO

LOT#: SB14-H040709

BOTANICAL NAME:	SERENOA REPENS	PART USED:	DRIED BERRIES
CARRIER:	DEXTRIN	SOLVENT:	ETHANOL & WATER

	<u>METHOD</u>	<u>SPECIFICATIONS</u>	<u>RESULTS</u>
APPEARANCE:	VISUAL	FINE POWDER	CONFORMS
COLOR:	VISUAL	WHITE TO LIGHT CREAM	CONFORMS
TASTE:	ORGANOLEPTIC	CHARACTERISTIC	CONFORMS
ODOR:	ORGANOLEPTIC	ODOR REDUCED	CONFORMS
IDENTIFICATION:	FTIR	VERIFIED	CONFORMS
EXTRACTION METHOD:	PERCOLATION	PERCOLATION	CONFORMS
MESH SIZE:	RO-TAP	60-80	CONFORMS
LOSS ON DRYING:	MF-50 MOISTURE ANALYZER	<6%	3.85%
LEAD:	AOAC 993.14	REPORT ONLY	0.060 PPM
ARSENIC:	AOAC 993.14	REPORT ONLY	0.021 PPM
CADMIUM:	AOAC 993.14	REPORT ONLY	0.002 PPM
MERCURY:	AOAC 993.14	REPORT ONLY	0.012 PPM
<u>MICROBIOLOGICAL ANALYSIS:</u>			
TOTAL AEROBIC			
PLATE COUNT:	AOAC 966.23		
YEAST & MOLD:	FDA-BAM 7 th -ED	<10,000 cfu/g	<10,000 cfu/g
TOTAL COLIFORM:	AOAC 966.24	<300 cfu/g	<300 cfu/g
E. COLI:	AOAC 966.24	NEGATIVE	NEGATIVE
SALMONELLA:	AOAC 2004.03	NEGATIVE	NEGATIVE
S. AUREUS:	AOAC 975.55	NEGATIVE	NEGATIVE

MANUFACTURE DATE:	MARCH 2014
RE-CERTIFICATION DATE:	MARCH 2017

STORAGE: MINIMUM 3 YEARS WHEN PROPERLY STORED IN ORIGINALLY SEALED UNOPENED CONTAINER. STORE CONTAINER IN A COOL AND DRY PLACE AWAY FROM LIGHT, WATER, HUMIDITY, AND EXTREME VARIATIONS IN TEMPERATURE.

STRYKA BOTANICS

CERTIFICATE OF ANALYSIS

HAWTHORN BERRY

LOT#: SB14-H071233

BOTANICAL NAME:	CRATAEGUS LAEVIGATA	PART USED:	BERRIES
CARRIER:	MALTODEXTRIN	SOLVENT:	WATER & ETHANOL

	<u>METHOD</u>	<u>SPECIFICATIONS</u>	<u>RESULTS</u>
APPEARANCE:	VISUAL	POWDER	CONFORMS
COLOR:	VISUAL	LIGHT BROWN	CONFORMS
TASTE:	ORGANOLEPTIC	CHARACTERISTIC	CONFORMS
ODOR:	ORGANOLEPTIC	CHARACTERISTIC	CONFORMS
IDENTIFICATION:	FTIR	VERIFIED	VERIFIED
EXTRACTION METHOD:	PERCOLATION	PERCOLATION	CONFORMS
MESH SIZE:	RO-TAP	> 40 MESH	CONFORMS
LOSS ON DRYING:	MF-50 MOISTURE ANALYZER	<6%	3.30%
HEAVY METALS:	AOAC 993.14	<5 PPM	<2 PPM
LEAD:	AOAC 993.14	REPORT ONLY	0.254 PPM
ARSENIC:	AOAC 993.14	REPORT ONLY	0.110 PPM
CADMIUM:	AOAC 993.14	REPORT ONLY	0.009 PPM
MERCURY:	AOAC 993.14	REPORT ONLY	0.004 PPM
<u>MICROBIOLOGICAL ANALYSIS:</u>			
TOTAL AEROBIC			
PLATE COUNT:	AOAC 966.23	<10,000 cfu/g	<10,000 cfu/g
YEAST & MOLD:	FDA-BAM 7th -ED	<300 cfu/g	<300 cfu/g
TOTAL COLIFORM:	AOAC 966.24	NEGATIVE	NEGATIVE
E. COLI:	AOAC 966.24	NEGATIVE	NEGATIVE
SALMONELLA:	AOAC 2004.03	NEGATIVE	NEGATIVE
S. AUREUS:	AOAC 975.55	NEGATIVE	NEGATIVE

MANUFACTURE DATE:	JUNE 2014
RE-CERTIFICATION DATE:	JUNE 2017

STORAGE: MINIMUM 3 YEARS WHEN PROPERLY STORED IN ORIGINALLY SEALED UNOPENED CONTAINER. STORE CONTAINER IN A COOL AND DRY PLACE AWAY FROM LIGHT, WATER, HUMIDITY, AND EXTREME VARIATIONS IN TEMPERATURE.

