

# METABOLOMICS AMINO ACID MIX UNLABELED **STANDARD**

## 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: 03/06/2015

Revision date:

Version: 1.0

## MSK-A2-US-S

1.1.	Product identifier			
Product		: Mixtures		
Product		: METABOLOMICS AMINO ACID MIX UNLABELED STANDARD		
Product		: MSK-A2-US-S		
1.2.	Relevant identified uses of the su	ubstance or mixture and uses advised against		
1.2.1.	Relevant identified uses			
	al/Professional use spec	: For professional use only.		
1.2.2.	Uses advised against			
No add	tional information available			
1.3.	Details of the supplier of the safe	ity data sheet		
50 Fron	dge Isotope Laboratories, Inc. tage Road r, MA 01810			
	-800-322-1174 Int: 1-978-749-8000 @isotope.com www.isotope.com			
	Emergency telephone number			
-	ency numbers:			
	ec: 1-800-424-9300 (24 hours) ional: 1-703-741-5970 (24 hours)			
SECT	ION 2: Hazards identification	h in the second se		
2.1.	Classification of the substance o	r mixture		
Skin Irri	Classification according to Regulation (EC) No. 1272/2008 [CLP] Skin Irrit. 2 H315 Eye Irrit. 2 H319			
Skin Se	ns. 1 H317			
Full text	t of H-phrases: see section 16			
Classif Xi; R36	ication according to Directive 67/54 /37/38	8/EEC or 1999/45/EC		
Full text	t of R-phrases: see section 16			
Classif	ication (GHS-US)			
Skin Irri Eye Irrit	t. 2 H315 2A H319 .ns. 1 H317			
	e physicochemical, human health a itional information available	Ind environmental effects		
2.2.	Label elements			
	ng according to Regulation (EC) No. pictograms (CLP)	1272/2008 [CLP]		

Signal word (CLP) 10/06/2015

: Warning

GHS07

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

Hazardous ingredients	: L-LYSINE:2HCL UNLABELED
Hazard statements (CLP)	: H315 - Causes skin irritation H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation
Precautionary statements (CLP)	<ul> <li>P261 - Avoid breathing dust, mist</li> <li>P264 - Wash both hands thoroughly after handling</li> <li>P272 - Contaminated work clothing should not be allowed out of the workplace</li> <li>P280 - Wear eye protection, face protection, protective clothing, protective gloves</li> <li>P302+P352 - IF ON SKIN: Wash with plenty of water/</li> <li>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing</li> <li>P332+P313 - If skin irritation occurs: Get medical advice/attention</li> <li>P333+P313 - If skin irritation or rash occurs: Get medical advice/attention</li> </ul>
GHS-US labeling	
Hazard pictograms (GHS-US)	

	GHS07
Signal word (GHS-US)	: Warning
Hazard statements (GHS-US)	: H315 - Causes skin irritation H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation
Precautionary statements (GHS-US)	<ul> <li>P261 - Avoid breathing dust, mist</li> <li>P264 - Wash Both hands thoroughly after handling</li> <li>P272 - Contaminated work clothing should not be allowed out of the workplace</li> <li>P280 - Wear eye protection, face protection, protective clothing, protective gloves</li> <li>P302+P352 - IF ON SKIN: Wash with plenty of soap and water</li> <li>P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact</li> <li>lenses, if present and easy to do. Continue rinsing</li> <li>P321 - Specific treatment (see Hazard pictograms (CLP) on this label)</li> <li>P332+P313 - If skin irritation occurs: Get medical advice/attention</li> <li>P333+P313 - If skin irritation or rash occurs: Get medical advice/attention</li> <li>P362 - Take off contaminated clothing and wash before reuse</li> <li>P362+P364 - Take off contaminated clothing and wash it before reuse</li> <li>P501 - Dispose of contents/container to Comply with applicable regulations.</li> </ul>

