



# Certificate of Analysis

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



## Citicoline Sodium

### Citicoline Sodium Salt

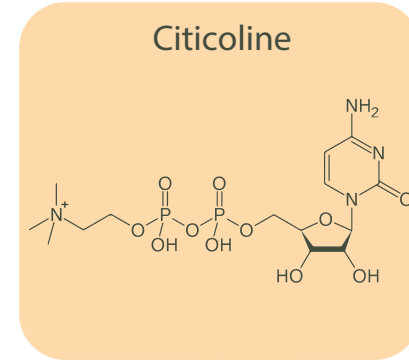
Material Lot #: ZJ20210610      Test Date: 08-02-2022  
Country of Origin: China      Re-Test Date: 07-30-2025

Analysis      Claim      Result

Citicoline Sodium      ≥99%      >99.9%

Test	Specification	Result
Citicoline Sodium (HPLC)	≥99%	>99.9%
Lead	≤0.5ppm	<0.005 ppm
Mercury	≤0.5ppm	<0.005 ppm
Cadmium	≤0.5ppm	<0.005 ppm
Arsenic	≤0.5 ppm	<0.01 ppm
<b>Total Aerobic Plate Count</b>	<b>&lt;1000 cfu/g</b>	<b>&lt;10 cfu/g</b>
Yeast	<100 cfu/g	<10 cfu/g
Moulds	<100 cfu/g	<10 cfu/g
Escherichia coli	<10 cfu/g	<10 cfu/g
Coliforms	<10 cfu/g	<10 cfu/g
Salmonella	Negative	Negative
Staphylococcus aureus	<10 cfu/g	<10 cfu/g

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



### Main Benefits

- Citicoline (CDP-Choline) is a naturally-occurring compound used in numerous biochemical pathways in the human body.
- Citicoline plays an important role in many biochemical systems in the human body. It is especially important as a methyl-group donor, a cofactor for a variety of enzyme systems, and for phospholipid synthesis.
- Anecdotally, it may have similar effects to other Nootropic compounds.

### Main Cautions

- Citicoline is considered possibly safe for use by most people when taken at the recommended serving size for up to 90 days.
- However at much larger sizes, possible adverse effects may include difficulty sleeping, headache, diarrhoea, high or low blood pressure, nausea, blurred vision and chest pain.
- Consult your physician before using Citicoline if you are taking any medication. Citicoline has not been tested for safety in pregnant or breastfeeding women.

### Usage Tips

- A 0.625cc measuring scoop is included. One level scoop contains approximately one serving of approximately **250mg of Citicoline**. As a dietary supplement, take 1-2 servings up to 3 times per day. Start at the lower suggested quantity to assess response.
- The negative effects of Citicoline are dependent on the amount taken, so use of a scale with 10mg/0.1g accuracy or better is highly recommended.
- Use of capsules, or mixing with tea, yogurt, apple sauce, or oatmeal may help make the powder more tolerable.
- This 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 Citicoline with other supplements, so long as the amount consumed does not exceed the suggested serving size.
- The benefits of Citicoline are most effective when they are supported by a healthy diet and plenty of exercise.

Eurofins Microbiology Laboratories (New Berlin)

2345 S. 170th St.  
New Berlin, Wisconsin 53151  
+1 262 754 5300  
Micro-MKE@EurofinsUS.com

Synaptent

Quality Control Department (COA)  
425 BARCLAY BOULEVARD  
Lincolnshire, IL 60069

**ANALYTICAL REPORT**

AR-22-QH-044203-01

Client Code: QH0000902  
PO#: ZJ20210610

Received On: 02Aug2022  
Reported On: 07Aug2022

Synaptent

Quality Control Department (COA)  
425 BARCLAY BOULEVARD  
Lincolnshire, IL 60069

**ANALYTICAL REPORT**

AR-22-QH-044203-01

Client Code: QH0000902  
PO#: ZJ20210610

Received On: 02Aug2022  
Reported On: 07Aug2022

<b>Eurofins Sample Code:</b> 477-2022-08020099	<b>Sample Registration Date:</b> 02Aug2022
<b>Client Sample Code:</b> ZJ20210610	<b>Condition Upon Receipt:</b> acceptable, 22.1°C
<b>Sample Description:</b> Citicoline Sodium	<b>Sample Reference:</b>

<b>FS001 - Heavy Metals (As, Cd, Hg, and Pb)</b>	<b>Reference</b> AOAC 2011.19, 993.14 and 2015.01 (modified)	<b>Accreditation</b>	<b>Completed</b>	<b>Sub</b>
			04Aug2022	1

<b>Parameter</b>	<b>Result</b>
Arsenic	<10.0 ppb
Cadmium	<5.00 ppb
Lead	<5.00 ppb
Mercury	<5.00 ppb

<b>UM8VD - Total Coliforms - CMMEF Chapter 9.933</b>	<b>Reference</b> CMMEF Chapter 9.933	<b>Accreditation</b> ISO/IEC 17025:2017 A2LA 3329.07	<b>Completed</b> 03Aug2022
--	---	--	-------------------------------

