



Certificate of Analysis

47 W Polk St. STE 100-241
Chicago, IL 60605
liftmode@liftmode.com

LiftMode

Matrine

 (from *Sophora flavescens*)

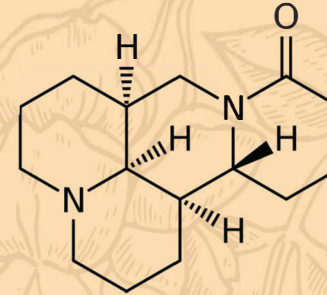
Material Lot #: 20210616 Test Date: 08/04/2021
Country of Origin: China Re-Test Date: 08/03/2024

Analysis	Claim	Result
Matrine	≥98%	99.1%

Test	Specification	Result
Matrine (HPLC)	≥98%	99.1%
Lead	≤0.5ppm	<0.005 ppm
Mercury	≤0.5ppm	<0.005 ppm
Cadmium	≤0.5ppm	<0.005 ppm
Arsenic	≤0.5 ppm	<0.010 ppm
Total Aerobic Plate Count	<10 cfu/g	<10 cfu/g
Yeast	<10 cfu/g	<10 cfu/g
Moulds	<10 cfu/g	<10 cfu/g
Escherichia coli	<10 cfu/g	<10 cfu/g
Coliforms	<10 cfu/g	<10 cfu/g
Salmonella	Negative	Not Detected per 25 g
Staphylococcus aureus	<10 cfu/g	<10 cfu/g

Matrine should be stored at or below room temperature in a tightly sealed durable container. Matrine should be protected from excess heat, direct sunlight, excess humidity, and moisture. Matrine has a retesting period of 3 years from the date of analysis when properly stored.

Matrine



Main Benefits

- **Matrine** is an alkaloid found in *Sophora flavescens*, an herb primarily associated with Tradition Chinese Medicine (TCM).
- **Matrine** has potent anti-inflammatory effects and has been shown to reduce expression of inflammatory mediators COX-2, TNF- α , IL-6 and ICAM-1, among other targets.
- **Matrine** binds both mu and kappa opioid receptors, though its affinity for the kappa receptor is believed to be significantly higher than the mu receptor.

Main Cautions

- While neuroprotective and hepatoprotective in lower doses, high doses of **Matrine** may be both neurotoxic and hepatotoxic. Do not exceed the recommended dose.
- Due to the kappa opioid activity of **Matrine**, high doses may also cause negative psychotropic effects, discomfort, nausea, and malaise.
- Consult your healthcare provider before use if you have a medical condition or if you are taking any prescription medications.

Usage Tips

- A 0.15cc measuring scoop is included. Three level scoops contains one serving of approximately **250mg Matrine**. As a dietary supplement, take 1 serving up to 2 times per day. Start at the lower suggested quantity to assess response.
- Anecdotal evidence suggests **Matrine** may potentiate natural mu opioid agonists such as Kratom (*Mitragyna speciosa*).
- **Matrine** is a freebase despite being soluble in water, so use of capsules is recommended. Mixing **Matrine** with acidic solutions such as vinegar or lemon juice may help reduce bitterness and causticity.
- This dietary supplement is not intended to treat, diagnose, prevent, or cure any diseases. Consult your healthcare provider before use if you have a medical condition or if you are taking any prescription medications.
- It is safe to stack **Matrine** with other supplements as long as the amount consumed does not exceed the suggested serving size.
- The benefits of **Matrine** are most effective when they are supported by a healthy diet and plenty of exercise.



S & N LABS

2021 E. Fourth Street Santa Ana, California 92705 (714) 543-2211

4 August 2021

Job Number: 25285a
PO Number: verbal

Synapient LLC
47 West Polk Street #100-241
Chicago, Illinois 60605

REPORT OF ANALYSIS

One packet, labeled "Maitrine 98% Batch 20210616", was received on 2 August 2021. The material was analyzed for purity using high pressure liquid chromatography (HPLC). The detector was set to 210nm. The results are summarized in the table below.

Sample	Chromatographic Purity (% area)
Maitrine 98% Batch 20210616	99.1

The chromatogram is enclosed for your reference.

