

L-Phenylalanine

Product SPECIFICATION

Product Name	L-Phenylalanine
INCI Name	3-phenyl-L-alanine
EINECS Number	200-568-1
CAS Code	63-91-2

The product meets OR exceeds:
FCC6

Description	White crystals or crystalline powder
Identification (IR)	Concordant with the reference spectrum
Specific rotation [α]D20	-33.2° ~ -35.2°
Assay	98.5 ~ 101.5%
Loss on drying	≤ 0.20%
Residue on ignition	≤ 0.10%
PH	5.4~6.0
Chloride	≤0.021
Heavy Metals(Pb)	≤15ppm
Lead	≤ 3 ppm
Arsenic (As)	≤ 1 ppm
Mercury	≤ 0.1 ppm
Cadmium	≤ 1 ppm
Total Plate Count	≤ 10000 cfu/g
Yeast&Mold	≤ 1000 cfu/g
Salmonella	Absent/10g
Enterobacterias	Absent/g
Staphylococcus aureus	Absent/g
E.Coli	Absent/g

Part or total information is provided as received from our supplier. The data outlined and the Statements made are intended only as a source of information. No warranties, expressed or implied, are made. On the basis of this information it is suggested that you analyze the product on a laboratory scale prior to use in a finished product. The information contained herein should not be construed as permission for violation of patent rights.

Productos Químicos Gonmisol S.A.
 Barcelona (Spain)

Phone (+34) 93 313 61 18
 Fax (+34) 93 314 74 27

<http://www.gonmisol.com>

Confidential document. For internal use only

L-Phenylalanine

GENERAL PRODUCT INFORMATION

Mesh of the product	20
Taped denisty	-
Bulk density	-
Water solubility	2.74 (H2O, g/100g, 20°C)
Origin (Synthetic, Fermentation)	Fermentation
Origin (Animal, Vegetal, etc.)	Glucose
Is the product and their ingredients FREE of GLUTEN?	Yes
Product is suitable for Vegans	Yes
Product is suitable for Vegetarians	Yes
Product is free of fructose	Yes
Is this product suitable for food?	Yes
Can be the product used in baby food (According to Directive 2006/141/CE)?	No
Pharmacopoeias that product meets	FCC, USP, EP
Drug indication	Not applicable
Melting Point	270-275°C
Country of the raw material/s	South Korea
Storage conditions (In the warehouse)	Ambient conditions
Storage conditions (During the transport-Short term)	Ambient conditions

Part or total information is provided as received from our supplier. The data outlined and the Statements made are intended only as a source of information. No warranties, expressed or implied, are made. On the basis of this information it is suggested that you analyze the product on a laboratory scale prior to use in a finished product. The information contained herein should not be construed as permission for violation of patent rights.

Productos Químicos Gonmisol S.A. Barcelona (Spain)	Phone (+34) 93 313 61 18 Fax (+34) 93 314 74 27	http://www.gonmisol.com Confidential document. For internal use only
---	--	---

L-Phenylalanine

TECHNICAL PRODUCT INFORMATION

IUPAC name	(S)-2-Amino-3-phenylpropanoic acid
ATC Code	Not applicable
Molecular Formula	C9H11NO2
Stereochemistry	https://en.wikipedia.org/wiki/Phenylalanine
Molecular mass	165.192 g/mol
Raw materials used and their function	Glucose for starting raw material. Not present in the product
Frequency of analysis of each contaminant?	Every lot
Frequency of analysis of microbiology?	Every lot, Every lot
Frequency of analysis of each heavy metals?	Every lot, Every lot

Part or total information is provided as received from our supplier. The data outlined and the Statements made are intended only as a source of information. No warranties, expressed or implied, are made. On the basis of this information it is suggested that you analyze the product on a laboratory scale prior to use in a finished product. The information contained herein should not be construed as permission for violation of patent rights.