<b>Parameter</b>	<b>Result</b>
Coliforms	< 10 cfu/g

<b>Parameter</b>	<b>Result</b>
Escherichia coli	< 10 cfu/g

<b>UMDTC - Salmonella species - AOAC-RI 121501</b>	<b>Reference</b> AOAC-RI 121501	<b>Accreditation</b> ISO/IEC 17025:2017 A2LA 3329.07	<b>Completed</b> 03Aug2022
--	------------------------------------	--	-------------------------------

<b>Parameter</b>	<b>Result</b>
Salmonella	Not Detected per 25 g

<b>UMHBM - Staphylococcus aureus - BAM Chapter 12</b>	<b>Reference</b> BAM Chapter 12	<b>Accreditation</b> ISO/IEC 17025:2017 A2LA 3329.07	<b>Completed</b> 04Aug2022
---	------------------------------------	--	-------------------------------

<b>Parameter</b>	<b>Result</b>
Staphylococcus aureus	< 10 cfu/g

<b>UMIB1 - Yeast - FDA BAM Chapter 18 mod.</b>	<b>Reference</b> FDA BAM Chapter 18 mod.	<b>Accreditation</b> ISO/IEC 17025:2017 A2LA 3329.07	<b>Completed</b> 07Aug2022
--	---	--	-------------------------------

<b>UMIB1 - Yeast - FDA BAM Chapter 18 mod.</b>	<b>Reference</b> FDA BAM Chapter 18 mod.	<b>Accreditation</b> ISO/IEC 17025:2017 A2LA 3329.07	<b>Completed</b> 07Aug2022
--	---	--	-------------------------------

<b>Parameter</b>	<b>Result</b>
Yeast	< 10 cfu/g

<b>Parameter</b>	<b>Result</b>
Moulds	< 10 cfu/g

<b>UMVSE - Aerobic Plate Count - CMMEF Chapter 8.72</b>	<b>Reference</b> CMMEF Chapter 8.72	<b>Accreditation</b> ISO/IEC 17025:2017 A2LA 3329.07	<b>Completed</b> 04Aug2022
---	--	--	-------------------------------

<b>Parameter</b>	<b>Result</b>
Aerobic Plate Count	< 10 cfu/g

Subcontracting partners:  
1 - Eurofins Food Chemistry Testing US Madison, WI

Respectfully Submitted,



*Christine Gwinn*  
Christine Gwinn  
Associate Technical Leader

Results shown in this report relate solely to the item submitted for analysis. | Any opinions/interpretations expressed on this report are given independent of the laboratory's scope of accreditation. | All results are reported on an "As Received" basis unless otherwise stated. | Reports shall not be reproduced except in full without written permission of Eurofins Scientific, Inc. | All work done in accordance with Eurofins General Terms and Conditions of Sale: [www.eurofins.com/terms\\_and\\_conditions.pdf](http://www.eurofins.com/terms_and_conditions.pdf) | v Indicates a subcontract test to a different lab. Lab(s) are listed at end of the report. For further details about the performing labs please contact your customer service contact at Eurofins. Measurement of uncertainty can be obtained upon request.

5 August 2022

Job Number:	26134
PO Number:	Verbal

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

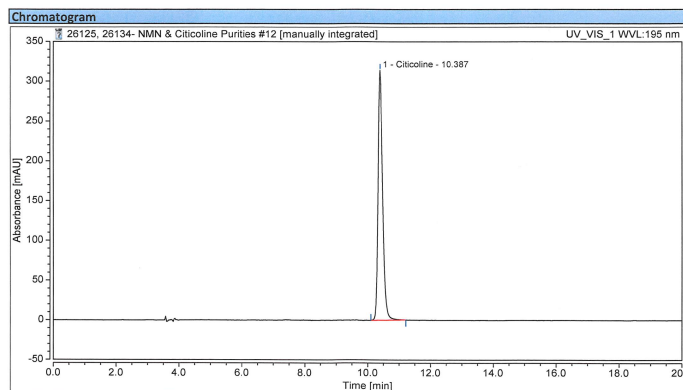
**REPORT OF ANALYSIS**

One blue container with powder labeled "Citicoline Sodium ZJ20210610" was received on 2 August 2022. A portion of the powder from within the container was analyzed for purity using high pressure liquid chromatography (HPLC). Based on ultraviolet (UV) detection at 195 nm the chromatographic purity of the sample was found to be >99.9%.

The chromatogram is enclosed for your reference.

*Chris French*  
Chris French, PhD  
Principal Scientist

Chromatogram and Results			
<b>Injection Details</b>			
Injection Name:	26134- Citicoline sodium lot ZJ20210610	Run Time (min):	20.00
Vial Number:	GB4	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	195
Instrument Method:	AC HILIC 20min Purity Method	Bandwidth:	10
Processing Method:	Processing Method	Dilution Factor:	1.0000
Injection Date/Time:	02/Aug/22 22:46	Sample Weight:	1.0000



Integration Results						
No.	Peak Name	Retention Time	Area	Height	Relative Area	Relative Height
		min	mAU*min	mAU	%	%
1	Citicoline	10.387	53.812	314.179	100.00	100.00
<b>Total:</b>			<b>53.812</b>	<b>314.179</b>	<b>100.00</b>	<b>100.00</b>