STRYKA BOTANICS

CERTIFICATE OF ANALYSIS

GINGKO BILOBA

LOT#: SB14-H071253

BOTANICAL NAME:	GINGKO BILOBA	PART USED:	LEAF
CARRIER:	MALTODEXTRIN	SOLVENT:	ETHANOL

	<u>METHOD</u>	<u>SPECIFICATIONS</u>	<u>RESULTS</u>
APPEARANCE:	VISUAL	POWDER	CONFORMS
COLOR:	VISUAL	BROWNISH	CONFORMS
TASTE:	ORGANOLEPTIC	CHARACTERISTIC	CONFORMS
ODOR:	ORGANOLEPTIC	CHARACTERISTIC	CONFORMS
IDENTIFICATION:	FTIR	VERIFIED	VERIFIED
EXTRACTION METHOD:	HYDRO-ALCOHOLIC	HYDRO-ALCOHOLIC	CONFORMS
LOSS ON DRYING:	MF-50 MOISTURE ANALYZER	<6%	3.50%
HEAVY METALS:	AOAC 993.14	<5 PPM	<2 PPM
LEAD:	AOAC 993.14	REPORT ONLY	0.010 PPM
ARSENIC:	AOAC 993.14	REPORT ONLY	0.027 PPM
CADMIUM:	AOAC 993.14	REPORT ONLY	<0.007 PPM
MERCURY:	AOAC 993.14	REPORT ONLY	0.001 PPM
<u>MICROBIOLOGICAL ANALYSIS:</u>			
TOTAL AEROBIC			
PLATE COUNT:	AOAC 966.23	<10,000 cfu/g	<10,000 cfu/g
YEAST & MOLD:	FDA-BAM 7th -ED	<300 cfu/g	<300 cfu/g
TOTAL COLIFORM:	AOAC 966.24	NEGATIVE	NEGATIVE
E. COLI:	AOAC 966.24	NEGATIVE	NEGATIVE
SALMONELLA:	AOAC 2004.03	NEGATIVE	NEGATIVE
S. AUREUS:	AOAC 975.55	NEGATIVE	NEGATIVE

MANUFACTURE DATE:	JUNE 2014
RE-CERTIFICATION DATE:	JUNE 2017

STORAGE: MINIMUM 3 YEARS WHEN PROPERLY STORED IN ORIGINALLY SEALED UNOPENED CONTAINER. STORE CONTAINER IN A COOL AND DRY PLACE AWAY FROM LIGHT, WATER, HUMIDITY, AND EXTREME VARIATIONS IN TEMPERATURE.

STRYKA BOTANICS

CERTIFICATE OF ANALYSIS

DAMIANA

LOT#: SB14-H071234

BOTANICAL NAME:	TURNERA APHRODISIACA	PART USED:	LEAVES
CARRIER:	MALTODEXTRIN	SOLVENT:	WATER & ETHANOL

	<u>METHOD</u>	<u>SPECIFICATIONS</u>	<u>RESULTS</u>
APPEARANCE:	VISUAL	POWDER	CONFORMS
COLOR:	VISUAL	BROWNISH	CONFORMS
TASTE:	ORGANOLEPTIC	CHARACTERISTIC	CONFORMS
ODOR:	ORGANOLEPTIC	CHARACTERISTIC	CONFORMS
IDENTIFICATION:	FTIR	VERIFIED	VERIFIED
EXTRACTION METHOD:	PERCOLATION	PERCOLATION	CONFORMS
MESH SIZE:	RO-TAP	80	CONFORMS
LOSS ON DRYING:	MF-50 MOISTURE ANALYZER	<6%	4.50 %
HEAVY METALS:	AOAC 993.14	<5 PPM	<2 PPM
LEAD:	AOAC 993.14	REPORT ONLY	0.017 PPM
ARSENIC:	AOAC 993.14	REPORT ONLY	0.052 PPM
CADMIUM:	AOAC 993.14	REPORT ONLY	0.004 PPM
MERCURY:	AOAC 993.14	REPORT ONLY	0.001 PPM
<u>MICROBIOLOGICAL ANALYSIS:</u>			
TOTAL AEROBIC			
PLATE COUNT:	AOAC 966.23	<10,000 cfu/g	<10,000 cfu/g
YEAST & MOLD:	FDA-BAM 7th -ED	<300 cfu/g	<300 cfu/g
TOTAL COLIFORM:	AOAC 966.24	NEGATIVE	NEGATIVE
E. COLI:	AOAC 966.24	NEGATIVE	NEGATIVE
SALMONELLA:	AOAC 2004.03	NEGATIVE	NEGATIVE
S. AUREUS:	AOAC 975.55	NEGATIVE	NEGATIVE

MANUFACTURE DATE:	JUNE 2014
RE-CERTIFICATION DATE:	JUNE 2017

STORAGE: MINIMUM 3 YEARS WHEN PROPERLY STORED IN ORIGINALLY SEALED UNOPENED CONTAINER. STORE CONTAINER IN A COOL AND DRY PLACE AWAY FROM LIGHT, WATER, HUMIDITY, AND EXTREME VARIATIONS IN TEMPERATURE.

STRYKA BOTANICALS

www.stryka.com • info@stryka.com
279 Homestead Road • Hillsborough, NJ 08844 • Tel: (908) 281-5577 • 1-800-9-STRYKA • Fax: (908) 281-5392
9142 Owensmouth Avenue • Chatsworth, CA 91311 • Tel: (818) 340-2640 • 1-888-4-STRYKA • Fax: (818) 340-2740
555 Republic Drive, Second Floor • Plano, TX 75074 • Tel: (972) 516-4264 • 1-877-9-STRYKA • Fax: (972) 516-4265

CERTIFICATE OF ANALYSIS

Product Name: Tribulus Terrestris P.E. 20%	Part Used: Fruit	Lot#: NIGTT-1214
Country of Origin: India	Solvents Used: Hydro Alcohol	Manufacture Date: Aug 2011
FDA# 16869546514		Retest Date: Jul 2015

TEST ITEMS	SPECIFICATION	RESULTS
Appearance	Brown powder	Brown powder
Taste & Odor	Characteristic	Characteristic
Solubility		
-In water	NLT 50%	69.19%
-50% Alcohol	NLT 50%	74.46%
Loss on Drying	NMT 7%	4.83%
pH	3-7	6.18
Sieve Analysis	NLT 90% thru 60 mesh	Conforms
Bulk Density (Tapped)	0.60-0.90g/ml	0.89g/ml
Heavy Metals	NMT 20ppm	9ppm
Lead(Pb)	NMT 3ppm	1.45ppm
Arsenic(As)	NMT 1ppm	0.48ppm
Cadmium(Cd)	NMT 1.0ppm	Not detected
Mercury(Hg)	NMT 0.1ppm	0.03ppm
Saponins (by UV)	NLT 20%	24.02%
MICROBIOLOGICAL ANALYSIS		
Total Plate Count	NMT 5,000cfu/g	810cfu/g
Yeast & Mold	NMT 100cfu/g	40cfu/g
E.Coli	Negative	Negative
Salmonella	Negative	Negative
Staphylococcus	Negative	Negative

Storage	Store in a clean, cool, dry place at room temperature.
Shelf Life	Four years if sealed and store away from direct sun light.



