



Mouse Express L-LYSINE (13C6, 99%) MOUSE FEED

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 14/03/2012

Revision date: 17/08/2022

Supersedes: 18/08/2016

Version: 5.0

MF-LYS-C

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

1.1. Product identifier

Product form : Mixtures
Product name : Mouse Express L-LYSINE (13C6, 99%) MOUSE FEED
Product code : MF-LYS-C

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]

Not classified

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

GHS-US classification

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

No labeling applicable

GHS-US labeling

No labeling applicable

2.3. Other hazards

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

Mouse Express L-LYSINE (13C6, 99%) MOUSE FEED

MF-LYS-C

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

3.2. Mixtures

Name	Product identifier	%	Classification according to Directive 67/548/EEC
SUCROSE UNLABELED	(CAS-No.) 57-50-1 (EC-No.) 200-334-9	35.08	Not classified
CORN STARCH UNLABELED	(CAS-No.) 9005-25-8 (EC-No.) 232-679-6 (EC Index-No.)	15	Not classified
MALTODEXTRIN UNLABELED	(CAS-No.) 9050-36-6 (EC-No.) (EC Index-No.)	15	Not classified
SOYBEAN OIL UNLABELED	(CAS-No.) 8001-22-7 (EC-No.) 232-274-4	8	Not classified
L-GLUTAMIC ACID UNLABELED	(CAS-No.) 56-86-0 (EC-No.) 200-293-7	4	Not classified
MINERAL MIX, AIN-93M-MX (94049) UNLABELED	(CAS-No.) (EC-No.) (EC Index-No.)	3.5	Not classified
CELLULOSE UNLABELED	(CAS-No.) 9004-34-6 (EC-No.) 232-674-9	3	Not classified
GLYCINE UNLABELED	(CAS-No.) 56-40-6 (EC-No.) 200-272-2	2.33	Not classified
VITAMIN MIX, AIN-93-VX (94047) UNLABELED	(CAS-No.) (EC-No.) (EC Index-No.)	1.95	Not classified
L-ARGININE:HCL UNLABELED	(CAS-No.) 1119-34-2 (EC-No.) 214-275-1	1.21	Xi; R36/38
L-LYSINE:2HCL (13C6, 99%)	(CAS-No.) 657-26-1 (Unlabeled) (EC-No.) 211-518-3 (Unlabeled)	1.2	R43
L-LEUCINE UNLABELED	(CAS-No.) 61-90-5 (EC-No.) 200-522-0	1.11	Not classified
L-VALINE UNLABELED	(CAS-No.) 72-18-4 (EC-No.) 200-773-6	0.82	Not classified
L-THREONINE UNLABELED	(CAS-No.) 72-19-5 (EC-No.) 200-774-1	0.82	Not classified
L-ISOLEUCINE UNLABELED	(CAS-No.) 73-32-5 (EC-No.) 200-798-2	0.82	Not classified
L-METHIONINE UNLABELED	(CAS-No.) 63-68-3 (EC-No.) 200-562-9	0.82	Not classified
CALCIUM PHOSPHATE MONOBASIC MONOHYDRATE UNLABELED	(CAS-No.) 10031-30-8 (EC-No.) 231-837-1 (EC Index-No.)	0.82	Xi; R36/37/38
L-PHENYLALANINE UNLABELED	(CAS-No.) 63-91-2 (EC-No.) 200-568-1	0.75	Not classified
L-ASPARAGINE UNLABELED	(CAS-No.) 70-47-3 (EC-No.) 200-735-9 (EC Index-No.)	0.598	Not classified
L-TYROSINE UNLABELED	(CAS-No.) 60-18-4 (EC-No.) 200-460-4	0.5	Xi; R36/37/38
L-HISTIDINE:HCL:H2O UNLABELED	(CAS-No.) 71-00-1 (EC-No.) 200-745-3	0.45	Not classified
L-ALANINE UNLABELED	(CAS-No.) 56-41-7 (EC-No.) 200-273-8	0.35	Not classified
L-ASPARTIC ACID UNLABELED	(CAS-No.) 56-84-8 (EC-No.) 200-291-6 (EC Index-No.) (REACH-no) 01-2119966139-27	0.35	Not classified
L-PROLINE UNLABELED	(CAS-No.) 147-85-3 (EC-No.) 205-702-2	0.35	Not classified
L-CYSTINE UNLABELED	(CAS-No.) 56-89-3 (EC-No.) 200-296-3	0.35	Not classified
L-SERINE UNLABELED	(CAS-No.) 302-84-1 (EC-No.) 206-130-6	0.35	Not classified
CHOLINE BITARTRATE UNLABELED	(CAS-No.) 87-67-2 (EC-No.) 201-763-4 (EC Index-No.)	0.28	Not classified
L-TRYPTOPHAN UNLABELED	(CAS-No.) 73-22-3 (EC-No.) 200-795-6	0.18	Not classified
AQUA GREEN FOOD COLOR UNLABELED	(CAS-No.) 2353-45-9 (EC-No.) (EC Index-No.)	0.01	Not classified
TBHQ UNLABELED	(CAS-No.) 1948-33-0 (EC-No.) 217-752-2	0.002	Not classified

