



LABELED AMINO ACID STANDARDS SET A

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 26/07/2016

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Version: 1.0

NSK-A-CE

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixtures
Product name. : LABELED AMINO ACID STANDARDS SET A
Product code : NSK-A-CE

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

1.2.1. Relevant identified uses

Main use category : Professional use
Industrial/Professional use spec : For professional use only.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.
50 Frontage Road
Andover, MA 01810
USA

USA: 1-800-322-1174 Int: 1-978-749-8000
cilsales@isotope.com www.isotope.com

Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours)
International: 1-703-741-5970 (24 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin Irrit. 2 H315
Eye Irrit. 2 H319

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

Xi; R36

Full text of R-phrases: see section 16

Classification (GHS-US)

Skin Irrit. 2 H315
Eye Irrit. 2A H319

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) : Warning
Hazard statements (CLP) : H315 - Causes skin irritation
H319 - Causes serious eye irritation

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Precautionary statements (CLP) : P264 - Wash Both hands thoroughly after handling
P280 - Wear protective clothing, protective gloves
P302+P352 - IF ON SKIN: Wash with plenty of water/...
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P332+P313 - If skin irritation occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) :

Warning

Hazard statements (GHS-US) :

H315 - Causes skin irritation
H319 - Causes serious eye irritation

Precautionary statements (GHS-US) :

P264 - Wash Both hands thoroughly after handling
P280 - Wear protective clothing, protective gloves
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P321 - Specific treatment (see Hazard pictograms (CLP) 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

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Directive 67/548/EEC
GLYCINE (2-13C, 99%; 15N, 98%+)	(CAS No) 91795-59-4 (EC no) 200-272-2 (Unlabeled)	18.36	Not classified
L-ARGININE:HCL (5-13C, 99%; 4,4,5,5-D4, 95%)	(CAS No) 1119-34-2 (Unlabeled) (EC no) 214-275-1 (Unlabeled)	10.28	Xi; R36/38
L-TYROSINE (RING-13C6, 99%)	(CAS No) 201595-63-3 (EC no) 200-460-4 (Unlabeled)	8.92	Xi; R36/37/38
L-CITRULLINE (5,5-D2, 98%)	(CAS No) 372-75-8 (Unlabeled) (EC no) 206-759-6 (Unlabeled)	8.45	Not classified
L-PHENYLALANINE (RING-13C6, 99%)	(CAS No) 63-91-2 (Unlabeled) (EC no) 200-568-1	8.16	Not classified
L-ORNITHINE:HCL (5,5-D2, 98%)	(CAS No) 3184-13-2 (Unlabeled) (EC no) 221-678-6 (Unlabeled)	8.13	Xi; R36
L-METHIONINE (METHYL-D3, 98%)	(CAS No) 13010-53-2 (EC no) 200-562-9 (Unlabeled)	7.26	Not classified
L-GLUTAMIC ACID (2,4,4-D3, 97-98%)	(CAS No) 56-86-0 (Unlabeled) (EC no) 200-293-7 (Unlabeled)	7.16	Not classified
L-ASPARTIC ACID (2,3,3-D3, 98%)	(CAS No) 3842-25-9 (EC no) 200-291-6 (Unlabeled)	6.49	Xn; R21/22 Xi; R36
L-LEUCINE (5,5,5-D3, 99%)	(CAS No) 87828-86-2 (EC no) 200-522-0 (Unlabeled)	6.4	Not classified
L-VALINE (D8, 98%)	(CAS No) 35045-72-8 (EC no) 200-773-6 (Unlabeled)	5.97	Not classified
L-ALANINE (2,3,3,3-D4, 98%)	(CAS No) 18806-29-6 (EC no) 200-273-8	4.44	Not classified
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
GLYCINE (2-13C, 99%; 15N, 98%+)	(CAS No) 91795-59-4 (EC no) 200-272-2 (Unlabeled)	18.36	Not classified