THE INFORMATION CONTAINED HEREIN IS, TO THE BEST OF OUR KNOWLEDGE, CORRECT. THE DATA OUTLINED AND THE STATEMENTS MADE ARE INTENDED ONLY AS A SOURCE OF INFORMATION. NO WARRANTIES, EXPRESSED OR IMPLIED, ARE MADE. ON THE BASIS OF THIS INFORMATION IT IS SUGGESTED THAT YOU EVALUATE THE PRODUCT ON A LABORATORY SCALE PRIOR TO USE IN A FINISHED PRODUCT. THE INFORMATION CONTAINED HEREIN SHOULD NOT BE CONSTRUED AS PERMISSION FOR VIOLATION OF PATENT RIGHTS.

CERTIFICATE OF ANALYSIS

CATUABA EXTRACT PE 4:1

LOT#: SB14-H071232

BOTANICAL NAME:	ERYTHROXYLUM CATUABA	PART USED:	BARK
EXTRACT RATIO:	≥ 4:1	SOLVENT:	WATER & ETHANOL
CARRIER:	MALTODEXTRIN		

	<u>METHOD</u>	<u>SPECIFICATIONS</u>	<u>RESULTS</u>
APPEARANCE:	VISUAL	POWDER	CONFORMS
COLOR:	VISUAL	BROWN	CONFORMS
TASTE:	ORGANOLEPTIC	CHARACTERISTIC	CONFORMS
ODOR:	ORGANOLEPTIC	CHARACTERISTIC	CONFORMS
IDENTIFICATION:	FTIR	VERIFIED	VERIFIED
EXTRACTION METHOD:	WATER/AND OR ALCOHOL	WATER/AND OR ALCOHOL	WATER & ETHANOL
MESH SIZE:	RO-TAP	100% THRU 60 MESH	CONFORMS
LOSS ON DRYING:	MF-50 MOISTURE ANALYZER	<6%	3.50%
HEAVY METALS:	AOAC 993.14	<5 PPM	<2 PPM
LEAD:	AOAC 993.14	REPORT ONLY	0.014 PPM
ARSENIC:	AOAC 993.14	REPORT ONLY	0.027 PPM
CADMIUM:	AOAC 993.14	REPORT ONLY	<0.001 PPM
MERCURY:	AOAC 993.14	REPORT ONLY	<0.001 PPM

MICROBIOLOGICAL ANALYSIS:

TOTAL AEROBIC			
PLATE COUNT:	AOAC 966.23	<10,000 cfu/g	<10,000 cfu/g
YEAST & MOLD:	FDA-BAM 7th -ED	<300 cfu/g	<300 cfu/g
TOTAL COLIFORM:	AOAC 966.24	NEGATIVE	NEGATIVE
E. COLI:	AOAC 966.24	NEGATIVE	NEGATIVE
SALMONELLA:	AOAC 2004.03	NEGATIVE	NEGATIVE
S. AUREUS:	AOAC 975.55	NEGATIVE	NEGATIVE

MANUFACTURE DATE:	JUNE 2014
RE-CERTIFICATION DATE:	JUNE 2017

STORAGE: MINIMUM 3 YEARS WHEN PROPERLY STORED IN ORIGINALLY SEALED UNOPENED CONTAINER. STORE CONTAINER IN A COOL AND DRY PLACE AWAY FROM LIGHT, WATER, HUMIDITY, AND EXTREME VARIATIONS IN TEMPERATURE.

STRYKA BOTANICALS

www.stryka.com • info@stryka.com

279 Homestead Road • Hillsborough, NJ 08844 • Tel: (908) 281-5577 • 1-800-9-STRYKA • Fax: (908) 281-5392
9142 Owensmouth Avenue • Chatsworth, CA 91311 • Tel: (818) 340-2640 • 1-888-4-STRYKA • Fax: (818) 340-2740
555 Republic Drive, Second Floor • Plano, TX 75074 • Tel: (972) 516-4264 • 1-877-9-STRYKA • Fax: (972) 516-4265

CERTIFICATE OF ANALYSIS

MUIRA PUAMA BARK PE 4:1

LOT#: SB14-H071205

BOTANICAL NAME:	PTYCHOPETALUM OLACOIDES	PART USED:	BARK
EXTRACT RATIO:	≥ 4:1	SOLVENT:	WATER & ETHANOL
CARRIER:	MALTODEXTRIN		

	<u>METHOD</u>	<u>SPECIFICATIONS</u>	<u>RESULTS</u>
APPEARANCE:	VISUAL	POWDER	CONFORMS
COLOR:	VISUAL	BROWNISH	CONFORMS
TASTE:	ORGANOLEPTIC	CHARACTERISTIC	CONFORMS
ODOR:	ORGANOLEPTIC	CHARACTERISTIC	CONFORMS
IDENTIFICATION:	FTIR	VERIFIED	CONFORMS
EXTRACTION METHOD:	PERCOLATION	PERCOLATION	VERIFIED
MESH SIZE:	RO-TAP	60	CONFORMS
LOSS ON DRYING:	MF-50 MOISTURE ANALYZER	<6%	CONFORMS
HEAVY METALS:	AOAC 993.14	<5 PPM	3.50%
LEAD:	AOAC 993.14	REPORT ONLY	<2 PPM
ARSENIC:	AOAC 993.14	REPORT ONLY	0.018 PPM
CADMIUM:	AOAC 993.14	REPORT ONLY	0.020 PPM
MERCURY:	AOAC 993.14	REPORT ONLY	<0.001 PPM
		REPORT ONLY	0.001 PPM
<u>MICROBIOLOGICAL ANALYSIS:</u>			
TOTAL AEROBIC			
PLATE COUNT:	AOAC 966.23	<10,000 cfu/g	<10,000 cfu/g
YEAST & MOLD:	FDA-BAM 7 th -ED	<300 cfu/g	<300 cfu/g
TOTAL COLIFORM:	AOAC 966.24	NEGATIVE	NEGATIVE
E. COLI:	AOAC 966.24	NEGATIVE	NEGATIVE
SALMONELLA:	AOAC 2004.03	NEGATIVE	NEGATIVE
S. AUREUS:	AOAC 975.55	NEGATIVE	NEGATIVE

MANUFACTURE DATE:	JUNE 2014
RE-CERTIFICATION DATE:	JUNE 2017

STORAGE: MINIMUM 3 YEARS WHEN PROPERLY STORED IN ORIGINALLY SEALED UNOPENED CONTAINER. STORE CONTAINER IN A COOL AND DRY PLACE AWAY FROM LIGHT, WATER, HUMIDITY, AND EXTREME VARIATIONS IN TEMPERATURE.