Productos Químicos Gonmisol S.A.
Barcelona (Spain)

Phone (+34) 93 313 61 18
Fax (+34) 93 314 74 27

<http://www.gonmisol.com>

Confidential document. For internal use only

L-Phenylalanine

FOREIGN BODIES

Explanation about control of the foreign bodies during the manufacturing process:

Metal detector	Yes
Sieve	Yes
Filter	Yes
X-Ray	No
Other	Yes

Part or total information is provided as received from our supplier. The data outlined and the Statements made are intended only as a source of information. No warranties, expressed or implied, are made. On the basis of this information it is suggested that you analyze the product on a laboratory scale prior to use in a finished product. The information contained herein should not be construed as permission for violation of patent rights.

Productos Químicos Gonmisol S.A.
Barcelona (Spain)

Phone (+34) 93 313 61 18
Fax (+34) 93 314 74 27

<http://www.gonmisol.com>

Confidential document. For internal use only

L-Phenylalanine

INGREDIENTS

In accordance with the Directive 2003/89/EC We confirm this is the ingredients and their content in %

L-Phenylalanine 100

Part or total information is provided as received from our supplier. The data outlined and the Statements made are intended only as a source of information. No warranties, expressed or implied, are made. On the basis of this information it is suggested that you analyze the product on a laboratory scale prior to use in a finished product. The information contained herein should not be construed as permission for violation of patent rights.

Productos Químicos Gonmisol S.A.
Barcelona (Spain)

Phone (+34) 93 313 61 18
Fax (+34) 93 314 74 27

<http://www.gonmisol.com>

Confidential document. For internal use only

L-Phenylalanine

BSE/TSE

The product does not contain and is not derived from Specified Risk Material as defined in Commission Directive European and it is conform to the EU legislation relating to the risk of Transmission of Spongiform Encephalopathy (TSE).

GMO

Following EU regulations have been published in the Official Journal of the European Union:

- Regulation (EC) No.1829/2003 of the European Parliament and the Council of 22nd September 2003 on genetically modified food and feed
- Regulation (EC) No.1830/2003 of the European Parliament and the Council of 22nd September 2003 concerning tractability and labeling on genetically modified organisms and tractability of food and feed products produced from genetically modified organisms and amending Directive 2001/18/EC.

This product has not been genetically modified so there is no obligation of GMO labeling as defined by the above mentioned regulations.

NON IRRADIATION/NON IONIZED

According to directives 1992/2/EC and 1999/3/EC, We confirm is not made from irradiated/ionized raw materials or was irradiated/ionized the product.

Part or total information is provided as received from our supplier. The data outlined and the Statements made are intended only as a source of information. No warranties, expressed or implied, are made. On the basis of this information it is suggested that you analyze the product on a laboratory scale prior to use in a finished product. The information contained herein should not be construed as permission for violation of patent rights.

Productos Químicos Gonmisol S.A.
Barcelona (Spain)

Phone (+34) 93 313 61 18
Fax (+34) 93 314 74 27

<http://www.gonmisol.com>

Confidential document. For internal use only

L-Phenylalanine

PESTICIDES

To our actual knowledge of production process, raw materials and equipment used potential pesticide residues in the above mentioned product comply with the European legislation on pesticide residues, esp. Regulation (EC)None. 396/2005. However, we do no test for pesticide residues on a routine basis.

RESIDUAL SOLVENTS

The product meets with:

- DIRECTIVE 2009/32/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 23 April 2009 on the approximation of the laws of the Member States on extraction solvents used in the production of foodstuffs and food ingredients
- DIRECTIVE 2010/59/EU of 26 August 2010 amending Directive 2009/32/EC of the European Parliament and of the Council on the approximation of the laws of the Member States on extraction solvents used in the production of foodstuffs and food ingredients.

CONTAMINANTS

The product is in accordance and meets with the commission regulation (EC) No.629/2008 of 2 July 2008 amending regulation (EC) No.1881/2006 setting maximum levels for certain contaminants in foodstuffs.

PCBS and MELAMINE

The product is in accordance and meets with the commission regulation (EU) No.594/2012 of 5 July 2012 amending regulation (EC) No.1881/2006 as regards the maximum levels of the contaminants Ochratoxin a, non dioxin-like PCBS and melamine in foodstuffs.