#### 2.3. Other hazards

No additional information available

1. Substances			
Not applicable			
2. Mixtures			
Name	Product identifier	%	Classification according to Directive 67/548/EEC
L-HISTIDINE:HCL:H2O UNLABELED	(CAS No) 71-00-1 (EC no) 200-745-3	8.938	Not classified
L-LYSINE:2HCL UNLABELED	(CAS No) 657-26-1 (Unlabeled) (EC no) 211-518-3	7.787	Not classified
TYROSINE UNLABELED	(CAS No) 60-18-4 (Unlabeled) (EC no) 200-460-4	7.726	Xi; R36/37/38
-ARGININE:HCL UNLABELED	(CAS No) 1119-34-2 (EC no) 214-275-1	7.427	Xi; R36/38
-PHENYLALANINE UNLABELED	(CAS No) 63-91-2 (Unlabeled) (EC no) 200-568-1	7.044	Not classified
METHIONINE UNLABELED	(CAS No) 63-68-3 (Unlabeled)	6.361	Not classified
-GLUTAMIC ACID UNLABELED	(CAS No) 56-86-0 (unlabeled) (EC no) 200-293-7	6.273	Not classified
L-ASPARTIC ACID UNLABELED	(CAS No) 56-84-8 (EC no) 200-291-6	5.676	Not classified
-LEUCINE UNLABELED	(CAS No) 61-90-5 (Unlabeled) (EC no) 200-522-0	5.592	Not classified

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

Name	Product identifier	%	Classification according to Directive 67/548/EEC
L-ISOLEUCINE UNLABELED	(CAS No) 73-32-5 (unlabeled) (EC no) 200-798-2	5.592	Not classified
L-CYSTINE UNLABELED	(CAS No) 56-89-3 (EC no) 200-296-3	5.123	Not classified
L-THREONINE UNLABELED	(CAS No) 72-19-5 (EC no) 200-774-1	5.079	Not classified
L-VALINE UNLABELED	(CAS No) 72-18-4 (EC no) 200-773-6	4.995	Not classified
L-PROLINE UNLABELED	(CAS No) 147-85-3 (EC no) 205-702-2	4.908	Not classified
DL-SERINE UNLABELED	(CAS No) 302-84-1 (unlabeled) (EC no) 206-130-6	4.48	Not classified
L-ALANINE UNLABELED	(CAS No) 56-41-7 (EC no) 200-273-8	3.798	Not classified
GLYCINE UNLABELED	(CAS No) 56-40-6	3.201	Not classified
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
L-HISTIDINE:HCL:H2O UNLABELED	(CAS No) 71-00-1 (EC no) 200-745-3	8.938	Not classified
L-LYSINE:2HCL UNLABELED	(CAS No) 657-26-1 (Unlabeled) (EC no) 211-518-3	7.787	Skin Sens. 1B, H317
L-TYROSINE UNLABELED	(CAS No) 60-18-4 (Unlabeled) (EC no) 200-460-4	7.726	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
L-ARGININE:HCL UNLABELED	(CAS No) 1119-34-2 (EC no) 214-275-1	7.427	Skin Irrit. 2, H315 Eye Irrit. 2, H319
L-PHENYLALANINE UNLABELED	(CAS No) 63-91-2 (Unlabeled) (EC no) 200-568-1	7.044	Not classified
L-METHIONINE UNLABELED	(CAS No) 63-68-3 (Unlabeled)	6.361	Not classified
L-GLUTAMIC ACID UNLABELED	(CAS No) 56-86-0 (unlabeled) (EC no) 200-293-7	6.273	Not classified
L-ASPARTIC ACID UNLABELED	(CAS No) 56-84-8 (EC no) 200-291-6	5.676	Not classified
L-LEUCINE UNLABELED	(CAS No) 61-90-5 (Unlabeled) (EC no) 200-522-0	5.592	Not classified
L-ISOLEUCINE UNLABELED	(CAS No) 73-32-5 (unlabeled) (EC no) 200-798-2	5.592	Not classified
L-CYSTINE UNLABELED	(CAS No) 56-89-3 (EC no) 200-296-3	5.123	Not classified
L-THREONINE UNLABELED	(CAS No) 72-19-5 (EC no) 200-774-1	5.079	Not classified
L-VALINE UNLABELED	(CAS No) 72-18-4 (EC no) 200-773-6	4.995	Not classified
L-PROLINE UNLABELED	(CAS No) 147-85-3 (EC no) 205-702-2	4.908	Not classified
DL-SERINE UNLABELED	(CAS No) 302-84-1 (unlabeled) (EC no) 206-130-6	4.48	Not classified
L-ALANINE UNLABELED	(CAS No) 56-41-7 (EC no) 200-273-8	3.798	Not classified
GLYCINE UNLABELED	(CAS No) 56-40-6	3.201	Not classified
Name	Product identifier	%	Classification (GHS-US)
L-LYSINE:2HCL UNLABELED	(CAS No) 657-26-1 (Unlabeled)	7.787	Skin Sens. 1B, H317
L-TYROSINE UNLABELED	(CAS No) 60-18-4 (Unlabeled)	7.726	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
L-ARGININE:HCL UNLABELED	(CAS No) 1119-34-2	7.427	Skin Irrit. 2, H315 Eye Irrit. 2A, H319