STRYKA BOTANICS

CERTIFICATE OF ANALYSIS

CUSCUTA SEED PE 4:1

LOT#: SB14-H071231

BOTANICAL NAME:	CUSCUTA CHINENSES LAM	PART USED:	SEED
EXTRACT RATIO:	≥ 4:1	SOLVENT:	WATER & ETHANOL
CARRIER:	MALTODEXTRIN		

	<u>METHOD</u>	<u>SPECIFICATIONS</u>	<u>RESULTS</u>
APPEARANCE:	VISUAL	FINE POWDER	CONFORMS
COLOR:	VISUAL	BROWN	CONFORMS
TASTE:	ORGANOLEPTIC	CHARACTERISTIC	CONFORMS
ODOR:	ORGANOLEPTIC	CHARACTERISTIC	CONFORMS
IDENTIFICATION:	FTIR	VERIFIED	VERIFIED
EXTRACTION METHOD:	PERCOLATION	PERCOLATION	CONFORMS
MESH SIZE:	RO-TAP	80 MESH	CONFORMS
LOSS ON DRYING:	MF-50 MOISTURE ANALYZER	<6%	4.75%
HEAVY METALS:	AOAC 993.14	<5 PPM	<2 PPM
LEAD:	AOAC 993.14	REPORT ONLY	0.017 PPM
ARSENIC:	AOAC 993.14	REPORT ONLY	0.166 PPM
CADMIUM:	AOAC 993.14	REPORT ONLY	0.004 PPM
MERCURY:	AOAC 993.14	REPORT ONLY	<0.001 PPM

MICROBIOLOGICAL ANALYSIS:

TOTAL AEROBIC			
PLATE COUNT:	AOAC 966.23	<10,000 cfu/g	<10,000 cfu/g
YEAST & MOLD:	FDA-BAM 7th -ED	<300 cfu/g	<300 cfu/g
TOTAL COLIFORM:	AOAC 966.24	NEGATIVE	NEGATIVE
E. COLI:	AOAC 966.24	NEGATIVE	NEGATIVE
SALMONELLA:	AOAC 2004.03	NEGATIVE	NEGATIVE
S. AUREUS:	AOAC 975.55	NEGATIVE	NEGATIVE

MANUFACTURE DATE:	JUNE 2014
RE-CERTIFICATION DATE:	JUNE 2017

STORAGE: MINIMUM 3 YEARS WHEN PROPERLY STORED IN ORIGINALLY SEALED UNOPENED CONTAINER. STORE CONTAINER IN A COOL AND DRY PLACE AWAY FROM LIGHT, WATER, HUMIDITY, AND EXTREME VARIATIONS IN TEMPERATURE.

STRYKA BOTANICS

www.stryka.com • info@stryka.com

279 Homestead Road • Hillsborough, NJ 08844 • Tel: (908) 281-5577 • 1-800-9-STRYKA • Fax: (908) 281-5392
9142 Owensmouth Avenue • Chatsworth, CA 91311 • Tel: (818) 340-2640 • 1-888-4-STRYKA • Fax: (818) 340-2740
555 Republic Drive, Second Floor • Plano, TX 75074 • Tel: (972) 516-4264 • 1-877-9-STRYKA • Fax: (972) 516-4265

**JIAHERB**

essential of nature

World Headquarters: Shaanxi Jiahe Phytochem Co., Ltd. 37 Keji Road, Ste. B2704, Xi'an, China
 P 86-29-8832-5419 F 86-29-8832-5519 www.jiaherb.com

U.S. Headquarters: Jiaherb, Inc. 140 Littleton Road, Suite 200, Parsippany, NJ 07054
 P 888-JIAHERB P 973-439-6869 F. 973-439-6879 www.jiaherbinc.com

VC RC # 14E1201

Certificate of Analysis**Epimedium Sagittatum(Horny Goat Weed) Extract 4:1****GENERAL INFORMATION**

Batch Number	CYYH-A-00688	Report Date	3/24/2014
Manufacture Date	3/20/2014	Expiry Date	3/18/2017
Botanical Source	<i>Epimedium Sagittatum</i>	Part Used	Aerial
Country Of Origin	China	Appearance	Yellow brown fine powder
Solvents Used	Water&Ethanol	Carrier Used	Maltodextrin 4%
Sterilization Method	Heat NON-IRR/ETO	Kosher Halal	Yes Yes, AHF

ITEMS	SPECIFICATION	RESULT	METHOD&REFERENCE
Identification	Correspond to standard	Conform	TLC USP<201>
Extract ratio	NLT 4to1	Conform	Calculation
Particle size	NLT 90% through 80 mesh	Conform	Analytical sieving USP<786>
Loss on drying	NMT (%) 10.0	3.43	USP<731>
Total ash	NMT (%) 10.0	7.01	USP<561>
Bulk density	Between (g/100ml) 30~70	53.00	USP<616> Method I
Residue of Solvents	NMT (ppm) 5000	Conform	GC USP<467>
Heavy Metals	NMT (ppm) 20.0	Conform	USP<231> Method II
Lead(Pb)	NMT (ppm) 2.0	1.0276	ICP-MS
Arsenic(As)	NMT (ppm) 2.0	1.1759	ICP-MS
Cadmium(Cd)	NMT (ppm) 1.0	0.0977	ICP-MS
Mercury(Hg)	NMT (ppm) 1.0	0.0515	ICP-MS
Pesticide Residues	Meet the requirements	Conform	GC USP<561>
Total Plate Count	NMT (cfu/g) 10000	70	USP30 <61>
Yeast & Mold	NMT (cfu/g) 1000	20	USP30 <61>
E.Coli.	Not detected in (g) 10	Not detected	USP30 <61>
Salmonella	Not detected in (g) 25	Not detected	USP30 <61>
Staphylococcus	Not detected in (g) 10	Not detected	USP30 <61>