ANTI-DOPING

As per the list of 2012 of the world anti-doping agency the ingredient is not a doping substance and not a combination of doping substances. The ingredient does not contain any doping substance. The ingredient does not result from a doping substance.

As per the list of 2016 of the world anti-doping agency the ingredient is not a doping substance and not a combination of doping substances. The ingredient does not contain any doping substance. The ingredient does not result from a doping substance.

NANOMATERIALS

According to the the definition of 'nanomaterials' of the UE REGULATION (EU) No 1169/2011 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 25 October 2011 on the provision of food information to consumers , we hereby attest that no nanomaterials are used in the formulation nor in the packaging materials of our product.

Part or total information is provided as received from our supplier. The data outlined and the Statements made are intended only as a source of information. No warranties, expressed or implied, are made. On the basis of this information it is suggested that you analyze the product on a laboratory scale prior to use in a finished product. The information contained herein should not be construed as permission for violation of patent rights.

Productos Químicos Gonmisol S.A.
Barcelona (Spain)

Phone (+34) 93 313 61 18
Fax (+34) 93 314 74 27

<http://www.gonmisol.com>

Confidential document. For internal use only

L-Phenylalanine

PACKING

We confirm that the packing used is in compliance with:

- Commission Directive 2002/72/EC of 6 August 2002 relating to plastic materials and articles intended to come into contact with foodstuffs.
- Regulation (EC) No 1935/2004 of the European Parliament and of the Council of 27 October 2004 on materials and articles intended to come into contact with food and repealing Directives 80/590/EEC and 89/109/EEC
- Commission Regulation (EU) No 10/2011 of 14 January 2011 on plastic materials and articles intended to come into contact with food.

Part or total information is provided as received from our supplier. The data outlined and the Statements made are intended only as a source of information. No warranties, expressed or implied, are made. On the basis of this information it is suggested that you analyze the product on a laboratory scale prior to use in a finished product. The information contained herein should not be construed as permission for violation of patent rights.

Productos Químicos Gonmisol S.A.
Barcelona (Spain)

Phone (+34) 93 313 61 18
Fax (+34) 93 314 74 27

<http://www.gonmisol.com>

Confidential document. For internal use only

L-Phenylalanine

ALLERGENS

In accordance with the Directive 2003/89/EC and Council amending Directive 2000/13/EC and taking Directive 2005/26/EC, Directive 2005/63/EC and Directive 2006/142/EC of 22.12.2006 into consideration. We confirm the following information:

Note: Does the raw material CONTAIN or is it DERIVED from or could it be CROSS-CONTAMINATED by any of the following.

Cereals containing gluten (i.e. wheat, rye, barley, oats, spelt, kamut or their hybridised strains) and products thereof	No
Crustaceans and products thereof	No
Eggs and products thereof	No
Fish and products thereof	No
Peanuts and products thereof	No
Soybeans and products thereof	No
Milk and products thereof (including lactose)	No
Nuts (i.e. Almond, Hazelnut, Walnut, Cashew, Pecan nut, Brazil nut, Pistachio nut, Macadamia nut and Queensland nut and products thereof)	No
Celery and products thereof	No
Mustard and products thereof	No
Sesame seeds and products thereof	No
Sulphur dioxide and sulphite at concentrations of more than 10 mg/kg or 10 mg/l expressed as SO ₂	No
Lupine and products thereof	No
Molluscs and products thereof	No

Part or total information is provided as received from our supplier. The data outlined and the Statements made are intended only as a source of information. No warranties, expressed or implied, are made. On the basis of this information it is suggested that you analyze the product on a laboratory scale prior to use in a finished product. The information contained herein should not be construed as permission for violation of patent rights.

Productos Químicos Gonmisol S.A.
Barcelona (Spain)

Phone (+34) 93 313 61 18
Fax (+34) 93 314 74 27

<http://www.gonmisol.com>

Confidential document. For internal use only

L-Phenylalanine

ALBA LIST (ALLERGENS)

When it is written 'No' means that there's no contamination in:

Contain in recipe, Handled on same production line or Handled at same side.

