

LIFTMODE
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 www.liftmode.com

CERTIFICATE OF ANALYSIS

DL-Phenylalanine (2-amino-3-phenylpropanoic acid)

Material Lot #: 20161006
 Country of Origin: China
 Manufacture Date: 10/07/2016
 Testing Date: 12/04/2018
 Retesting Date: 12/03/2021

Analysis	Claim	Result
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DL-Phenylalanine	≥99.0%	99.1%
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Test	Specification	Result
Appearance	White crystalline powder	Conforms
Identification	Exhibits relative maxima at the same wavelengths	Conforms
Loss on Drying	≤0.20%	0.1%
Residue on Ignition	≤0.30%	0.15%
Heavy Metals	≤10 ppm	Conforms
Arsenic	≤1 ppm	Conforms
Cadmium	≤1 ppm	Conforms
Lead	≤3 ppm	Conforms
Mercury	≤0.1 ppm	Conforms
Bulk Density	0.24 g/ml	Conforms
Tap density	0.4-0.7 g/ml	Conforms
Total Plate Count	≤1,000 cfu/g	Conforms
E.coli	Negative	Conforms
Salmonella	Negative	Conforms
Yeast & Mold	≤100 cfu/g	Conforms
Coliforms	≤100 cfu/g	Conforms

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



Colmaric Analyticals, LLC

812 Meadowlark Lane, Goodlettsville, TN 37072
 Telephone: 615-239-8604

Certificate of Analysis

Synaptent LLC
 47 W Polk Street, 100-241
 Chicago, IL 60654

Product Name	DL-Phenylalanine	Product Lot Number	20161006
Report Date	12/04/2018	Laboratory Number	8328

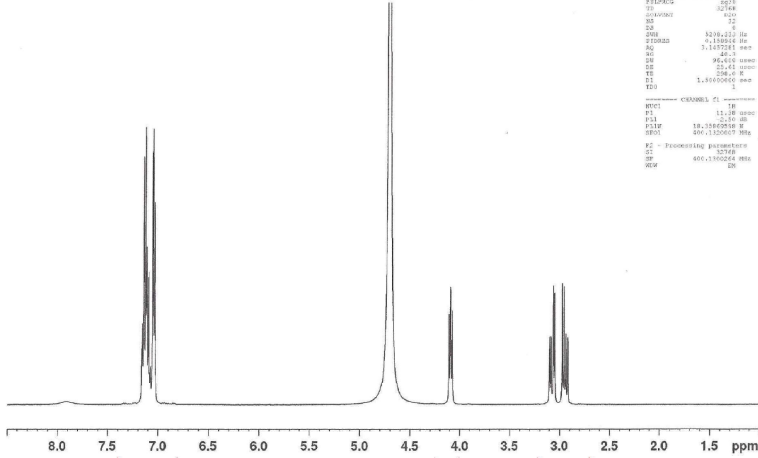
Description	Method	Result
Identification	1H NMR	Conforms
DL-Phenylalanine Assay	HPLC	98.9 %
Lead	ICP-MS	<0.001 ppm
Arsenic	ICP-MS	<0.001 ppm
Cadmium	ICP-MS	0.026 ppm
Mercury	ICP-MS	<0.001 ppm

Michael Robil
 Michael Robil
 QA Auditor

12/04/18
 12/04/2018
 Date

The result(s) stated in this report is only for the sample submitted. This report may not be reproduced in whole or in part, nor may any reference be made to the work, the result, or the company in any news release, public announcements or advertising without our prior written consent.

**¹H NMR of DL-phenylalanine
in D₂O + DCI
Lot # 8328
Colmaric Analytical
400 MHz
03-08-17**



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Name: DL-Phenylalanine
EXPNO: 2
PROCNO: 1
PROCPS: 1
SFO: 400.1363000 MHz
AQ: 0.10000000
RG: 655.36000000
AQ2: 0.00000000
SI: 32768
SF: 163840000.00000000
WDW: EM
SSB: 0
LB: 0.00000000
GB: 0
PC: 0.00000000
SC: 0
DC: 0
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DS: 0
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AS3: 0
AS4: 0
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AS100: 0
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Main Benefits

- DL-Phenylalanine is a combination of two enantiomers, D and L. The D isomer is the most active form. DL-Phenylalanine is best known for its mood-boosting properties.
- DL-Phenylalanine interacts with receptors in the brain to increase the production of neurotransmitters, which can increase energy, and reduce sensations of pain.
- DL-Phenylalanine is also being studied for a variety of other neurodegenerative conditions, especially for supporting memory and cognitive performance.

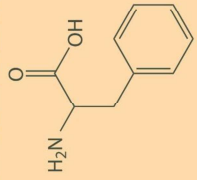
Usage Tips

- A 1.7oz measuring scoop is included. One level scoop contains approximately one serving of 1.2 grams of dietary supplement. Take 1-2 servings 1-2 times per day. Start at the lower suggested quantity to assess tolerance.
- It is recommended to take DL-Phenylalanine with other supplements, so long as the amount consumed does not exceed the suggested serving size.
- The benefits of DL-Phenylalanine are most effective when they are supported by a healthy diet and plenty of exercise.

Main Cautions

- Side effects of DL-Phenylalanine may include heartburn, nausea, headache, and increased blood pressure.
- Do not exceed the recommended serving size for DL-Phenylalanine. Exceeding the recommended serving size of DL-Phenylalanine if you have any underlying medical conditions.
- There is insufficient information as to the safety of DL-Phenylalanine for pregnant and breastfeeding women.

DL-PHENYLALANINE



- This supplement is not intended to treat, diagnose, prevent, or cure any disease. Consult your healthcare provider if you have any underlying medical condition or if you are taking any prescription medications.
- The negative effects of DL-Phenylalanine are most pronounced when taken in combination with 10mg of L-Dopa. A lower dosage of L-Dopa is recommended.
- Use of capsules, or mixing with tea, yogurt, apple sauce, or oatmeal may help make the powder more palatable.