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

4.1. Description of first aid measures	
First-aid measures after inhalation : If breathed in, move person into fresh air. If not brea	thing, give artificial respiration.
First-aid measures after skin contact : Wash with plenty of soap and water. Wash contamin	ated clothing before reuse.
First-aid measures after eye contact : Flush eyes with water as a precaution.	
First-aid measures after ingestion : Never give anything by mouth to an unconscious per	son. Rinse mouth with water.

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

4.2. Most important symptoms and effect	s, both acute and delayed
Symptoms/injuries after inhalation	: May cause an allergic skin reaction.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: May cause eye irritation.
Symptoms/injuries after ingestion	: May be harmful if swallowed and enters airways.
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	: Alcohol resistant foam. Dry chemical. Carbon dioxide. Water spray.
5.2. Special hazards arising from the sub	
Reactivity	: Not available.
5.3. Advice for firefighters	
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
SECTION 6: Accidental release meas	ures
6.1. Personal precautions, protective equ	
General measures	: Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure
	adequate ventilation.
6.1.1. For non-emergency personnel	
No additional information available	
6.1.2. For emergency responders	
No additional information available	
6.2. Environmental precautions	
None.	
6.3. Methods and material for containme	nt and cleaning up
Methods for cleaning up	: Sweep up and shovel. Keep in suitable, closed containers for disposal.
6.4. Reference to other sections	
No additional information available	
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Additional hazards when processed	: Further processing of solid materials may result in the formation of combustible dusts. The
Additional nazarus when processed	potential for combustible dust formation should be taken into consideration before additional processing occurs.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety practice. Wash hands before
	breaks and at the end of workday.
7.2. Conditions for safe storage, includin	g any incompatibilities
Technical measures	: Keep container tightly closed in a dry and well-ventilated place.
Storage conditions	: Store refrigerated (-5 C to 5 C). Protect from light.
7.3. Specific end use(s)	
No additional information available	
SECTION 8: Exposure controls/perso	nal protection
8.1. Control parameters	
No additional information available	
8.2. Exposure controls	
Personal protective equipment	: Safety glasses. Gloves. Respiratory protection of the dependent type. Protective clothing.
Hand protection	: Wear suitable protective clothing and gloves.
Eye protection	: Chemical goggles or safety glasses.

## 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

Skin and body protection: Wear suitable protective clothing.Respiratory protection: When appropriate, use NIOSH/CEN approved respirator.

<b>SECTION 9: Physical and chemical</b>	properties
9.1. Information on basic physical and	
Physical state	: Liquid
Color	: No data available
Odor	: No data available
Odor threshold	: No data available
рН	: 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
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
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				
Not available.				
10.2. Chemical stability				
Stable if stored under recommended conditions.				
10.3. Possibility of hazardous reactions				
Not established.				
10.4. Conditions to avoid				
Not available.				
10.5. Incompatible materials				
Strong oxidizing agents.	Strong oxidizing agents.			
10.6. Hazardous decomposition products				
No data available.				
<b>SECTION 11: Toxicological informatio</b>	n			
11.1. Information on toxicological effects				
Acute toxicity :	Not classified			
GLYCINE UNLABELED (56-40-6)	GLYCINE UNLABELED (56-40-6)			
LD50 oral rat	7930 mg/kg			
ATE (oral)	7930.000 mg/kg body weight			
L-ASPARTIC ACID UNLABELED (56-84-8)				
LD50 oral rat	5000 mg/kg			
LD50 dermal rabbit	5000 mg/kg			
10/06/2015	EN (English US) 5/10			

