

Safety Data Sheet

Warning:



L-Tyrosine

Section 1 - Chemical Product and Company Identification

1.1 Product Identifiers

Product Name: L-Tyrosine

Catalog Numbers:

CAS #. : 60-18-4

EC#: 200-460-4

RTECS#: YP2275600

1.2 Recommended Use of the Chemical and restrictions of Use

Chemical manufacturing

1.3 Supplier Details

BioSpectra, Inc.

100 Majestic Way

Bangor, Pa 18013

610.599.3400

1.4 Emergency Numbers

US & Canada: 1-800-424-9300

Outside the US & Canada: +1 703-527-3887

Section 2 – Hazard Identification

2.1 Classification of Substance or Mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin irritation (Category 2), H315

Eye irritation (Category 2A), H319

Specific target organ toxicity - single exposure (Category 3),

Respiratory system, H335

2.2 GHS Label Elements Including Precautionary Statements

Pictogram



Signal Word: Warning

Hazard statement(s)

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary statement(s)

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ eye protection/ face protection.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

P321 Specific treatment (see supplemental first aid instructions on this label).

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not Classified or not Covered by the GHS

None

Section 3 – Composition, Information on Ingredients

Component	Classification	Concentration
L-Tyrosine	NA	>98.5%

Synonyms: (S)-2-Amino-3-(4-hydroxyphenyl)propionic acid, 3-(4-Hydroxyphenyl)-L-alanine

Formula: C₉H₁₁NO₃

Molecular Weight: 181.19 g/mol

Section 4 - First Aid Measures

4.1 Description of necessary first aid measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Get medical aid immediately.

Skin: Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: DO NOT induce vomiting unless instructed to do so by a medical professional. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation: Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician: Treat symptomatically and supportively.

4.2 Most Important symptoms/effects, acute and delayed

Refer to Section 2.2 for Precautionary Statements if any are applicable

4.3 Indication of Immediate Medical Attention and Special Treatment

No information available

Section 5 - Firefighting Measures

5.1 Extinguishing Media

Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Specific Hazards Associated with this Chemical

Carbon oxides, nitrogen oxides (NO_x)

5.3 Special Equipment/Precautions for Firefighters

May be combustible at high temperatures. As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source. In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode. Explosion will appear as fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

5.4 Other information

None available

Section 6 - Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Use proper personal protective equipment as indicated in Section 8.

6.2 Environmental Precautions

Do not allow to enter drains

6.3 Methods and Materials for Containment and Cleaning Up

Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions.

6.4 Other information

None available

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Use with adequate ventilation. Take into consideration the avoidance of formation of combustible dust before processing. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

7.2 Conditions for Storage Including any Incompatibilities

Store in a dry, well-ventilated area away from incompatible substances. Keep containers tightly closed.

7.3 Other information

None available.

Section 8 - Exposure Controls, Personal Protection

8.1 Control parameters

Chemical does not contain any substances with occupational exposure limits

8.2 Engineering controls

Use adequate ventilation to keep airborne concentrations low.

8.3 Personal protective equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure. Wear impervious gloves: Nitrile rubber with layer thickness 0.11mm.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Where protection from nuisance levels of dusts are desired, use type N95

(US) or type P1 (EN 143) dust masks. A respiratory protection program that meets OSHA's 29 CFR '1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

Section 9 - Physical and Chemical Properties

Physical State: Solid	Melting Point: 343°C
Appearance: White	Boiling Point: Not available
Odor: Not available	Decomposition Temperature: Not available
pH: Not available	Specific Gravity/Density: Not available
Vapor Pressure: Not available	Solubility: 0.479 g/l at 25 °C
Vapor Density: Not available	Molecular Formula: C ₉ H ₁₁ NO ₃
Viscosity: Not available	Molecular Weight: 181.19 g/mol

Other safety information

Dissociation constant 2.2 at 25 °C

Section 10 - Stability and Reactivity

10.1 Chemical Stability

Stable under normal temperatures and pressures.

10.2 Conditions to Avoid

No information available.

10.3 Incompatibilities with Other Materials

Strong oxidizing agents

10.4 Hazardous Decomposition Products

No information available.

10.5 Hazardous Polymerization

Will not occur.

Section 11 - Toxicological Information

11.1 Toxicological effects

Acute Toxicity

LD50 Intraperitoneal: mouse: > 1,450 mg/kg

Carcinogenicity:

CAS# 60-18-4: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology: No information available.

Teratogenicity: No information available.

Reproductive Effects: No information available.

Neurotoxicity: No information available.

Mutagenicity: No information available.

Other Studies: No information available.

11.2 Additional information

RTECS#: YP2275600

To the best of our knowledge the associated physical, chemical and toxicological properties of this chemical have not undergone thorough investigation, all known information is contained in this SDS.

Section 12 - Ecological Information

12.1 Ecotoxicity

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative Potential

No information available

12.4 Mobility in Soil

No information available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other Adverse Effects

No information available

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

	US DOT	IATA	RID/ADR	IMO	Canada TDG
Shipping Name:	No Information Available	No Information Available	No Information Available	No Information Available	No information available.
Hazard Class:					
UN Number:					
Packing Group:					

Section 15 - Regulatory Information

15.1 EHS Chemical Specific Regulations

SARA

Section 302 (TPQ): None of the chemicals in this product have a TPQ.

Section 313: No chemicals are reportable under Section 313.

SARA 311/312 Hazards: Acute Health Hazard

STATE:

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

L-Tyrosine CAS-No. 60-18-4

New Jersey Right To Know Components

L-Tyrosine CAS-No. 60-18-4

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16 - Additional Information

16.1 Hazard Ratings

HMIS Rating

Health hazard: 2

Flammability: 0

Physical Hazard: 0

NFPA Rating

Health hazard: 2

Fire Hazard: 0

Reactivity Hazard: 0

The information conveyed in this Safety Data Sheet is only a representation of what BioSpectra has found to be accurate based on the current information that is available in regards to this compound. BioSpectra makes no warranty, expressed or implied, with respect to such information, and therefore assumes no liability resulting from product usage. It is strongly recommended that users of this product perform their own investigations to determine the accuracy and suitability of the information for their specific purposes. In no way will BioSpectra assume liability for any claims, losses, damages to any third party, any lost profits or any special, indirect, incidental, consequential or exemplary damages that may arise, even if BioSpectra has been advised of the possibility of such damages.