



Certificate of Analysis

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

LiftMode

Sarcosine

(Methylamino)acetic acid

Material Lot #: 20200603 Test Date: 03/25/2021
Country of Origin: China Re-Test Date: 03/22/2024

Analysis	Claim	Result
Sarcosine	≥98%	99.7%

Test	Specification	Result
Identification / Purity (qNMR)	Conforms to structure / ≥98%	Conforms / 99.72%
Purity (HPLC)	≥98%	99.8%
Lead	≤1 ppm	<0.010 ppm
Mercury	≤1 ppm	<0.010 ppm
Cadmium	≤1 ppm	<0.010 ppm
Arsenic	≤1 ppm	<0.010 ppm
Total Aerobic Plate Count	<1000 cfu/g	<10 cfu/g
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
Staphylococcus aureus	<10 cfu/g	<10 cfu/g
Salmonella	Not Detected per 25 g	Not Detected per 25 g

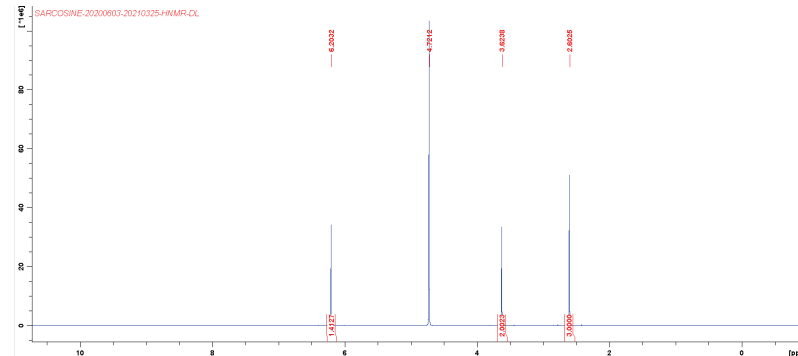


Figure 3 The ¹H-NMR spectrum of sarcosine sample.

4 Conclusions and Discussions

As the customer requirements, three samples were successfully used in purity assay by qNMR method.

Table 1 Analysis results.

Sample name	Purity	Internal Standard Substance	Solvent
Galactooligosaccharide	97.50 %	Sodium benzoate	D ₂ O
Sarcosine	99.72 %	Maleic acid	D ₂ O
Caffeine	98.60 %	Toluene	CDCl ₃

– End of Report –

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

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Synoptent

Joseph Walkins
 1442 W. Fulton Street
 Chicago, IL 60607

Client Code: OH0000902
 PO Number: 20210211
 Received On: 12Feb2021
 Reported On: 17Feb2021

ANALYTICAL REPORT

AR-21-OH-009403-01

Eurofins Sample Code:	477-2021-02120087	Sample Registration Date:	12Feb2021
Client Sample Code:	20200603	Condition Upon Receipt:	acceptable, 7,1°C
Sample Description:	Sarcosine	Sample Reference:	20200603
TK08L - Sarcosin Assay, Titration	Reference	Completed	Sub
	Internal method	17Feb2021	1

Parameter
 Assay

Result
 99.6 %

Subcontracting partners:

1 - Eurofins SF Analytical Laboratories, WI

Respectfully Submitted,

Michael Kaiser
 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 [\ Indicates a subcontract test to a different lab. Lab(s) are listed at end of the report. For further details about the performing lab please contact your customer service contact at Eurofins. Measurement of uncertainty can be obtained upon request.



Order # Sample ID: 2021-001612-01 **Company:** Synoptent LLC
Customer Sample ID: GOS (Galacto-Oligosaccharides)
Sample Description: Lot #20201015

Analytical Testing
Method:

1:2 Mercury

Component:

Mercury

Result:

<0.010 ppm

Test Date:

01-Mar-2021

Metals (ICP-MS) Arsenic <10 ppb 22-Feb-2021

Metals (ICP-MS) Cadmium <10 ppb 22-Feb-2021

Metals (ICP-MS) Lead <10 ppb 22-Feb-2021

Order # Sample ID: 2021-001612-02 **Company:** Synoptent LLC
Customer Sample ID: Sarcosine
Sample Description: Lot #20200603

Analytical Testing
Method:

1:2 Mercury

Component:

Mercury

Result:

<0.010 ppm

Test Date:

01-Mar-2021

Metals (ICP-MS) Arsenic <10 ppb 22-Feb-2021

Metals (ICP-MS) Cadmium <10 ppb 22-Feb-2021

Metals (ICP-MS) Lead <10 ppb 22-Feb-2021

Results Approved By: Randy Vadros
 (Authorized Reviewer)

Medallion Labs maintains A2LA accreditation to ISO/IEC 17025 for the specific tests listed in certificates # 2569-01 and 2569-02. Medallion Labs reserves the right to include this information in the final report, including the report for the individual subject material, without the consent of the client. For more information, please contact us at info@medallionlabs.com. Unless otherwise noted above, samples were received in acceptable condition and analyzed as received.

1 * This analysis is performed by a partner lab.

 2 * This test is not considered a message of our current A2LA accreditation. For a listing of in-scope tests, please visit www.medallionlabs.com.

Date Issued: March 01, 2021

Report #: 30231

Synoptent

Joseph Walkins
 1442 W. Fulton Street
 Chicago, IL 60607

Client Code: OH0000902
 PO Number: 20210205
 Received On: 12Feb2021
 Reported On: 21Feb2021

ANALYTICAL REPORT

AR-21-OH-009403-01

Eurofins Sample Code:	477-2021-02120088	Sample Registration Date:	12Feb2021
Client Sample Code:	20201015	Condition Upon Receipt:	acceptable, 7,1°C
Sample Description:	GOS (Galacto-Oligosaccharides)	Sample Reference:	20201015
UMHBM - Staphylococcus aureus - BAM Chapter 12	Reference	Completed	Sub
	BAM Chapter 12	21Feb2021	1

Parameter
 Staphylococcus aureus

Result
 < 10 cfu/g

Eurofins Sample Code:	477-2021-02120089	Sample Registration Date:	12Feb2021
Client Sample Code:	20200603	Condition Upon Receipt:	acceptable, 7,1°C
Sample Description:	Sarcosine	Sample Reference:	20200603

UMHVE - Aerobic Plate Count - CMMEF Chapter 8.7.2	Reference	Completed	Sub
	CMMEF Chapter 8.7.2	14Feb2021	1

Parameter
 Aerobic Plate Count

Result
 < 10 cfu/g

UMIB1 - Yeast - FDA BAM Chapter 18 mod.	Reference	Completed	Sub
	FDA BAM Chapter 18 mod.	17Feb2021	1

Parameter
 Yeast

Result
 < 10 cfu/g

Parameter Moulds	Result < 10 cfu/g
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UMGWS - Total Coliforms - CMMEF Chapter 8.7	Reference	Completed	Sub
	CMMEF Chapter 8.7	13Feb2021	1

Parameter
 Coliforms

Result
 < 10 cfu/g

UMCB1 - E. coli - CMMEF Chapter 9.933	Reference	Completed	Sub
	CMMEF Chapter 9.933	13Feb2021	1

Parameter
 Escherichia coli

Result
 < 10 cfu/g

UMDTC - Salmonella species - AOAC-R1 121501	Reference	Completed	Sub
	AOAC-R1 121501	13Feb2021	1

Parameter
 Salmonella

Result
 Not Detected per 25 g

UMHBM - Staphylococcus aureus - BAM Chapter 12	Reference	Completed	Sub
	BAM Chapter 12	21Feb2021	1

Parameter
 Staphylococcus aureus

Result
 < 10 cfu/g

Synoptent

Joseph Walkins
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 Chicago, IL 60607

Client Code: OH0000902
 PO Number: 20210205
 Received On: 12Feb2021
 Reported On: 21Feb2021

ANALYTICAL REPORT

AR-21-OH-009403-01

Eurofins Sample Code:	477-2021-02120089	Sample Registration Date:	12Feb2021
Client Sample Code:	20200603	Condition Upon Receipt:	acceptable, 7,1°C
Sample Description:	Sarcosine	Sample Reference:	20200603
UMHBM - Staphylococcus aureus - BAM Chapter 12	Reference	Completed	Sub
	BAM Chapter 12	21Feb2021	1

Parameter
 Staphylococcus aureus

Result
 < 10 cfu/g

Respectfully Submitted,

Christine Gwinn
 Associate Technical Leader

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