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
L-ARGININE:HCL (5-13C, 99%; 4,4,5,5-D4, 95%)	(CAS No) 1119-34-2 (Unlabeled) (EC no) 214-275-1 (Unlabeled)	10.28	Skin Irrit. 2, H315 Eye Irrit. 2, H319
L-TYROSINE (RING-13C6, 99%)	(CAS No) 201595-63-3 (EC no) 200-460-4 (Unlabeled)	8.92	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
L-CITRULLINE (5,5-D2, 98%)	(CAS No) 372-75-8 (Unlabeled) (EC no) 206-759-6 (Unlabeled)	8.45	Not classified
L-PHENYLALANINE (RING-13C6, 99%)	(CAS No) 63-91-2 (Unlabeled) (EC no) 200-568-1	8.16	Not classified
L-ORNITHINE:HCL (5,5-D2, 98%)	(CAS No) 3184-13-2 (Unlabeled) (EC no) 221-678-6 (Unlabeled)	8.13	Eye Irrit. 2, H319
L-METHIONINE (METHYL-D3, 98%)	(CAS No) 13010-53-2 (EC no) 200-562-9 (Unlabeled)	7.26	Not classified
L-GLUTAMIC ACID (2,4,4-D3, 97-98%)	(CAS No) 56-86-0 (Unlabeled) (EC no) 200-293-7 (Unlabeled)	7.16	Not classified
L-ASPARTIC ACID (2,3,3-D3, 98%)	(CAS No) 3842-25-9 (EC no) 200-291-6 (Unlabeled)	6.49	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Eye Irrit. 2, H319
L-LEUCINE (5,5,5-D3, 99%)	(CAS No) 87828-86-2 (EC no) 200-522-0 (Unlabeled)	6.4	Not classified
L-VALINE (D8, 98%)	(CAS No) 35045-72-8 (EC no) 200-773-6 (Unlabeled)	5.97	Not classified
L-ALANINE (2,3,3,3-D4, 98%)	(CAS No) 18806-29-6 (EC no) 200-273-8	4.44	Not classified

Name	Product identifier	%	Classification (GHS-US)
L-ARGININE:HCL (5-13C, 99%; 4,4,5,5-D4, 95%)	(CAS No) 1119-34-2 (Unlabeled)	10.28	Skin Irrit. 2, H315 Eye Irrit. 2A, H319
L-TYROSINE (RING-13C6, 99%)	(CAS No) 201595-63-3	8.92	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
L-ORNITHINE:HCL (5,5-D2, 98%)	(CAS No) 3184-13-2 (Unlabeled)	8.13	Eye Irrit. 2A, H319
L-ASPARTIC ACID (2,3,3-D3, 98%)	(CAS No) 3842-25-9	6.49	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Eye Irrit. 2A, H319
L-ALANINE (2,3,3,3-D4, 98%)	(CAS No) 18806-29-6	4.44	Not classified

Full text of R-, H- and EUH-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Assure fresh air breathing. Allow the victim to rest.
- First-aid measures after skin contact : Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: When symptoms occur: rinse immediately with plenty of water. Get medical advice/attention. Specific treatment (see First aid measures on this label).
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after skin contact : Causes skin irritation.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

Hygiene measures : Wash Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store at room temperature away from light and moisture.

Incompatible products : Strong bases. strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure. Gloves. Self-contained breathing apparatus. Protective clothing. Protective goggles.



Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Wear approved mask.

Other information : When using, do not eat, drink or smoke.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Color : Colorless.

Odor : characteristic.

Odor threshold : No data available

pH : No data available

Relative evaporation rate (butyl acetate=1) : No data available

Melting point : No data available

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

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Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

See storage and expiration date on CoA.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

L-ASPARTIC ACID (2,3,3-D3, 98%) (3842-25-9)	
LD50 oral rat	5000 mg/kg
LD50 dermal rabbit	5000 mg/kg
ATE (oral)	500.000 mg/kg body weight
ATE (dermal)	1100.000 mg/kg body weight
L-TYROSINE (RING-13C6, 99%) (201595-63-3)	
	LD50 Intraperitoneal - mouse - > 1,450 mg/kg
L-GLUTAMIC ACID (2,4,4-D3, 97-98%) (56-86-0 (Unlabeled))	
LD50 oral rat	> 5110 mg/kg male and female
LD50 dermal rat	> 2000 mg/kg male and female
L-VALINE (D8, 98%) (35045-72-8)	
LD50 oral rat	> 2000 mg/kg Rat female - (OECD Test Guideline 423)
LD50 dermal rat	5390 mg/kg
LC50 inhalation rat (mg/l)	> 5260 mg/m ³ (OECD Test Guideline 403)
L-LEUCINE (5,5,5-D3, 99%) (87828-86-2)	
LD50 oral rat	> 16000 mg/kg male and female
LD50 Intraperitoneal - Rat - 5,379 mg/kg	Lungs, Thorax, or Respiration
Remarks	
GLYCINE (2-13C, 99%; 15N, 98%+) (91795-59-4)	
LD50 oral rat	7930 mg/kg
ATE (oral)	7930.000 mg/kg body weight

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L-ARGININE:HCL (5-13C, 99%; 4,4,5,5-D4, 95%) (1119-34-2 (Unlabeled))	
LD50 oral rat	12400 mg/kg
ATE (oral)	12000.000 mg/kg body weight
L-ORNITHINE:HCL (5,5-D2, 98%) (3184-13-2 (Unlabeled))	
LD50 oral rat	10000 mg/kg Remarks: Behavioral: Altered sleep time (including change in righting reflex). Behavioral: Ataxia. Lungs, Thorax, or Respiration: Dyspnea.
ATE (oral)	10000.000 mg/kg body weight
L-METHIONINE (METHYL-D3, 98%) (13010-53-2)	
LD50 oral rat	36000 mg/kg Remarks: Behavioral: Change in motor activity (specific assay). Skin and Appendages: Allergic (Multiple organ involvement) Anaphylaxis.