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

L-ASPARTIC ACID UNLABELED (56-84-8)				
ATE (oral)	5000.000 mg/kg body weight			
ATE (dermal)	5000.000 mg/kg body weight			
L-GLUTAMIC ACID UNLABELED (56-86-0 (unlabeled))				
LD50 oral rat	> 30000 mg/kg			
L-METHIONINE UNLABELED (63-68-3 (Unlab	L-METHIONINE UNLABELED (63-68-3 (Unlabeled))			
LD50 oral rat	36000 mg/kg			
ATE (oral)	36000.000 mg/kg body weight			
L-ARGININE:HCL UNLABELED (1119-34-2)				
LD50 oral rat	12000 mg/kg			
ATE (oral)	12000.000 mg/kg body weight			
L-HISTIDINE:HCL:H2O UNLABELED (71-00-1	)			
LD50 oral rat	15000 mg/kg			
ATE (oral)	15000.000 mg/kg body weight			
Skin corrosion/irritation	: Causes skin irritation.			
Serious eye damage/irritation	: Causes serious eye irritation.			
Respiratory or skin sensitization	: May cause an allergic skin reaction.			
Germ cell mutagenicity	: Not classified			
Carcinogenicity	: Not classified			
Reproductive toxicity	: Not classified			
Specific target organ toxicity (single exposure)	: Not classified			
Specific target organ toxicity (repeated exposure)	: Not classified			
Aspiration hazard	: Not classified			
Symptoms/injuries after inhalation	: May cause an allergic skin reaction.			
Symptoms/injuries after skin contact	: Causes skin irritation.			
Symptoms/injuries after eye contact	: May cause eye irritation.			
Symptoms/injuries after ingestion	: May be harmful if swallowed and enters airways.			

## **SECTION 12: Ecological information**

Toxicity 12.1.

No additional information available

12.2. Persistence and degradability			
GLYCINE UNLABELED (56-40-6)			
Persistence and degradability	Not available.		
L-ALANINE UNLABELED (56-41-7)			
Persistence and degradability	Not available.		
L-ASPARTIC ACID UNLABELED (56-84-8)			
Persistence and degradability	Not available.		
L-GLUTAMIC ACID UNLABELED (56-86-0 (unl	abeled))		
Persistence and degradability	Not available.		
L-VALINE UNLABELED (72-18-4)			
Persistence and degradability	Not available.		
L-LEUCINE UNLABELED (61-90-5 (Unlabeled))			
Persistence and degradability	Not available.		
L-PHENYLALANINE UNLABELED (63-91-2 (Unlabeled))			
Persistence and degradability	Not available.		
L-METHIONINE UNLABELED (63-68-3 (Unlabeled))			
Persistence and degradability	Not available.		

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

L-ARGININE:HCL UNLABELED (1119-34-2)		
Persistence and degradability	Not available.	
L-TYROSINE UNLABELED (60-18-4 (Unlabele	d))	
Persistence and degradability	Not available.	
,,		
L-LYSINE:2HCL UNLABELED (657-26-1 (Unla	"	
Persistence and degradability	Not available.	
L-ISOLEUCINE UNLABELED (73-32-5 (unlabe	led))	
Persistence and degradability	Not available.	
L-PROLINE UNLABELED (147-85-3)	·	
Persistence and degradability	Not available.	
• •		
DL-SERINE UNLABELED (302-84-1 (unlabeled		
Persistence and degradability	Not available.	
L-THREONINE UNLABELED (72-19-5)		
Persistence and degradability	Not available.	
12.3. Bioaccumulative potential		
GLYCINE UNLABELED (56-40-6)		
Bioaccumulative potential	Not available.	
L-ALANINE UNLABELED (56-41-7)		
Bioaccumulative potential	Not available.	
· ·		
L-ASPARTIC ACID UNLABELED (56-84-8)	Not available.	
Bioaccumulative potential		
L-GLUTAMIC ACID UNLABELED (56-86-0 (un		
Bioaccumulative potential	Not available.	
L-VALINE UNLABELED (72-18-4)		
Bioaccumulative potential	Not available.	
L-LEUCINE UNLABELED (61-90-5 (Unlabeled)		
Bioaccumulative potential	Not available.	
· ·		
L-PHENYLALANINE UNLABELED (63-91-2 (U	"	
Bioaccumulative potential	Not available.	
L-METHIONINE UNLABELED (63-68-3 (Unlabe	eld))	
Bioaccumulative potential	Not available.	
L-ARGININE:HCL UNLABELED (1119-34-2)		
Bioaccumulative potential	Not available.	
·		
L-TYROSINE UNLABELED (60-18-4 (Unlabele	"	
Log Pow	-2.26 at 25 °C (77 °F)	
Bioaccumulative potential	Not available.	
L-LYSINE:2HCL UNLABELED (657-26-1 (Unlabeled))		
Bioaccumulative potential	Not available.	
L-ISOLEUCINE UNLABELED (73-32-5 (unlabe	led))	
Bioaccumulative potential	Not available.	
L-PROLINE UNLABELED (147-85-3)	Net available	
Bioaccumulative potential	Not available.	
DL-SERINE UNLABELED (302-84-1 (unlabeled		
Bioaccumulative potential	Not available.	
L-THREONINE UNLABELED (72-19-5)		
Log Pow	-1.43	
Bioaccumulative potential	Not available.	
•		
12.4. Mobility in soil		