Packing&Storage	Polyethylene bag with cardboard box. 25kg net.
Shelf life	36 months if store under the conditions above and stay in original packaging.
Manufacturer	Shaanxi Jiahe Phytochem Co., Ltd.

Q.C. Manager: Zhanfeng Hui

Signature:



SABINSA CORPORATION

*Pharmaceuticals *Phytochemicals
*Fine Chemicals *Herbal Extracts
*Cosmeceuticals *Specialty Chemicals

VC RC #14C1309

CERTIFICATE OF ANALYSIS

Page 1 of 3

Product Name BioPerine® (BLACK PEPPER EXTRACT)
Product Code 0215
Batch No. C131036E/H
TR No. KL13F0486
Date of Manufacture June 2013
Date of Expiry May 2018

Sold To : VitaCare Pharma

PO No. : 14C1101

Quantity : 15.000 KG

Botanical/Scientific name Piper nigrum
CAS No 94-62-2
Plant part Fruits
Preparation type Extraction
Solvent used for extraction Ethanol
Solvent used in manufacture DM Water
Final extract ratio 50:1
Standardization Piperine
Excipient Used None

Parameters

Result

Limit

Reference

PHYSICAL

Description	Complies	Off white to greenish yellow powder with characteristic odor*	Organoleptic
Identification	Complies	To comply by HPLC	SLL/STP-P-007**
Solubility	Complies	Soluble in alcohol and in glacial acetic acid; insoluble in water	USP
Loss on drying	0.14 % w/w	Not more than 2.0% w/w (dried at 105°C)	USP <731>
Ash Content	0.08 % w/w	Not more than 0.1% w/w	USP <561>
Tapped bulk density	0.67 g/ml	Between 0.55g/ml and 0.85g/ml	USP <616>
Loose bulk density	0.4 g/ml	Between 0.30g/ml and 0.65g/ml	USP <616>
Sieve Test (Passes Through)			USP <786>
- 80 Mesh	98.41 % w/w	Not less than 95.0% w/w	

CHEMICAL

Assay

20 Lake Drive
East Windsor
New Jersey - 08520
Tel: 732-777-1111
Fax: 732-777-1443

Our Innovation Is Your Answer®
www.sabinsa.com

Sabinsa Utah
750 South Innovation Circle
Payson, UT - 84651
Tel: 801-465-8400
Fax: 801-465-8600



SABINSA CORPORATION

*Pharmaceuticals *Phytochemicals
*Fine Chemicals *Herbal Extracts
*Cosmeceuticals *Specialty Chemicals

CERTIFICATE OF ANALYSIS

Page 2 of 3

Product Name BioPerine® (BLACK PEPPER EXTRACT)
Product Code 0215
Batch No. C131036E/H
TR No. KL13F0486
Date of Manufacture June 2013
Date of Expiry May 2018

-Content of Piperine by HPLC	95.41 % w/w	Not less than 95.0% w/w and not more than 102.0% w/w on dry basis	HPLC, SLL/STP-P-007**
OTHERS			
Total heavy metals	10 ppm (µg/g)	Not more than 10ppm (µg/g)	USP <231> Method II
Lead	0.6 ppm (µg/g)	Not more than 3ppm (µg/g)	ICP-OES, SLL/STP-H-006**
Arsenic	0.36 ppm (µg/g)	Not more than 1ppm (µg/g)	ICP-OES, SLL/STP-H-006**
Cadmium	<0.2 ppm (µg/g)	Not more than 1ppm (µg/g)	ICP-OES, SLL/STP-H-006**
Mercury	<0.02 ppm (µg/g)	Not more than 0.1ppm (µg/g)	ICP-OES, SLL/STP-H-006**
Residual solvents	Complies	To comply as per USP	USP <467>
Residual pesticides	Complies	To comply as per USP	USP <561>
MICROBIAL			
Total plate count	<100 cfu/g	Not more than 3000cfu/g	USP <2021>
Yeast and mould count	15 cfu/g	Not more than 100cfu/g	USP<2021>
Escherichia coli	Complies	Negative/10g	USP<2022>
Salmonella	Complies	Negative/10g	USP<2022>
Staphylococcus aureus	Complies	Negative/10g	USP<2022>
Pseudomonas aeruginosa	Complies	Negative/10g	USP<62>
Enterobacteriaceae	Complies	Negative/10g	USP<2021>

ADDITIONAL INFORMATION

Sanitizing treatment Non-irradiated and not treated with ETO
Certification status (Kosher/Halal) Kosher certified, Halal certified
Genetic Modification Status GMO free
BSE/TSE status BSE / TSE free
Country of origin India
Cultivated or wild crafted Cultivated
Storage condition Store at room temperature

20 Lake Drive
East Windsor
New Jersey - 08520
Tel: 732-777-1111
Fax: 732-777-1443

Our Innovation Is Your Answer®
www.sabinsa.com

Sabinsa Utah
750 South Innovation Circle
Payson, UT - 84651
Tel: 801-465-8400
Fax: 801-465-8600



SABINSA CORPORATION

*Pharmaceuticals *Phytochemicals
*Fine Chemicals *Herbal Extracts
*Cosmeceuticals *Specialty Chemicals