Skin corrosion/irritation	: Causes skin irritation. Causes skin irritation
Serious eye damage/irritation	: Causes serious eye irritation. Based on available data, the classification criteria are not met
Respiratory or skin sensitization	: Not classified Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (repeated exposure)	: Not classified Based on available data, the classification criteria are not met

L-LEUCINE (5,5,5-D3, 99%) (87828-86-2)	
NOAEL (oral,rat,90 days)	3840 mg/kg bodyweight/day female
Aspiration hazard	: Not classified Based on available data, the classification criteria are not met
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/injuries after skin contact	: Causes skin irritation.

SECTION 12: Ecological information

12.1. Toxicity

L-GLUTAMIC ACID (2,4,4-D3, 97-98%) (56-86-0 (Unlabeled))	
LC50 fish 1	> 100 mg/l Cyprinus carpio (Carp) - 96 h - static test
EC50 Daphnia 1	> 100 g/l Daphnia magna (Water flea) - 48 h
EC50 other aquatic organisms 1	> 31 mg/l Pseudokirchneriella subcapitata (green algae) - 72 h - static test
L-VALINE (D8, 98%) (35045-72-8)	
LC50 fish 1	> 10 g/l Danio rerio (zebra fish) - (OECD Test Guideline 203) - 96 h
EC50 Daphnia 1	> 10 g/l Daphnia magna (Water flea) - (OECD Test Guideline 202) - 24 h

12.2. Persistence and degradability

LABELED AMINO ACID STANDARDS SET A	
Persistence and degradability	Not established.
L-ALANINE (2,3,3,3-D4, 98%) (18806-29-6)	
Persistence and degradability	Not available.
L-ASPARTIC ACID (2,3,3-D3, 98%) (3842-25-9)	
Persistence and degradability	Not available.
L-PHENYLALANINE (RING-13C6, 99%) (63-91-2 (Unlabeled))	
Persistence and degradability	Not available.

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L-TYROSINE (RING-13C6, 99%) (201595-63-3)	
Persistence and degradability	Not available.
L-GLUTAMIC ACID (2,4,4-D3, 97-98%) (56-86-0 (Unlabeled))	
Persistence and degradability	Aerobic - exposure time: 28 d.
Biodegradation	97 % Readily biodegradable
L-CITRULLINE (5,5-D2, 98%) (372-75-8 (Unlabeled))	
Persistence and degradability	Not available.
L-VALINE (D8, 98%) (35045-72-8)	
Persistence and degradability	Aerobic - exposure time: 28 d.
L-LEUCINE (5,5,5-D3, 99%) (87828-86-2)	
Persistence and degradability	Not available.
GLYCINE (2-13C, 99%; 15N, 98%+) (91795-59-4)	
Persistence and degradability	Not available.
L-ARGININE:HCL (5-13C, 99%; 4,4,5,5-D4, 95%) (1119-34-2 (Unlabeled))	
Persistence and degradability	Not available.
L-ORNITHINE:HCL (5,5-D2, 98%) (3184-13-2 (Unlabeled))	
Persistence and degradability	Not available.
L-METHIONINE (METHYL-D3, 98%) (13010-53-2)	
Persistence and degradability	Not available.
12.3. Bioaccumulative potential	
LABELED AMINO ACID STANDARDS SET A	
Bioaccumulative potential	Not established.
L-ALANINE (2,3,3,3-D4, 98%) (18806-29-6)	
Bioaccumulative potential	Not available.
L-ASPARTIC ACID (2,3,3-D3, 98%) (3842-25-9)	
Bioaccumulative potential	Not available.
L-PHENYLALANINE (RING-13C6, 99%) (63-91-2 (Unlabeled))	
Bioaccumulative potential	Not available.
L-TYROSINE (RING-13C6, 99%) (201595-63-3)	
Log Pow	-2.26 at 25 °C (77 °F)
Bioaccumulative potential	Not available.
L-GLUTAMIC ACID (2,4,4-D3, 97-98%) (56-86-0 (Unlabeled))	
Log Pow	< -4 at 20 °C (68 °F)
Bioaccumulative potential	Not available.
L-CITRULLINE (5,5-D2, 98%) (372-75-8 (Unlabeled))	
Bioaccumulative potential	Not available.
L-VALINE (D8, 98%) (35045-72-8)	
Log Pow	-2.259 at 20 °C (68 °F)
Bioaccumulative potential	Not available.
L-LEUCINE (5,5,5-D3, 99%) (87828-86-2)	
Bioaccumulative potential	Not available.
GLYCINE (2-13C, 99%; 15N, 98%+) (91795-59-4)	
Bioaccumulative potential	Not available.
L-ARGININE:HCL (5-13C, 99%; 4,4,5,5-D4, 95%) (1119-34-2 (Unlabeled))	
Bioaccumulative potential	Not available.
L-ORNITHINE:HCL (5,5-D2, 98%) (3184-13-2 (Unlabeled))	
Bioaccumulative potential	Not available.
L-METHIONINE (METHYL-D3, 98%) (13010-53-2)	
Bioaccumulative potential	Not available.

