

• SAFETY DATA SHEET

Version 6.15
Revision Date 10/14/2025
Print Date 10/15/2025

SECTION 1. IDENTIFICATION

1.1 Product identifiers

Product name : 21 L-Amino acids + Glycine

Product Number : 09416

Brand : Sigma

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765

Fax : +1 800 325-5052

1.4 Emergency telephone number

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-
527-3887 CHEMTREC (International) 24
Hours/day; 7 Days/week

This is a summary SDS for a kit. For the full SDS for each of the components listed in section 16 please visit our website.

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SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazards for the product as supplied

Short-term (acute) aquatic hazard : Category 3

Other hazards

None known.

GHS label elements

Hazard Statements : H402 Harmful to aquatic life.

Precautionary statements : **Prevention:**
P273 Avoid release to the environment.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Refer to component SDS

SECTION 4. FIRST AID MEASURES

Refer to component SDS

SECTION 5. FIREFIGHTING MEASURES

Refer to component SDS

SECTION 6. ACCIDENTAL RELEASE MEASURES

Refer to component SDS

SECTION 7. HANDLING AND STORAGE

For precautions see section 2.2.

Further information on storage conditions : Tightly closed.

Storage class : 10, Combustible liquids

Recommended storage temperature : Recommended storage temperature see product label.

Further information on storage stability : Store under inert gas.
Air sensitive.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Refer to component SDS

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Refer to component SDS

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SECTION 10. STABILITY AND REACTIVITY

Refer to component SDS

SECTION 11. TOXICOLOGICAL INFORMATION

Refer to component SDS

SECTION 12. ECOLOGICAL INFORMATION

Refer to component SDS

SECTION 13. DISPOSAL CONSIDERATIONS

Refer to component SDS

SECTION 14. TRANSPORT INFORMATION**International Regulations****IATA-DGR**

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to IMO instruments

Not applicable for product as supplied.

National Regulations**49 CFR Road**

Not regulated as a dangerous good

Poison Inhalation Hazard : No

Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

SARA 311/312 Hazards : No SARA Hazards

SECTION 16. OTHER INFORMATION

Kit Components:

L-Alanine	Sigma	05129
L-Arginine monohydrochloride	Sigma	11040
L-Asparagine	Sigma-Aldrich	11150
L-Aspartic acid	Sigma-Aldrich	11190
L-Cysteine	Sigma-Aldrich	30090
L-Cystine	Sigma	30200
L-Glutamine	Sigma	49419
L-Glutamic acid	Sigma-Aldrich	49450
Glycine	Sigma-Aldrich	50050
L-Histidine monohydrochloride monohydrate	Sigma	53370
trans-4-Hydroxy-L- proline	Sigma	56250
L-Isoleucine	Sigma-Aldrich	58880
L-Leucine	Sigma	L8000
L-Lysine monohydrochloride	Sigma-Aldrich	62930
L-Methionine	Sigma-Aldrich	64320
L-Phenylalanine	Sigma-Aldrich	P2126
L-Proline	Sigma	81710
L-Serine	Sigma-Aldrich	84960
L-Threonine	Sigma-Aldrich	89180
L-Tryptophan	Sigma-Aldrich	T0254
L-Tyrosine	Sigma-Aldrich	T3754
L-Valine	Sigma-Aldrich	94620

Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonised System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not

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Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organisation for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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Revision Date : 10/14/2025

The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the information in the document regarding the product remains unchanged and matches the product ordered. For further information please contact mlsbranding@sial.com.

US / EN

Kit Components:

L-Alanine					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma - 05129					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

L-Arginine monohydrochloride					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma - 11040					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

L-Asparagine					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma-Aldrich - 11150					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

L-Aspartic acid					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma-Aldrich - 11190					No hazard pictogram, no signal word, no hazard

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					statement(s), no precautionary statement(s) required.
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L-Cysteine					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma-Aldrich - 30090					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

L-Cystine					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma - 30200					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

L-Glutamine					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma - 49419					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

L-Glutamic acid					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma-Aldrich - 49450					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s)

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					required.
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Glycine					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma-Aldrich - 50050					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

L-Histidine monohydrochloride monohydrate					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma - 53370					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

<i>trans</i>-4-Hydroxy-L-proline					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma - 56250			Harmful to aquatic life.	Avoid release to the environment. Dispose of contents/ container to an approved waste disposal plant.	

L-Isoleucine					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma-Aldrich - 58880					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

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L-Leucine					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma - L8000					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

L-Lysine monohydrochloride					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma-Aldrich - 62930					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

L-Methionine					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma-Aldrich - 64320					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

L-Phenylalanine					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma-Aldrich - P2126					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

L-Proline					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma - 81710					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

L-Serine					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma-Aldrich - 84960					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

L-Threonine					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma-Aldrich - 89180					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

L-Tryptophan					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma-Aldrich - T0254					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

L-Tyrosine					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma-Aldrich - T3754					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

L-Valine					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma-Aldrich - 94620					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.