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

Ecology - soil	Not available.
L-ALANINE UNLABELED (56-41-7)	
Ecology - soil	Not available.
L-ASPARTIC ACID UNLABELED (56-84-8)	
Ecology - soil	Not available.
L-GLUTAMIC ACID UNLABELED (56-86-0	(unlabeled))
Ecology - soil	Not available.
L-VALINE UNLABELED (72-18-4)	
Ecology - soil	Not available.
L-LEUCINE UNLABELED (61-90-5 (Unlabe	Nod))
Ecology - soil	Not available.
L-PHENYLALANINE UNLABELED (63-91-2 Ecology - soil	Not available.
L-METHIONINE UNLABELED (63-68-3 (Un Ecology - soil	labeled)) Not available.
L-ARGININE:HCL UNLABELED (1119-34-2	
Ecology - soil	Not available.
L-TYROSINE UNLABELED (60-18-4 (Unla	
Ecology - soil	Not available.
L-LYSINE:2HCL UNLABELED (657-26-1 (U	Jnlabeled))
Ecology - soil	Not available.
L-ISOLEUCINE UNLABELED (73-32-5 (un	labeled))
Ecology - soil	Not available.
L-PROLINE UNLABELED (147-85-3)	
Ecology - soil	Not available.
DL-SERINE UNLABELED (302-84-1 (unlab	veled))
Ecology - soil	Not available.
L-THREONINE UNLABELED (72-19-5)	
Ecology - soil	Not available.
2.5. Results of PBT and vPvB assess	nent
lo additional information available	nent
2.6. Other adverse effects	
No additional information available	
SECTION 13: Disposal considerati	ons
3.1. Waste treatment methods	
3.1.         Waste treatment methods           Vaste treatment methods	: Offer surplus and non-recyclable solutions to a licensed disposal company.
Waste treatment methods           Vaste treatment methods	: Offer surplus and non-recyclable solutions to a licensed disposal company.
3.1. Waste treatment methods Vaste treatment methods Vaste disposal recommendations	<ul> <li>Offer surplus and non-recyclable solutions to a licensed disposal company.</li> <li>Dispose in a safe manner in accordance with local/national regulations. Dispose of as unuser product.</li> </ul>
3.1.         Waste treatment methods           Vaste treatment methods         Vaste disposal recommendations           SECTION 14: Transport information         Description	<ul> <li>Offer surplus and non-recyclable solutions to a licensed disposal company.</li> <li>Dispose in a safe manner in accordance with local/national regulations. Dispose of as unuser product.</li> </ul>
3.1.       Waste treatment methods         Vaste treatment methods       Vaste disposal recommendations         SECTION 14: Transport information       Description         n accordance with ADR / RID / ADNR / IMDG       Description	<ul> <li>Offer surplus and non-recyclable solutions to a licensed disposal company.</li> <li>Dispose in a safe manner in accordance with local/national regulations. Dispose of as unused product.</li> </ul>
3.1.       Waste treatment methods         Vaste treatment methods       Vaste disposal recommendations         SECTION 14: Transport information       In accordance with ADR / RID / ADNR / IMDG         4.1.       UN number	<ul> <li>Offer surplus and non-recyclable solutions to a licensed disposal company.</li> <li>Dispose in a safe manner in accordance with local/national regulations. Dispose of as unused product.</li> </ul>
3.1.       Waste treatment methods         Vaste treatment methods       Vaste disposal recommendations         SECTION 14: Transport information       Description         n accordance with ADR / RID / ADNR / IMDG       Description	<ul> <li>Offer surplus and non-recyclable solutions to a licensed disposal company.</li> <li>Dispose in a safe manner in accordance with local/national regulations. Dispose of as unused product.</li> </ul>
3.1. Waste treatment methods         Vaste treatment methods         Vaste disposal recommendations         SECTION 14: Transport information         n accordance with ADR / RID / ADNR / IMDG         4.1. UN number         Not applicable         4.2. UN proper shipping name	<ul> <li>Offer surplus and non-recyclable solutions to a licensed disposal company.</li> <li>Dispose in a safe manner in accordance with local/national regulations. Dispose of as unused product.</li> </ul>
3.1. Waste treatment methods         Vaste treatment methods         Vaste disposal recommendations         SECTION 14: Transport information         n accordance with ADR / RID / ADNR / IMDG         4.1. UN number         Not applicable         4.2. UN proper shipping name	<ul> <li>Offer surplus and non-recyclable solutions to a licensed disposal company.</li> <li>Dispose in a safe manner in accordance with local/national regulations. Dispose of as unuser product.</li> </ul>
3.1.       Waste treatment methods         Vaste treatment methods       Vaste disposal recommendations         SECTION 14: Transport information       In accordance with ADR / RID / ADNR / IMDG         4.1.       UN number         Not applicable       Image: Content of the second se	<ul> <li>Offer surplus and non-recyclable solutions to a licensed disposal company.</li> <li>Dispose in a safe manner in accordance with local/national regulations. Dispose of as unused product.</li> </ul>
<ul> <li>3.1. Waste treatment methods</li> <li>Waste treatment methods</li> <li>Waste disposal recommendations</li> <li>SECTION 14: Transport information</li> <li>Contact and the second secon</li></ul>	<ul> <li>Offer surplus and non-recyclable solutions to a licensed disposal company.</li> <li>Dispose in a safe manner in accordance with local/national regulations. Dispose of as unused product.</li> </ul>
<ul> <li>3.1. Waste treatment methods</li> <li>Vaste treatment methods</li> <li>Vaste disposal recommendations</li> <li>SECTION 14: Transport information</li> <li>n accordance with ADR / RID / ADNR / IMDG</li> <li>4.1. UN number</li> <li>Not applicable</li> <li>4.2. UN proper shipping name</li> <li>Not applicable</li> </ul>	<ul> <li>Offer surplus and non-recyclable solutions to a licensed disposal company.</li> <li>Dispose in a safe manner in accordance with local/national regulations. Dispose of as unused product.</li> </ul>
<ul> <li>3.1. Waste treatment methods</li> <li>Waste treatment methods</li> <li>Waste disposal recommendations</li> <li>SECTION 14: Transport information</li> <li>Contact and the second secon</li></ul>	<ul> <li>Offer surplus and non-recyclable solutions to a licensed disposal company.</li> <li>Dispose in a safe manner in accordance with local/national regulations. Dispose of as unused product.</li> </ul>