Mouse Express L-LYSINE (13C6, 99%) MOUSE FEED

MF-LYS-C

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
SUCROSE UNLABELED	(CAS-No.) 57-50-1 (EC-No.) 200-334-9	35.08	Not classified
CORN STARCH UNLABELED	(CAS-No.) 9005-25-8 (EC-No.) 232-679-6 (EC Index-No.)	15	Not classified
MALTODEXTRIN UNLABELED	(CAS-No.) 9050-36-6 (EC-No.) (EC Index-No.)	15	Not classified
SOYBEAN OIL UNLABELED	(CAS-No.) 8001-22-7 (EC-No.) 232-274-4	8	Not classified
L-GLUTAMIC ACID UNLABELED	(CAS-No.) 56-86-0 (EC-No.) 200-293-7	4	Not classified
MINERAL MIX, AIN-93M-MX (94049) UNLABELED	(CAS-No.) (EC-No.) (EC Index-No.)	3.5	Not classified
CELLULOSE UNLABELED	(CAS-No.) 9004-34-6 (EC-No.) 232-674-9	3	Not classified
GLYCINE UNLABELED	(CAS-No.) 56-40-6 (EC-No.) 200-272-2	2.33	Not classified
VITAMIN MIX, AIN-93-VX (94047) UNLABELED	(CAS-No.) (EC-No.) (EC Index-No.)	1.95	Not classified
L-ARGININE:HCL UNLABELED	(CAS-No.) 1119-34-2 (EC-No.) 214-275-1	1.21	Skin Irrit. 2, H315 Eye Irrit. 2, H319
L-LYSINE:2HCL (13C6, 99%)	(CAS-No.) 657-26-1 (Unlabeled) (EC-No.) 211-518-3 (Unlabeled)	1.2	Skin Sens. 1, H317
L-LEUCINE UNLABELED	(CAS-No.) 61-90-5 (EC-No.) 200-522-0	1.11	Not classified
L-VALINE UNLABELED	(CAS-No.) 72-18-4 (EC-No.) 200-773-6	0.82	Not classified
L-THREONINE UNLABELED	(CAS-No.) 72-19-5 (EC-No.) 200-774-1	0.82	Not classified
L-ISOLEUCINE UNLABELED	(CAS-No.) 73-32-5 (EC-No.) 200-798-2	0.82	Not classified
L-METHIONINE UNLABELED	(CAS-No.) 63-68-3 (EC-No.) 200-562-9	0.82	Not classified
CALCIUM PHOSPHATE MONOBASIC MONOHYDRATE UNLABELED	(CAS-No.) 10031-30-8 (EC-No.) 231-837-1 (EC Index-No.)	0.82	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
L-PHENYLALANINE UNLABELED	(CAS-No.) 63-91-2 (EC-No.) 200-568-1	0.75	Not classified
L-ASPARAGINE UNLABELED	(CAS-No.) 70-47-3 (EC-No.) 200-735-9 (EC Index-No.)	0.598	Not classified
L-TYROSINE UNLABELED	(CAS-No.) 60-18-4 (EC-No.) 200-460-4	0.5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
L-HISTIDINE:HCL:H2O UNLABELED	(CAS-No.) 71-00-1 (EC-No.) 200-745-3	0.45	Not classified
L-ALANINE UNLABELED	(CAS-No.) 56-41-7 (EC-No.) 200-273-8	0.35	Not classified
L-ASPARTIC ACID UNLABELED	(CAS-No.) 56-84-8 (EC-No.) 200-291-6 (EC Index-No.) (REACH-no) 01-2119966139-27	0.35	Not classified
L-PROLINE UNLABELED	(CAS-No.) 147-85-3 (EC-No.) 205-702-2	0.35	Not classified
L-CYSTINE UNLABELED	(CAS-No.) 56-89-3 (EC-No.) 200-296-3	0.35	Not classified
L-SERINE UNLABELED	(CAS-No.) 302-84-1 (EC-No.) 206-130-6	0.35	Not classified
CHOLINE BITARTRATE UNLABELED	(CAS-No.) 87-67-2 (EC-No.) 201-763-4 (EC Index-No.)	0.28	Not classified
L-TRYPTOPHAN UNLABELED	(CAS-No.) 73-22-3 (EC-No.) 200-795-6	0.18	Not classified
AQUA GREEN FOOD COLOR UNLABELED	(CAS-No.) 2353-45-9 (EC-No.) (EC Index-No.)	0.01	Not classified
TBHQ UNLABELED	(CAS-No.) 1948-33-0 (EC-No.) 217-752-2	0.002	Not classified
Name	Product identifier	%	GHS-US classification
L-GLUTAMIC ACID UNLABELED	(CAS-No.) 56-86-0	4	Not classified

