

LIFTMODE

LIFTMODE
47 W. Polk St. STE 100-241
Chicago, IL 60605

liftmode@liftmode.com
www.liftmode.com

CERTIFICATE OF ANALYSIS

Piperine

(Piper nigrum extract)

Material Lot #: 17082
Country of Origin: India

Manufacture Date: 05/02/2017
Expiration Date: 05/01/2020

Analysis	Claim	Result
Piperine	≥95.0%	95.3%

Test	Specification	Result
Appearance	Off-white to pale yellow powder	Complies
Loss on Drying	≤1.0%	0.21%
Solubility	Insoluble in water and soluble in alcohol	Complies
Pesticide Residue	Meets USP/ICH standard	Complies
Residual Solvents	Meets USP/ICH standard	Complies
Heavy Metals	≤10 ppm	Complies
Lead	≤1.0 ppm	Complies
Arsenic	≤2.0 ppm	Complies
Cadmium	≤1.0 ppm	Complies
Mercury	≤0.5 ppm	Complies
Total Plate Count	≤10,000 cfu/g	Complies
Yeast and mold	<1,000 cfu/g	Complies
E.Coli	Negative/10g	Complies
Salmonella	Negative/10g	Complies

Piperine should be stored at or below room temperature in a tightly sealed durable container.
Piperine should be protected from excess heat, direct sunlight, excess humidity and moisture.
Piperine has a stable shelf life of 2 years from the date of manufacture when properly stored.

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Product Name	Piperine	Client Lot Number	17082
Report Date	08/18/17	Laboratory #	9077

Test	Method	Result
Identification	H-NMR	Conforms
Assay	HPLC	95.1%
Total Aerobic Count	Biolumix	<1000 CFU/g
Yeast & Mold	Biolumix	<100 CFU/g
Salmonella	Biolumix	Absent
E. Coli	Biolumix	Absent
Coliform	Biolumix	< 10 CFU/g
Lead	ICP-MS USP <730>	0.008 ppm
Arsenic	ICP-MS USP <730>	0.021 ppm
Cadmium	ICP-MS USP <730>	<0.001 ppm
Mercury	ICP-MS USP <730>	<0.001 ppm

Collin Thomas 
Laboratory Manager

08/18/2017 
Date

1H NMR of Piperine
Lot # 9077
Colmaric Analytical
400 MHz
08-08-17

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Current Data Parameters
NAME      Aug08-2017-colmaric
EXPNO    1
PROCNO   1

F2 - Acquisition Parameters
Date_    20170808
Time     16.48
INSTRUM  spect
PROBHD   5 mm PABBO BB-
PULPROG  zg30
TD       32768
SOLVENT  DMSO
NS       32
DS       0
SWH       5208.233 Hz
FIDRES   0.158946 Hz
AQ       3.1457281 sec
RG       40.3
RW       96.500 usec
RE       25.61 usec
TE       298.0 K
D1       1.55000000 sec
TDS      1

----- CHANNEL f1 -----
NUC1      1H
P1       11.38 usec
PL1      -2.50 dB
PL12     18.35869598 N
SFO1     400.1300007 MHz

F2 - Processing parameters
SI       32768
SF       400.1300007 MHz
WDW      RM
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