CERTIFICATE OF ANALYSIS

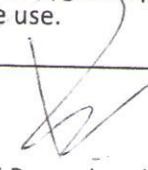
Page 3 of 3

Product Name BioPerine® (BLACK PEPPER EXTRACT)
Product Code 0215
Batch No. C131036E/H
TR No. KL13F0486
Date of Manufacture June 2013
Date of Expiry May 2018

Manufactured By Sami Labs Limited
19/1,19/2 I Main, II Phase,Peenya Industrial Area,Bangalore - 560058, Karnataka, India
Manufactured At SAMI LABS LIMITED - KUNIGAL
Plot No. 30-35, KIADB Industrial Area,Tumkur DistrictKunigal 572130
Patent Information BIOPERINE® is Patented Product fromSabinsa Corporation,US#5536506, US#5744161, US#5972382, US#6054585, EP#0810868,CA#2247467, 3953513

Remarks

*Since it is a herbal product, there is likely to be minor color variation because of the geographical and seasonal variations of the raw material.
*Natural products can be hygroscopic and tend to agglomerate sometimes. It is suggested to sift before use.


Dr. Hari Ramachandran
QA/ QC Manager

The above certificate of analysis is based on **Specifications Issue No: 11.0 Dated: April 23, 2012**

****In-House developed and validated methods**

NAP:Not Applicable

NAV:Not Available

20 Lake Drive
East Windsor
New Jersey - 08520
Tel: 732-777-1111
Fax: 732-777-1443

Our Innovation Is Your Answer®
www.sabinsa.com

Sabinsa Utah
750 South Innovation Circle
Payson, UT - 84651
Tel: 801-465-8400
Fax: 801-465-8600



VC RC # 14D2903

Innophos Inc.
1101 Arnold St Chicago Height, IL 60411
Technical Support: (866) 631-7394

Product Dicalcium Phosphate, Dihydrate, Unmilled,
FCC Grade

Lot 260567

Food Chemicals Codex - Current Edition

Trade Name DI-TAB

Product Code F110BG0017
Legacy Code 20057741
Customer # 1000179
Customer Code F110BG0017
PO# 324141J
Qty Shipped 4375

Mfg Location CH
Mfg Date 01/12/2014
Retest Date 01/12/2016
Shipment # 1080152

Ship To
INDEPENDENT CHEMICAL CORP
70-30 79TH PL

GLENDAL

NY 11385

Test	Result	Units	Min.	Max
Appearance	White, Odorless, Granular			
pH (20%)	7.2		7.0	8.0
Assay (USP/EP/JP)	99.9	%	98.0	105.0
On USS 20 Mesh Sieve	0.0			1.0
On USS 40 Mesh Sieve	0.3			2.0
On USS 100 Mesh Sieve (Cum)	73.1		40.0	80.0
Thru USS 325 Mesh Sieve	1.7	%		10.0
Acid Insoluble (USP/EP)	0.0	%		0.2
Loss On Ignition	26.0	%	24.5	26.5
Loss On Drying @ 60 C	0.2	%		1.5
Fluoride	< 50*	ppm		50
Heavy Metals as Pb	< 30*	ppm		30
Lead (ICP/MS)	< 0.25*	ppm		0.25
Arsenic (ICP/MS)	< 2*	ppm		3
Cadmium (ICP/MS)	< 1*	ppm		1
Mercury (ICP/MS)	< 1*	ppm		1
Sulfate	< 0.16*	ppm		0.50
Chloride	< 330*	ppm		2,500
Identification A	Pass*			
Identification B	Pass*			
Barium	Pass*			
Carbonate	Pass*			

* Guaranteed analysis checked at intervals according to Plant Schedule.

- 1) We hereby certify that this material is not manufactured using any material of animal origin, therefore, it cannot be a source of Transmissible Spongiform Encephalitis (TSE) and Bovine Spongiform Encephalitis (BSE).
- 2) The raw materials, manufacturing process and this product do not contain any of the solvents listed in the United States Pharmacopeia (USP), <467>, The European Pharmacopeia, and/or the International Conference of Harmonization (ICH), Q3c Residual Solvent (OVI), lists. In addition, no other organic solvents are used or generated during the manufacturing process.
- 3) Pass/Fail Criteria As Follows: Identification A - White Precipitate Formed, Identification B - Yellow Precipitate Formed, Barium - No Turbidity, Carbonate - No Effervescence

Approved By: *John E. Tucker*

Approved On: 4/2/2014



FLOCEL® 102

Microcrystalline Cellulose, Ph. Eur., NF

CERTIFICATE OF ANALYSIS

Batch No: 2F102C4D42
Re-evaluation date: 6-Apr-2019
Manufacturing date: 6-Apr-2014

Manufacturing site: 725 41st Ave DR SW
Cedar Rapids, IA., USA

Description

Appearance

White or almost white fine or granular powder.

Solubility

Practically insoluble in water, acetone, anhydrous ethanol and toluene, dilute acids and sodium hydroxide solution (50 g/L)

Characteristics	Acceptance criteria	Batch result	Reference
Identification A	Violet-blue color	Passes	Ph. Eur., NF
Identification B	Degree of polymerization max.350	255	Ph. Eur., NF
Conductivity	Max. 75 µS/cm	47 µS/cm	Ph. Eur., USP
Ether-soluble substances	Max. 0.05%	< 0.05 % *	Ph. Eur., NF
Heavy metals	Max. 10 ppm	< 10 ppm *	USP
Loss on drying	Max. 6.0%	3.4 %	Ph. Eur., USP
pH	5.0 – 7.0	5.8	Ph. Eur., USP
Solubility	Dissolves completely	Passes *	Ph. Eur.
Sulphated ash / residue on ignition	Max. 0.05%	< 0.05 % *	Ph. Eur., USP
Water-soluble substances	Max. 0.24%	0.09 %	Ph. Eur., NF
TAMC (Total aerobic microbial count)	10 ² cfu/g	Passes *	Ph. Eur., USP
TYMC (Total yeasts and molds)	20 cfu/g	Passes *	Ph. Eur., USP
Escherichia coli	Absent in 1 g	Absent *	Ph. Eur., USP
Pseudomonas aeruginosa	Absent in 1 g	Absent *	Ph. Eur., USP
Salmonella species	Absent in 10 g	Absent *	Ph. Eur., USP
Staphylococcus aureus	Absent in 1 g	Absent *	Ph. Eur., USP
Bulk density	0.27 - 0.34 g/mL	0.31 g/mL	USP
Particle size (retained on air jet sieve)			JRS Method
> 250 µm (60 mesh)	Max. 8%	0.3 %	
> 75 µm (200 mesh)	Min. 45%	58.8 %	

* Results reported are expected results based on periodic testing.