Where: 1) Contain in recipe 2) Handled on same production line 3) Handled at same side.

	Cross contamination (mg/kg)?	Where?
Cow milk protein	No	-
Lactose	No	-
Chicken egg	No	-
Soya protein	No	-
Soya oil	No	-
Gluten	No	-
Wheat	No	-
Rye	No	-
Cattle	No	-
Pork	No	-
Chicken	No	-
Fish	No	-
Shellfish and Crustaceae	No	-
Corn	No	-
Cocoa	No	-
Leguminous plants	No	-
Nuts	No	-
Nut oil	No	-
Peanut	No	-
Peanut oil	No	-
Sesame	No	-
Sesame oil	No	-
Glutamate	No	-
Sulphide (E220 to E228)	No	-
Coriander	No	-
Celery	No	-
Carrot	No	-
Lupines	No	-

Part or total information is provided as received from our supplier. The data outlined and the Statements made are intended only as a source of information. No warranties, expressed or implied, are made. On the basis of this information it is suggested that you analyze the product on a laboratory scale prior to use in a finished product. The information contained herein should not be construed as permission for violation of patent rights.

Productos Químicos Gonmisol S.A.
Barcelona (Spain)

Phone (+34) 93 313 61 18
Fax (+34) 93 314 74 27

<http://www.gonmisol.com>

Confidential document. For internal use only

L-Phenylalanine

NUTRITIONAL INFORMATION

The values given are approximate

ITEM / TEST METHOD / RESULT

TEST RESULT:

Assay / GB 5009.5-2003 / 99.72g/100g

Fat / GB 5009.6-2003 / 0.5g/100g

Moisture / GB 5009.3-2003 / 0.09g/100g

Ash / GB 5009.4-2003 / 0.05g/100g

Protein / GB 5009.5-2003 / 0g/100g

CALCULATE RESULT:

Carbohydrate / GB 28050-2004 / 0.09g/100g

Energy / GB 28050-2004 / 1315KJ/100g

Part or total information is provided as received from our supplier. The data outlined and the Statements made are intended only as a source of information. No warranties, expressed or implied, are made. On the basis of this information it is suggested that you analyze the product on a laboratory scale prior to use in a finished product. The information contained herein should not be construed as permission for violation of patent rights.

Productos Químicos Gonmisol S.A.
Barcelona (Spain)

Phone (+34) 93 313 61 18
Fax (+34) 93 314 74 27

<http://www.gonmisol.com>

Confidential document. For internal use only

L-Phenylalanine

RESIDUE LIMITS

For the products/s mentioned above We herewith certify that the ingredient mentioned is in compliance with: commission regulation (EU) 2016/355 of 11 march 2016 amending Annex III to regulation (EC) No. 853/2004 of the European parliament and of the council as regards the specific requirements for gelatine, collagen and highly refined products of animal origin intended for human consumption.

HYGIENE OF FOODSTUFFS

For the products/s mentioned above We herewith certify that the production complies with regulation (EC) No. 852/2004 of the European parliament on the hygiene of foodstuffs and all its amendments.

FULL TRACEABILITY

For the products/s mentioned above We herewith the full traceability as mentioned in regulation (EC) No. 178/2002 of the European parliament and of the council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European food safety authority and laying down procedures in matters of food safety.

Part or total information is provided as received from our supplier. The data outlined and the Statements made are intended only as a source of information. No warranties, expressed or implied, are made. On the basis of this information it is suggested that you analyze the product on a laboratory scale prior to use in a finished product. The information contained herein should not be construed as permission for violation of patent rights.