Mouse Express L-LYSINE (13C6, 99%) MOUSE FEED

MF-LYS-C

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Name	Product identifier	%	GHS-US classification
L-ARGININE:HCL UNLABELED	(CAS-No.) 1119-34-2	1.21	Skin Irrit. 2, H315 Eye Irrit. 2A, H319
L-LYSINE:2HCL (13C6, 99%)	(CAS-No.) 657-26-1 (Unlabeled)	1.2	Skin Sens. 1, H317

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: If you feel unwell, seek medical advice (show the label where possible). Evacuate danger area.
First-aid measures after inhalation	: When symptoms occur: go into open air and ventilate suspected area. If not breathing, give artificial respiration. Get medical advice/attention.
First-aid measures after skin contact	: Wash with plenty of soap and water. Get immediate medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get medical advice/attention.

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

Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	: May be harmful in contact with skin. May cause moderate irritation.
Symptoms/effects after eye contact	: May cause eye irritation.
Symptoms/effects after ingestion	: May be harmful if swallowed.

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 : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).

5.2. Special hazards arising from the substance or mixture

Reactivity : Not available.

5.3. Advice for firefighters

Firefighting instructions	: Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. Wear recommended personal protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Avoid breathing vapors, mist, gas. Avoid dust formation. Avoid contact with skin and eyes.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters. Do not allow to enter drains or water courses. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment	: Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal.
Methods for cleaning up	: This material and its container must be disposed of in a safe way, and as per local legislation.