The raw materials, manufacturing process, and product do not contain any of the solvents listed in Residual Solvents (USP <467>, Ph. Eur. <5.4>).

05-05-14
date

QUALITY ASSURANCE
JRS PHARMA LP



GENERICHEM CORP.
5 Taft Road, P.O. Box 457
Totowa, NJ 07511 - 0457
(973) 256-9266 Phone
(973) 256-0069 Fax
info@genericchem.com

YC RC # 14 D1501



曲阜市海纳药业有限公司

QUFU HINA PHARMACEUTICAL CO., LTD.

CERTIFICATE OF ANALYSIS

Report date: Aug. 11, 2013

PRODUCT NAME	CROSCARMELLOSE SODIUM		
BATCH NO.	0130811		
MFG. DATE	August 2013	EXPIRY DATE	July 2016
ITEMS	SPECIFICATIONS		RESULTS
IDENTIFICATIONS	A, B, C		Conforms
APPEARANCE	Off-white to white powder		White powder
PH	5.0-7.0		6.5
LOSS ON DRYING	10.0% max.		7.3%
SODIUM GLYCOLATE CONTENT AND SODIUM CHLORIDE CONTENT	0.5% max.		Absent
WATER SOLUBLE MATERIAL	1.0%-10.0%		8.6%
SETTLING VOLUME	10ml-30ml		17ml
DEGREE OF SUBSTITUTION	0.60-0.85		0.75
RESIDUE ON IGNITION	14.0%-28.0%		18.8%
HEAVY METALS	10ppm max.		Conforms
ORGANIC VOLATILE	Absent		Conforms
MICROBIAL ENUMERATION TESTS	Total aerobic microbial count <1000 cfu/g Total combine molds and yeasts count<100cfu/g Escherichia coli absent		Conforms
CONCLUSION:	Conforms to USP /NF.		

Analyst: 岳都松 Checker: 陈景龙 Supervisor: 王 东

COUNTRY OF ORIGIN: CHINA



VC DC #14E2301

LIPIDCHEM SENDIRIAN BERHAD

9, JALAN BUKIT 2, KAWASAN MIEL, BANDAR SERI ALAM FASA VII,
81750 MASAI, JOHOR BAHRU, JOHOR, MALAYSIA.

TEL : +607-386 5991 / 2 / 7 FAX : +607- 386 5990 / 6 Email : sales@lipidchem.com Website : www.lipidchem.com

(Co No. : 379629-M)

CERTIFICATE OF ANALYSIS

PRODUCT NAME : **STEARIC ACID 50 POWDER**
PRODUCT DESCRIPTION : **STEARIC ACID POWDER NF (STEAPD TRP)**

COA NO : 4694

DATE : 26 MARCH 2014

LOT NO : LSB/14-4723
PACKING SIZE : 25 KG/CARTON
MANUFACTURING SITE : LIPIDCHEM, AS SHOWN ABOVE
D.O.M. : 10 MARCH 2014
D.O.E. : 9 MARCH 2016
SHIPMENT DATE : 19 MARCH 2014

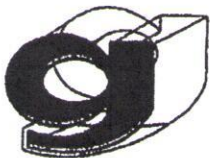
TEST	SPECIFICATION	RESULT	TEST METHOD
Organoleptic Profile			
Appearance	Fine, non-flowing powder	Complies	
Color	White	Complies	
Odor	Characteristic	Complies	
Chemical Test			
Acid Value, mg KOH/g	205 - 210	208.62	USP 36 - NF 31
Acidity	No red colour develop	Passed	USP 36 - NF 31
Colour of Solution	Less than Y or BY	Passed	USP 36 - NF 31
Heavy Metal, ppm	10 max	< 5	USP 36 - NF 31
Lead, ppm	2.0 max	< 0.02	USP 36 - NF 31
Iodine Value, g/100g	4.0 max	0.29	USP 36 - NF 31
Moisture (KF), %	2.0 max	0.07	USP 36 - NF 31
Residual Solvent USP<467>	Complies	Complies	USP 36 - NF 31
Residue on Ignition, %	0.10	< 0.01	USP 36 - NF 31
Saponification Value, mg KOH/g	206 - 212	210.5	USP 36 - NF 31
Stearic Acid, %	40 min	44.94	USP 36 - NF 31
Stearic Acid + Palmitic Acid (SUM), %	90 min	99.06	USP 36 - NF 31
Unsaponifiable Matter (%)	2 max	0.30	USP 36 - NF 31
Microbiological Test			
Coliforms, cfu/g	10 max	Negative	FDA-BAM (Chapter 4)
E. Coli	Negative	Negative	FDA-BAM (Chapter 4)
Salmonella	Negative	Negative	FDA-BAM (Chapter 5)
Total Plate Count, cfu/g	1000 max	< 10	FDA-BAM (Chapter 3)
Yeast and Mold, cfu/g	100 max	< 10	FDA-BAM (Chapter 18)
Physical Description			
Bulk Density, g/ml	0.27 min	0.43	USP 36 - NF 31
Freezing Point, °C	53 - 59	55.7	USP 36 - NF 31
Identification	Positive	Positive	USP 36 - NF 31
Identification - Compares to type	Positive	Positive	USP 36 - NF 31
Particle Size 150µm, %	100 min	100	USP 36 - NF 31