## 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

#### **Overland transport**

No additional information available

#### Transport by sea

No additional information available

## Air transport

No additional information available

14.4. Environmental hazards		
Other information	: No supplementary information available.	
14.5. Special precautions for user		
Special transport precautions	: DOT/IMDG/IATA: 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-ARGININE:HCL UNLABELED (1119-34-2)				
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard			
L-TYROSINE UNLABELED (60-18-4 (Unlabeled))				
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard			

#### 15.2. International regulations

#### CANADA

No additional information available

#### 15.2.1. **National regulations**

No additional information available

15.3. US State regulations

## L-ARGININE:HCL UNLABELED (1119-34-2)

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 UNLABELED (60-18-4 (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-LYSINE:2HCL UNLABELED (657-26-1 (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.

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

Other information

: This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

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

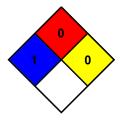
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Skin Irrit. 2	skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
Skin Sens. 1B	Skin sensitization Category 1B
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H335	May cause respiratory irritation
R36/37/38	Irritating to eyes, respiratory system and skin
R36/38	Irritating to eyes and skin
Xi	Irritant

#### NFPA health hazard

NFPA fire hazard NFPA reactivity

- : 1 Exposure could cause irritation but only minor residual injury even if no treatment is given.
- : 0 Materials that will not burn.
- 0 Normally stable, even under fire exposure conditions, and are not reactive with water.

Hazard - Irritation or minor reversible injury possible



#### **HMIS III Rating**

Health	: 1 Slight Hazard - I
Flammability	: 0 Minimal Hazard
Physical	: 0 Minimal Hazard

**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