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	: Avoid all eye and skin contact and do not breathe vapor and mist. Normal measures for preventive fire protection.
Precautions for safe handling	: Provide adequate ventilation to minimize dust and/or vapor concentrations.
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Mouse Express L-LYSINE (13C6, 99%) MOUSE FEED

MF-LYS-C

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Store in a well-ventilated place. Keep container tightly closed.
Storage conditions : Store product at 4°C or lower.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

SUCROSE UNLABELED (57-50-1)		
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³
SOYBEAN OIL UNLABELED (8001-22-7)		
Belgium	Limit value (mg/m ³)	10 mg/m ³ (Huiles végétales (brouillards); Belgium; Time-weighted average exposure limit 8 h)
CELLULOSE UNLABELED (9004-34-6)		
Belgium	Limit value (mg/m ³)	10 mg/m ³ (Cellulose; Belgium; Time-weighted average exposure limit 8 h)
France	VME (mg/m ³)	10 mg/m ³ (Cellulose (fibre de papier); France; Time-weighted average exposure limit 8 h; VL: Valeur non réglementaire indicative)
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³ (Cellulose; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Cotton dust, raw, untreated; 0.1 mg/m ³ ; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Thoracic fraction)
United Kingdom	WEL TWA (mg/m ³)	10 mg/m ³ Cellulose inhalable dust; United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005); Cellulose respirable dust; 4 mg/m ³ ; United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
United Kingdom	WEL STEL (mg/m ³)	20 mg/m ³ Cellulose inhalable dust; United Kingdom; Short time value; Workplace exposure limit (EH40/2005)
CORN STARCH UNLABELED (9005-25-8)		
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³ Dermatitis. Not classifiable as a human carcinogen
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	10 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³

8.2. Exposure controls

Appropriate engineering controls : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Personal protective equipment : Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.



Materials for protective clothing : Wear suitable protective clothing and gloves.

Hand protection : Wear suitable protective clothing and gloves.

Eye protection : Wear eye protection. Chemical goggles or face shield with safety glasses.

Skin and body protection : Wear suitable protective clothing, gloves and eye/face protection.

Respiratory protection : In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

The properties listed below are for the solvent, the main component of this mixture.

Physical state : Solid

Appearance : Pellets

Color : Aqua Green

Odor : No data available

Odor threshold : No data available

Mouse Express L-LYSINE (13C6, 99%) MOUSE FEED

MF-LYS-C

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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
Auto-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
Explosion 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

Six months unopened when stored under recommended conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Strong oxidizing agents

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

L-ALANINE UNLABELED (56-41-7)	
LD50 oral rat	> 5110 mg/kg male and female
L-ASPARTIC ACID UNLABELED (56-84-8)	
LD50 oral rat	5000 mg/kg
LD50 dermal rabbit	5000 mg/kg
L-ARGININE:HCL UNLABELED (1119-34-2)	
LD50 oral rat	12400 mg/kg
ATE CLP (oral)	12000.000 mg/kg body weight
SUCROSE UNLABELED (57-50-1)	
LD50 oral rat	29700 mg/kg Somnolence, Cyanosis, Diarrhea
ATE CLP (oral)	29700.000 mg/kg body weight
L-VALINE UNLABELED (72-18-4)	
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)

Mouse Express L-LYSINE (13C6, 99%) MOUSE FEED

MF-LYS-C

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

L-PROLINE UNLABELED (147-85-3)	
LD50 oral rat	> 5110 mg/kg
L-HISTIDINE:HCL:H2O UNLABELED (71-00-1)	
LD50 oral rat	15000 mg/kg
ATE CLP (oral)	15000.000 mg/kg body weight
GLYCINE UNLABELED (56-40-6)	
LD50 oral rat	7930 mg/kg
ATE CLP (oral)	7930.000 mg/kg body weight
L-TRYPTOPHAN UNLABELED (73-22-3)	
LD50 oral rat	> 16000 mg/kg
L-LEUCINE UNLABELED (61-90-5)	
LD50 oral rat	> 16000 mg/kg male and female
LD50 Intraperitoneal - Rat - 5,379 mg/kg Remarks	Lungs, Thorax, or Respiration: Dyspnea. Nutritional and Gross Metabolic: Changes in: Body temperature decrease.
L-TYROSINE UNLABELED (60-18-4)	
Additional information	LD50 Intraperitoneal - mouse - > 1,450 mg/kg
L-METHIONINE UNLABELED (63-68-3)	
LD50 oral rat	36000 mg/kg Remarks: Behavioral: Change in motor activity (specific assay). Skin and Appendages: Allergic (Multiple organ involvement) Anaphylaxis.
CELLULOSE UNLABELED (9004-34-6)	
LD50 oral rat	> 5000 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	> 6 mg/l/4h (Rat)
CALCIUM PHOSPHATE MONOBASIC MONOHYDRATE UNLABELED (10031-30-8)	
LD50 oral rat	17500 mg/kg Remarks: Peripheral Nerve and Sensation: Flaccid paralysis without anesthesia (usually neuromuscular blockage). Behavioral: Somnolence (general depressed activity). Lungs, Thorax, or Respiration: Respiratory stimulation.
L-GLUTAMIC ACID UNLABELED (56-86-0)	
LD50 oral rat	> 5110 mg/kg male and female
LD50 dermal rat	> 2000 mg/kg male and female (OECD Test Guideline 402)
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
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
L-LEUCINE UNLABELED (61-90-5)	
NOAEL (oral,rat,90 days)	3840 mg/kg bodyweight/day female
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: 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.
Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	: May be harmful in contact with skin. May cause moderate irritation.
Symptoms/effects after eye contact	: May cause eye irritation.
Symptoms/effects after ingestion	: May be harmful if swallowed.
SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
L-ALANINE UNLABELED (56-41-7)	
EC50 Daphnia 1	> 100 mg/l static test EC50 - Daphnia magna (Water flea) - 48 h (OECD Test Guideline 202)

Mouse Express L-LYSINE (13C6, 99%) MOUSE FEED

MF-LYS-C

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

L-VALINE UNLABELED (72-18-4)	
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
L-PROLINE UNLABELED (147-85-3)	
EC50 Daphnia 1	> 100 mg/l - Daphnia magna (Water flea) - 48 h
CELLULOSE UNLABELED (9004-34-6)	
LC50 fish 1	> 100 mg/l (LC50)
EC50 Daphnia 1	> 100 mg/l (EC50)
Threshold limit algae 1	> 100 mg/l (EC50)
L-GLUTAMIC ACID UNLABELED (56-86-0)	
LC50 fish 1	> 100 mg/l Cyprinus carpio (Carp) - static test - 96 h
EC50 Daphnia 1	> 100 g/l Daphnia magna (Water flea) - 48 h (OECD Test Guideline 202)
EC50 other aquatic organisms 1	> 31 mg/l Pseudokirchneriella subcapitata (green algae) - static test - 72 h

12.2. Persistence and degradability

L-VALINE UNLABELED (72-18-4)	
Persistence and degradability	Aerobic - exposure time: 28 d.
SOYBEAN OIL UNLABELED (8001-22-7)	
Persistence and degradability	Not readily biodegradable in water. No (test)data on mobility of the substance available.
BOD (% of ThOD)	0.39
CELLULOSE UNLABELED (9004-34-6)	
Persistence and degradability	Biodegradable in water.
L-GLUTAMIC ACID UNLABELED (56-86-0)	
Persistence and degradability	Aerobic - exposure time: 28 d.
Biodegradation	97 % Readily biodegradable

12.3. Bioaccumulative potential

L-ALANINE UNLABELED (56-41-7)	
Log Pow	-2.74 at 20 °C (68 °F)
L-VALINE UNLABELED (72-18-4)	
Log Pow	-2.259 at 20 °C (68 °F)
L-THREONINE UNLABELED (72-19-5)	
Log Pow	-1.43
L-ISOLEUCINE UNLABELED (73-32-5)	
Log Pow	-1.58
L-TYROSINE UNLABELED (60-18-4)	
Log Pow	-2.26 at 25 °C (77 °F)
SOYBEAN OIL UNLABELED (8001-22-7)	
Bioaccumulative potential	Not bioaccumulative.
CELLULOSE UNLABELED (9004-34-6)	
Bioaccumulative potential	Bioaccumulation: not applicable.
L-GLUTAMIC ACID UNLABELED (56-86-0)	
Log Pow	< -4 at 20 °C (68 °F)

12.4. Mobility in soil

SOYBEAN OIL UNLABELED (8001-22-7)	
Surface tension	0.025 N/m (20 °C)

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and local environmental control regulations.

Mouse Express L-LYSINE (13C6, 99%) MOUSE FEED

MF-LYS-C

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Product/Packaging disposal recommendations : Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Ecology - waste materials : Dispose of as unused product.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

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

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

Mouse Express L-LYSINE (13C6, 99%) MOUSE FEED	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
L-ARGININE:HCL UNLABELED (1119-34-2)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
L-LYSINE:2HCL (13C6, 99%) (657-26-1 (Unlabeled))	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
L-GLUTAMIC ACID UNLABELED (56-86-0)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.

15.2. International regulations

CANADA

Mouse Express L-LYSINE (13C6, 99%) MOUSE FEED
Not listed on the Canadian DSL (Domestic Substances List)

Mouse Express L-LYSINE (13C6, 99%) MOUSE FEED

MF-LYS-C

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

15.2.1. National regulations

No additional information available

15.3. US State regulations

Mouse Express L-LYSINE (13C6, 99%) MOUSE FEED()				
U.S. - California - Proposition 65 - Carcinogens List		No		
U.S. - California - Proposition 65 - Developmental Toxicity		No		
U.S. - California - Proposition 65 - Reproductive Toxicity - Female		No		
U.S. - California - Proposition 65 - Reproductive Toxicity - Male		No		
State or local regulations		RTK - U.S. - Pennsylvania - RTK (Right to Know) List RTK - U.S. - New Jersey - Right to Know Hazardous Substance List		
L-ARGININE:HCL UNLABELED (1119-34-2)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
L-LYSINE:2HCL (13C6, 99%) (657-26-1 (Unlabeled))				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
L-GLUTAMIC ACID UNLABELED (56-86-0)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
L-ARGININE:HCL UNLABELED (1119-34-2)				
State or local regulations				
RTK - U.S. - Pennsylvania - RTK (Right to Know) List RTK - U.S. - New Jersey - Right to Know Hazardous Substance List				
L-LYSINE:2HCL (13C6, 99%) (657-26-1 (Unlabeled))				
State or local regulations				
RTK - U.S. - Pennsylvania - RTK (Right to Know) List RTK - U.S. - New Jersey - Right to Know Hazardous Substance List				
L-GLUTAMIC ACID UNLABELED (56-86-0)				
State or local regulations				
RTK - U.S. - Pennsylvania - RTK (Right to Know) List RTK - U.S. - New Jersey - Right to Know Hazardous Substance List				

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
STOT SE 3	Specific target organ toxicity (single exposure) Category 3

Mouse Express L-LYSINE (13C6, 99%) MOUSE FEED

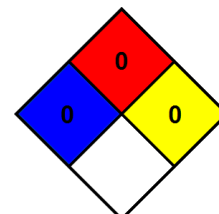
MF-LYS-C

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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
R43	May cause sensitization by skin contact
Xi	Irritant

NFPA health hazard	: 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.
NFPA fire hazard	: 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
NFPA reactivity	: 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

Health	: 0 Minimal Hazard - No significant risk to health
Flammability	: 0 Minimal Hazard
Physical	: 0 Minimal Hazard

CIL 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