Authorized signature



Badariah Abdul Rawi
QC/QA Manager

COUNTRY OF ORIGIN: MALAYSIA



14F2709
135 Newbury Street
Framingham, MA 01701
(508) 270-8433 • (800) 238-0001

MR-09-005
FORM C

CERTIFICATE OF ANALYSIS

PIROSIL PS-200

CUSTOMER: AMERICAN INTERNATIONAL CHEMICAL, INC	ATTENTION: Quality Control
DATE OF SHIPMENT: MAR 2014	PURCHASE ORDER: 75757
LOT: 8446	MANUFACTURE DATE: MAR 2014
QUANTITY: 13.44MT	CONTAINER NUMBER: TCLU5477144

PHYSICAL - CHEMICAL PROPERTIES

CHARACTERISTICS	TEST RESULTS	FCC LIMITS
A	PASSES TEST	PASSES TEST
B	PASSES TEST	PASSES TEST
ASSAY (as SiO ₂), %	98	94 Min.
Arsenic (as As), ppm	0.27	3 Max.
Heavy Metals (as Pb), ppm	<30	30 Max.
Lead, ppm	2.5	5 Max.
Loss on Drying (105 ° C 2 hours), %	5.8	7 Max.
Loss on Ignition (900 ° C 2 hours), %	5.2	4.0 - 6.0
DBP Absorption, ml/100g	282	280 - 300
Soluble Ionizable Salts (as Na ₂ SO ₄), %	2.0	5 Max.
Insoluble substances, %	-	1 Max.

REMARKS:

PIROSIL PS-200 meets FCC specifications.

EXPIRY DATE: SEP 2015

NOTE: THE INFORMATION CONTAINED HEREIN IS BASED ON OUR CURRENT TESTING AND EXPERIENCE AND DO NOT EXCEPT THE USER TO PRACTICE HIS OWN CONTROLS, HOWEVER NO GUARANTEE IS IMPLIED OR EXPRESSED REGARDING THE USE PRODUCT FOR AN SPECIFIC APPLICATION.

American International Chemical, Inc. Verifies that the information contained herein is true and correct to the best of our knowledge.
Verified by: *P. Norabadi* Date: *4-11-14*
Phone: 800-238-0001

CHEMICALS
Quality Control

Issue: MAR 27, 2014

GLASSVEN-YANGZHONG SILICAS AND CHEMICALS J.V LTD., CHANGWANG XI ROAD, YOUFANG TOWN, YANGZHONG CITY, JIANGSU PROVINCE, CHINA. TEL: +86 511-88525968 FAX: +86 511-88525966
扬中格拉斯白炭黑化工有限公司·中国江苏省扬中市油坊镇长旺西路 电话: +86 511-88525968 传真: +86 511-88525966

VC RC # 14F1702



GENERICHEM CORP.
8 TNR Road, P.O. Box 457
Tirunelveli, NJ 07811-0457
(973) 236-6236 Phone
(973) 236-6230 Fax
info@generichem.com



NITIKA

PHARMACEUTICAL SPECIALITIES PVT. LTD.

WHO - GMP & ISO CERTIFIED

NITIKA PHARMACEUTICAL SPECIALITIES PVT. LTD., NAGPUR

CERTIFICATE OF ANALYSIS

PRODUCT NAME: TABLUBE®
MAGNESIUM STEARATE (USP35/NF30)

GRADE : PREMIUM VEGETABLE
(CUSTOMISED - III)

Received Date : 15/02/2014

Page : 1 of 2

Release Date : 22/02/2014

Ref Specification No. : QAD/FP/SPEC/ABG/MGST9B/02

Drug Licence No. : ND/15

Analysis Report No. : NP/FP/MGST9/ 083/14

Batch No : MGST9D183

Qty. Drawn for Analysis : 75g

Mfg. Date : FEB. :- 2014

Re.Eval.Date : JAN. :-2019

SN	TESTS	SPECIFICATIONS	RESULTS
1. *	Description	Very, fine, light, white powder, slippery to touch.	Very, fine, light, white powder, slippery to touch.
2. *	Solubility	Insoluble in water, in alcohol, and in ether.	Complies
3.	Identification		
	Test A:	This solution responds to the test for Magnesium.	Complies
	Test B:	As Per USP	Complies
4. *	Assay	4.0 % - 5.0 % of Mg, Calculated on the dried basis.	4.60 %
5.	Limit of chloride	Max 0.1 %	< 0.1%
6.	Limit of sulfate	Max 1.0 %	< 1.0 %
7.	Limit of Lead	Max 10 ppm.	< 10 ppm
8.	Limit of cadmium	Max. 3 ppm.	< 3 ppm
9.	Limit of nickel	Max. 5 ppm.	< 5 ppm
10.	Microbial enumeration tests and tests for specified microorganisms.		
	i) The total aerobic microbial count	Does not exceed 1000 cfu per g.	< 1000 cfu/g
	ii) The total combined molds and yeasts count	Does not exceed 500 cfu per g.	< 500 cfu/g
	iii) Tests for salmonella species and Escherichia coli.	It meets the requirements of the tests for absence of salmonella species and Escherichia coli.	Absent
11.	Specific Surface Area	NLT 3- 13 m ² /g.	11.8 m ² /g
12.	Acidity or alkalinity	Not more than 0.05 ml of 0.1 N hydrochloric acid or 0.1 N sodium hydroxide is required to change the color of the indicator.	0.04ml of 0.1 N HCl required
13. *	Loss on drying at 105°	Not more than 6.0 % of its weight.	3.35 %
14. *	Relative content of Stearic acid and palmitic acid	i) Not less than 40 % for the Stearate peak ii) The sum of the Stearate and Palmitate peaks is not less than 90 % of the total	45.41 % 56.47 %

	Name	Designation	Signature/Date
Prepared By:	Mr. Murtaza Bharmal	QA Chemist	Murtaza 22/02/2014
Checked By:	Mrs. Ranjana Samrutwar	Asst. QC Manager	Ranjana 22/02/2014
Approved By:	Mrs. Kiran Kelwatkar	QA Head	Kiran 22/02/2014

Format No: NP/QAD/COAN/F1/01

Ref. SOP No. QAD-032