Productos Químicos Gonmisol S.A.
Barcelona (Spain)

Phone (+34) 93 313 61 18
Fax (+34) 93 314 74 27

<http://www.gonmisol.com>

Confidential document. For internal use only

L-Phenylalanine

FACTORY ACCREDITATIONS/CERTIFICATIONS

ISO 9001	Yes
ISO 14001	No
ISO 22000	Yes
HACCP	No
GMP	No
FAMI QS	No
BRC	No
Other accreditations/certifications	Halal, Kosher

Part or total information is provided as received from our supplier. The data outlined and the Statements made are intended only as a source of information. No warranties, expressed or implied, are made. On the basis of this information it is suggested that you analyze the product on a laboratory scale prior to use in a finished product. The information contained herein should not be construed as permission for violation of patent rights.

Productos Químicos Gonmisol S.A.
Barcelona (Spain)

Phone (+34) 93 313 61 18
Fax (+34) 93 314 74 27

<http://www.gonmisol.com>

Confidential document. For internal use only



Productos Químicos Gonmisol S.A.
Camino de la Verneda 47-49
08930 - San Adrian del Besos
Barcelona - Spain

Tel 34 933 136 118
Fax 34 933 147427
www.gonmisol.com

L-Phenylalanine

NON ANIMAL TESTING

We certify that the product has not been tested on animals for cosmetic purposes.

Part or total information is provided as received from our supplier. The data outlined and the Statements made are intended only as a source of information. No warranties, expressed or implied, are made. On the basis of this information it is suggested that you analyze the product on a laboratory scale prior to use in a finished product. The information contained herein should not be construed as permission for violation of patent rights.

Productos Químicos Gonmisol S.A.
Barcelona (Spain)

Phone (+34) 93 313 61 18
Fax (+34) 93 314 74 27

<http://www.gonmisol.com>

Confidential document. For internal use only

L-Phenylalanine

MSDS (Material Safety Data Sheet)

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY UNDERTAKING

Product Name: L-Phenylalanine
CAS Number: 63-91-2

Supplier Information:

Productos Quimicos Gonmisol S.A.
Camino de la Verneda 47-49
08930 - San Adrian del Besos
Barcelona - Spain
Phone +34 933136118
Fax +34 933147427
www.gonmisol.com

2. HAZARDS IDENTIFICATION

Classification of the substance

Physical hazards: Not applicable

Health hazards: Not applicable

Environmental hazards: Not applicable

Label elements

Not applicable

Potential effects

May cause eye and skin irritation It will increase the biological oxygen demand (BOD) of water

3. COMPOSITION INFORMATION ON INGREDIENTS

Substance

Name of substance: L-Phenylalanine

CAS number: 63-91-2

EC number: 200-568-1

Index number: -

Concentration: 100%

4. FIRST AID MEASURES

Description of first aid measures

After eye contact: Flush with copious amounts of water for at least 15 minute. Assure adequate flushing by separating the eyelids with fingers. Call a physician

After skin contact: Immediately wash skin with soap and flush with water

After inhalation: Remove to fresh air. If breathing becomes difficult, call a physician

After ingestion: Wash out mouth with water provided person is conscious. Call a physician

Most important symptoms and effects, both acute and delayed

Not determined

Indication of any immediate medical attention and special treatment needed

Not determined

5. FIRE FIGHTING MEASURES

Extinguishing media

Water spray, Carbon dioxide, dry chemical powder or appropriate foam

Part or total information is provided as received from our supplier. The data outlined and the Statements made are intended only as a source of information. No warranties, expressed or implied, are made. On the basis of this information it is suggested that you analyze the product on a laboratory scale prior to use in a finished product. The information contained herein should not be construed as permission for violation of patent rights.

L-Phenylalanine

MSDS (Material Safety Data Sheet)

Special hazards arising from the substance or mixture

Emits toxic fumes under fire conditions

Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See precautions in section 7 and 8. Avoid raising dust. Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves

Environmental precautions

None

Methods and material for containment and cleaning up

Sweep up, place in a bag and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

Reference to other sections

See precautions in section 7 and 8

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid inhalation. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure.