12.4. Mobility in soil

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L-ALANINE (2,3,3,3-D4, 98%) (18806-29-6)	
Ecology - soil	Not available.
L-ASPARTIC ACID (2,3,3-D3, 98%) (3842-25-9)	
Ecology - soil	Not available.
L-PHENYLALANINE (RING-13C6, 99%) (63-91-2 (Unlabeled))	
Ecology - soil	Not available.
L-TYROSINE (RING-13C6, 99%) (201595-63-3)	
Ecology - soil	Not available.
L-GLUTAMIC ACID (2,4,4-D3, 97-98%) (56-86-0 (Unlabeled))	
Ecology - soil	Not available.
L-CITRULLINE (5,5-D2, 98%) (372-75-8 (Unlabeled))	
Ecology - soil	Not available.
L-VALINE (D8, 98%) (35045-72-8)	
Ecology - soil	Not available.
L-LEUCINE (5,5,5-D3, 99%) (87828-86-2)	
Ecology - soil	Not available.
GLYCINE (2-13C, 99%; 15N, 98%+) (91795-59-4)	
Ecology - soil	Not available.
L-ARGININE:HCL (5-13C, 99%; 4,4,5,5-D4, 95%) (1119-34-2 (Unlabeled))	
Ecology - soil	Not available.
L-ORNITHINE:HCL (5,5-D2, 98%) (3184-13-2 (Unlabeled))	
Ecology - soil	Not available.
L-METHIONINE (METHYL-D3, 98%) (13010-53-2)	
Ecology - soil	Not available.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Additional information

Other information : No supplementary information available.
Special transport precautions : Not dangerous goods.

Overland transport

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

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14.4. Environmental hazards

Other information : No supplementary information available.

14.5. Special precautions for user

Special transport precautions : Not dangerous goods.

14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

L-TYROSINE (RING-13C6, 99%) (201595-63-3)

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
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L-ARGININE:HCL (5-13C, 99%; 4,4,5,5-D4, 95%) (1119-34-2 (Unlabeled))

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
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L-ORNITHINE:HCL (5,5-D2, 98%) (3184-13-2 (Unlabeled))

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
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15.2. International regulations

CANADA

No additional information available

15.2.1. National regulations

No additional information available

15.3. US State regulations

L-ALANINE (2,3,3,3-D4, 98%) (18806-29-6)

U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - New Jersey - Right to Know Hazardous Substance List
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

L-ASPARTIC ACID (2,3,3-D3, 98%) (3842-25-9)

U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - New Jersey - Right to Know Hazardous Substance List
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

L-TYROSINE (RING-13C6, 99%) (201595-63-3)

U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - New Jersey - Right to Know Hazardous Substance List
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

L-ARGININE:HCL (5-13C, 99%; 4,4,5,5-D4, 95%) (1119-34-2 (Unlabeled))

U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - New Jersey - Right to Know Hazardous Substance List
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

L-ORNITHINE:HCL (5,5-D2, 98%) (3184-13-2 (Unlabeled))

U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - New Jersey - Right to Know Hazardous Substance List
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

LABELED AMINO ACID STANDARDS SET A NSK-A-CE

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of R-, H- and EUH-phrases::

Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Skin Irrit. 2	skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H302	Harmful if swallowed
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
R21/22	Harmful in contact with skin and if swallowed
R36	Irritating to eyes
R36/37/38	Irritating to eyes, respiratory system and skin
R36/38	Irritating to eyes and skin
Xi	Irritant
Xn	Harmful

CIL Multi-Solvent Mixture SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product