Neil E. Springam, Ph.D.
President

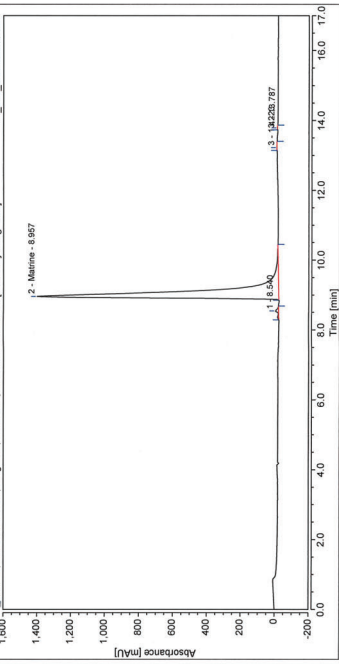
Chromatogram and Results

Injection Details

Injection Name: Maitrine Batch: 20210616 Run Time (min): 20.00
 Vial Number: G06 Injection Volume: 10.00
 Sample ID: Unknown
 Calibration Level: None
 Instrument Method: BD pH6 250mm MaxRP 20min
 Processing Method: MaxRP 20min
 Injection Date/Time: 04/Aug/21 12:06
 Dilution Factor: 1.0000
 Sample Weight: 1.0000

Chromatogram

25285_25285-Horvackol_Magnolol_RU58841_Maitrine_Purities #14 (manually integrated) UV_VIS_2.VVL210.m



No.	Peak Name	Retention Time (min)	Area (mAU*min)	Height (mAU)	Relative Area (%)	Relative Height (%)	Amount	
1	Maitrine	8.540	8.567	1426.844	98.07	98.50	n.a.	
2		13.223	0.145	1.385	0.05	0.10	n.a.	
4		13.787	0.102	1.716	0.04	0.12	n.a.	
Total:							285.288	1447.592
							100.00	100.00

Report Template: Integration

Client Code: CH0000902
PO#: 20210726
Received On: 03Sep2021
Reported On: 14Sep2021

eurofins | Eurofins Microbiology Laboratories (New Berlin)

Eurofins Microbiology Laboratories (New Berlin)

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ANALYTICAL REPORT

Synapient
Joseph Walkins
1442 W. Fulton Street
Chicago, IL 60607

Client Code: CH0000902
PO#: 20210726
Received On: 03Sep2021
Reported On: 14Sep2021

Eurofins Sample Code:	477-2021-09030103	Sample Registration Date:	03Sep2021
Client Sample Code:	20210616	Condition Upon Receipt:	acceptable, 21°C
Sample Description:	Maitrine	Sample Reference:	
Parameter Asenic Cadmium Lead Mercury	Reference AOAC 2011.19 and 983.14 (modified)	Accreditation ISO/IEC 17025:2017 AZLA 3329.07	Completed 14Sep2021
UM8VD - Total Coliforms - CMMEF Chapter 9.933	Reference CMMEF Chapter 9.933	Accreditation ISO/IEC 17025:2017 AZLA 3329.07	Completed 04Sep2021
Parameter Coliforms Escherichia coli	Result < 10 cfu/g		
UMIAGV - Confirmation Staphylococcus aureus - BAM Chapter 12	Reference BAM Chapter 12		
Parameter Staphylococcus aureus	Result < 10 cfu/g		
UMWDTG - Salmonella species - AOAC-R1 121501	Reference AOAC-R1 121501		
Parameter Salmonella	Result Not Detected per 25 g		

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Client Sample Code:	20210616	Condition Upon Receipt:	acceptable, 21°C
Sample Description:	Maitrine	Sample Reference:	
Parameter Yeast Moulds	Reference FDA BAM Chapter 18 mod.	Accreditation ISO/IEC 17025:2017 AZLA 3329.07	Completed 08Sep2021
UMVSE - Aerobic Plate Count - CMMEF Chapter 8.72	Reference CMMEF Chapter 8.72	Accreditation ISO/IEC 17025:2017 AZLA 3329.07	Completed 06Sep2021
Parameter Aerobic Plate Count	Result < 10 cfu/g		
UM8VD - Total Coliforms - CMMEF Chapter 9.933	Reference CMMEF Chapter 9.933		
Parameter Coliforms Escherichia coli	Result < 10 cfu/g		
UMWDTG - Salmonella species - AOAC-R1 121501	Reference AOAC-R1 121501		
Parameter Salmonella	Result Not Detected per 25 g		