Conditions for safe storage, including any incompatibilities

Store in a cool and dry place. Recommended storage temperature is 15~30°C. Keep container tightly closed and inner bag sealed

Specific end use(s)

Not applicable

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Not applicable

Exposure controls

Respiratory protection : NIOSH/MSHA-APPROVED respirator

Hand protection : Compatible chemical-resistant gloves

Eye protection : Chemical safety goggles

Body protection : Safety shower and eye bath

Hygiene measures : Mechanical exhaust required. Wash thoroughly after handling

9. PHYSICAL AND CHEMICAL PROPERTIES

For this information, please, refer directly to the Certificate of Analysis OR Specifications

10. STABILITY AND REACTIVITY

Reactivity

Not determined

Chemical stability

Stable under recommended storage conditions

Possibility of hazardous reactions

Part or total information is provided as received from our supplier. The data outlined and the Statements made are intended only as a source of information. No warranties, expressed or implied, are made. On the basis of this information it is suggested that you analyze the product on a laboratory scale prior to use in a finished product. The information contained herein should not be construed as permission for violation of patent rights.

L-Phenylalanine

MSDS (Material Safety Data Sheet)

Hazard polymerization will not occur
Conditions to avoid
Not determined
Incompatible materials
Strong oxidizers
Hazardous decomposition materials
Carbon monoxide, Carbon dioxide, Nitrogen oxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity
May be harmful if absorbed through the skin. May be harmful if inhaled. May be harmful if swallowed
Skin corrosion/irritation
May cause skin irritation
Serious eye damage/irritation
May cause eye irritation
Respiratory or skin sensitization
Not determined
Germ cell mutagenicity
Not determined
Carcinogenicity
Not determined
Reproductive toxicity
Not determined
STOT-single exposure
May be irritating to mucous membranes and upper respiratory tract
STOT-repeated exposure
Not determined
Aspiration hazard
Not determined
RTECS No.
AY 7535000

12. ECOLOGICAL INFORMATION

Toxicity
Not determined
Persistence and degradability
Not determined
Bioaccumulative potential
Not determined
Mobility in soil
Not determined
Results of PBT and vPvB assessment
Not determined
Other adverse effects
Not determined

13. DISPOSAL CONSIDERATIONS

Part or total information is provided as received from our supplier. The data outlined and the Statements made are intended only as a source of information. No warranties, expressed or implied, are made. On the basis of this information it is suggested that you analyze the product on a laboratory scale prior to use in a finished product. The information contained herein should not be construed as permission for violation of patent rights.

L-Phenylalanine

MSDS (Material Safety Data Sheet)

Waste treatment methods

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state and local environmental regulations

List of CER codes

Allocation of the waste code numbers according EC Directive 91/692/EEC must be realized under considerations of existing sector specifics and processes

14. TRANSPORT INFORMATION

UN Number

None

UN proper shipping name

None

Transport hazard classes

None

Packing group

None

Environmental hazards

None

Land transport (ADR/RID)

None

Onland waterway craft (ADN/ADNR)

None

Marine transport (IMDG)

None

Air transport (IATA)

None

Special precautions for user

None

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

Not determined

No special requirements for transport according to international regulations.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

OEL=MAK

NOES 1983 : HZD X5534; NIS 4; TNF 792; NOS 14; TNE 19901; TFE 14903

EPA TSCA Section 8(B) chemical inventory

Chemical safety assessment

Not applicable.

16. OTHER INFORMATION

This information is based on our present knowledge and is provided according to the relevant EC and national regulations. This information is intended as a characterization of the product in order to provide guidance for the relevant safety issues. However, this document does not provide any warranty, expressed or implied, regarding the properties of the product. In no event will we be responsible for damages of any nature whatsoever resulting from the use of or reliance on information.

Part or total information is provided as received from our supplier. The data outlined and the Statements made are intended only as a source of information. No warranties, expressed or implied, are made. On the basis of this information it is suggested that you analyze the product on a laboratory scale prior to use in a finished product. The information contained herein should not be construed as permission for violation of patent rights.

Productos Químicos Gonmisol S.A.
Barcelona (Spain)

Phone (+34) 93 313 61 18
Fax (+34) 93 314 74 27

<http://www.gonmisol.com>

Confidential document. For internal use only