

Customer:



PO #: 16-6470 Ln (1)
Customer Part #: 100013 Rev 5 4-8-2014
Ship Date: 5/31/16
Shipment #: 0000007330

Description:

Green Tea Extract 45% EGCG

Lot #:

887151216-03

	<u>Standard</u>	<u>Result</u> *
Physical Properties		
Appearance	Light yellow brown free flowing powder	Complies
Identification	Positive	Positive
Extraction Solvent	Water	Complies
Extract Ratio	25:1	Complies
Carrier Used	None	None
Plant Part	Leaf	Leaf
Latin Name	Camellia Sinensis	Camellia Sinensis
Bulk Density Loose (gm/cc)	>= 0.3	0.5
Bulk Density Tap (gm/cc)	>= 0.6	0.7
Particle size thru # 80 (%)	= 100	100
Analytical		
Assay (Polyphenols, % Dry Basis)	>= 98.0	100.3
Assay (Catechins, % Dry Basis)	>= 75.0	84.4
Assay (EGCG, % Dry Basis)	>= 45.0 <= 50.0	45.3
Assay (Caffeine, % Dry Basis)	<= 3.0	2.2
Loss on drying (%)	<= 5.0	3.3
ROI (%)	<= 2.0	0.3
Heavy Metals (ppm)	<= 10	<10
Lead (ppm)	<= 0.5	<0.5
Arsenic (ppm)	<= 1	<1
Cadmium (ppm)	<= 0.3	<0.3
Mercury (ppm)	<= 0.3	<0.3
Residual Solvents	Conforms to USP <467>	Conforms
Pesticides Residue	Conforms to USP <561>	Conforms
Microbiological		
APC (CFU/gm)	<= 3000	<10
Yeast/mold (CFU/gm)	<= 300	<10
E. coli (CFU/gm)	Negative	Negative
Salmonella (25 gm)	Negative	Negative
Coliforms (CFU/gm)	<= 100	Complies***
Staphylococcus	Negative	Complies***
Storage Conditions		
Manufacture date		Dec 16, 2015
Expiration date		Dec 16, 2017
Storage		Cool dry place sealed in light resistant container
Manufactured by		Plant # 887
Country of origin		China



Revision #

Certificate Of Analysis

Rev 7 2/25/2015

A handwritten signature in black ink, appearing to read 'Warren K. Majerus', is written over a horizontal line.

Approved By:

Warren K. Majerus
VP Quality Assurance

Date: 5/26/2016

* Test results based on information supplied by the manufacturer, unless otherwise noted.

** Based on third party testing lab results.

*** Based on results from Pharmore's sampling protocol.

The information contained in this certificate of analysis is believed to be accurate and is offered in good faith. Pharmore Ingredients, however, cannot assume any guarantee against natural product variations, patent infringement, liabilities or risk involved from the use of this product. Customers' assume all risk and liability with the use of this product.

Certificate of Analysis

Report No: 2015121603

Product Name	Green Tea Extract	Batch No.	151216-03
Latin Name	Camellia Sinensis	Material No.	C-001
Specification	PG-TP98C	Rep. Sample	800.0 kg
Extract Solvent	Ethanol and Water	Botanical part used	Leaf
Manufacture Date	Dec.16, 2015	Sample Date	Dec.16, 2015
Expiration Date	Dec.15, 2017	Report Date	Dec.21, 2015
Test Basis	Green Tea Extract Standard	Carrier	None

Test Items	Specification	Methods	Test Results
Appearance	Light yellow brown powder	Visual	Light yellow brown powder
Identification	Positive	HPLC	Positive
Inspection			
Total polyphenols	≥98.0%	UV	100.3%
Catechins	≥75.0%	HPLC	84.4%
EGCG	45.0-50.0%	HPLC	45.3%
Caffeine	≤3.0%	HPLC	2.2%
Loss on drying	≤5.0%	CP2010 Edition I Appendix IX H	3.3%
ROI	≤2.0%	CP2010 Edition I Appendix IX K	0.3%
Particle size	≥95%pass 80 mesh	CP2010 Edition I Appendix XI B	100% pass 80 mesh
Bulk density	≥0.30g/ml	Weight-volume method	0.46g/ml
Tap density	≥0.60g/ml	Weight-volume method	0.71g/ml
Heavy metals	≤10ppm	CP2010 Edition I Appendix IX E	<10ppm
Lead	≤0.5ppm	CP2010 Edition I Appendix IX B	<0.5ppm
Arsenic	≤1.0ppm	CP2010 Edition I Appendix IX B	<1.0ppm
Mercury	≤0.3ppm	CP2010 Edition I Appendix IX B	<0.3ppm
Cadmium	≤0.3ppm	CP2010 Edition I Appendix IX B	<0.3ppm
Residual Solvents	Meet USP standards	CP2010 Edition II Appendix VIII P	Conforms
Residual Pesticides	Meet USP Standards	CP2010 Edition I Appendix IX Q	Conforms
Microbiology			
Total Plate Count	≤3000cfu/g	CP2010 Edition I Appendix XIII C	<10cfu/g
Yeasts & Molds	≤300cfu/g	CP2010 Edition I Appendix XIII C	<10cfu/g
Coliforms	≤100cfu/g	CP2010 Edition I Appendix XIII C	<10cfu/g
E. Coli	Negative	CP2010 Edition I Appendix XIII C	Negative
Salmonella	Negative	CP2010 Edition I Appendix XIII C	Negative
S. Aureus	Negative	CP2010 Edition I Appendix XIII C	Negative
Conclusion: Conform to Green Tea Extract Standard			

QC manager:

Approver:

Analyst: