



BETA-N-METHYLAMINO-L-ALANINE HCL (97% CP) UNLABELED 100 UG/ML IN 0.1M HCL

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: 21/12/2017

Revision date: 22/05/2018

Supersedes: 21/12/2017

Version: 1.1

ULM-10493-S

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

1.1. Product identifier

Product form : Mixtures
Product name : BETA-N-METHYLAMINO-L-ALANINE HCL (97% CP) UNLABELED 100 UG/ML IN 0.1M HCL
Product code : ULM-10493-S

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]

Met. Corr. 1 H290

Full text of hazard classes and H-statements : see section 16

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

Not classified

GHS-US classification

Met. Corr. 1 H290

Full text of H statements : see section 16

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) :



GHS05

Signal word (CLP) :

Warning

Hazard statements (CLP) :

H290 - May be corrosive to metals

Precautionary statements (CLP) :

P234 - Keep only in original container
P390 - Absorb spillage to prevent material damage
P406 - Store in corrosive resistant container with a resistant inner liner

BETA-N-METHYLAMINO-L-ALANINE HCL (97% CP) UNLABELED 100 UG/ML IN 0.1M HCL

ULM-10493-S

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

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) :

Warning

Hazard statements (GHS-US) :

H290 - May be corrosive to metals

Precautionary statements (GHS-US) :

P234 - Keep only in original container
P390 - Absorb spillage to prevent material damage
P406 - Store in corrosive resistant container with a resistant inner liner

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
WATER UNLABELED	(CAS No) 7732-18-5 (EC No) 231-791-2	99.626798	Not classified
HYDROCHLORIC ACID	(CAS No) 7647-01-0 (EC No) 231-595-7 (EC Index No) 017-002-00-2	0.363239	Xi; R41 Xi; R37 Xi; R39
BETA-N-METHYLAMINO-L-ALANINE HCL (97% CP) UNLABELED	(CAS No) 16012-55-8	0.009963	Xn; R20/22 Xi; R36/38

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
WATER UNLABELED	(CAS No) 7732-18-5 (EC No) 231-791-2	99.626798	Not classified
HYDROCHLORIC ACID	(CAS No) 7647-01-0 (EC No) 231-595-7 (EC Index No) 017-002-00-2	0.363239	Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335
BETA-N-METHYLAMINO-L-ALANINE HCL (97% CP) UNLABELED	(CAS No) 16012-55-8	0.009963	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319

Name	Product identifier	%	GHS-US classification
WATER UNLABELED	(CAS No) 7732-18-5	99.626798	Not classified
HYDROCHLORIC ACID	(CAS No) 7647-01-0	0.363239	Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335
BETA-N-METHYLAMINO-L-ALANINE HCL (97% CP) UNLABELED	(CAS No) 16012-55-8	0.009963	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319

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.

BETA-N-METHYLAMINO-L-ALANINE HCL (97% CP) UNLABELED 100 UG/ML IN 0.1M HCL

ULM-10493-S

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

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.
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/injuries after inhalation	: May be harmful if inhaled. May cause respiratory irritation.
Symptoms/injuries after skin contact	: May be harmful in contact with skin. May cause moderate irritation.
Symptoms/injuries after eye contact	: May cause eye irritation.
Symptoms/injuries 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 : The product is non-reactive under normal conditions of use, storage and transport.

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.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

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 : Dike and contain spill. Clean up any spills as soon as possible, using an absorbent material to collect it. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal.

Methods for cleaning up : This material and its container must be disposed of in a safe way, and as per local legislation. Absorb spillage to prevent material damage.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : May be corrosive to metals.

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.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Store in a well-ventilated place. Keep container tightly closed.

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

Packaging materials : Store in corrosive resistant container with a resistant inner liner.

7.3. Specific end use(s)

No additional information available

BETA-N-METHYLAMINO-L-ALANINE HCL (97% CP) UNLABELED 100 UG/ML IN 0.1M HCL

ULM-10493-S

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

HYDROCHLORIC ACID (7647-01-0)		
Italy - Portugal - USA ACGIH	ACGIH Ceiling (ppm)	2 ppm USA. ACGIH Threshold Limit Values (TLV)
Italy - Portugal - USA ACGIH	Remark (ACGIH)	Upper Respiratory Tract irritation Not classifiable as a human carcinogen
USA NIOSH	NIOSH REL (ceiling) (mg/m ³)	7 mg/m ³ USA. NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (ceiling) (ppm)	5 ppm USA. NIOSH Recommended Exposure Limits
USA NIOSH	Remark (NIOSH)	Often used in an aqueous solution.
USA OSHA	OSHA PEL (Ceiling) (mg/m ³)	7 mg/m ³ USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants The value in mg/m ³ is approximate.
USA OSHA	OSHA PEL (Ceiling) (ppm)	5 ppm USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
USA OSHA	Remark (OSHA)	Ceiling limit is to be determined from breathing-zone air samples.

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.
- Environmental exposure controls : Avoid release to the environment.

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	: Liquid
Appearance	: Liquid
Molecular mass	: 18.02 g/mol
Color	: Colorless
Odor	: No data available
Odor threshold	: No data available
pH	: 6.0 - 8.0 at 25 °C (77 °F)
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: 0 °C (32.0 °F)
Freezing point	: No data available
Boiling point	: 100 °C (212.0 °F)
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
Specific gravity / density	: 1 g/ml at 20 °C (68 °F)
Solubility	: Water: Completely miscible
Log Pow	: No data available

BETA-N-METHYLAMINO-L-ALANINE HCL (97% CP) UNLABELED 100 UG/ML IN 0.1M HCL

ULM-10493-S

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

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

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

See storage and expiration date on CoA.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

metals. May be corrosive to metals.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

BETA-N-METHYLAMINO-L-ALANINE HCL (97% CP) UNLABELED (16012-55-8)	
ATE CLP (oral)	500.000 mg/kg body weight
ATE CLP (gases)	4500.000 ppmV/4h
ATE CLP (vapors)	11.000 mg/l/4h
ATE CLP (dust, mist)	1.500 mg/l/4h

WATER UNLABELED (7732-18-5)	
LD50 oral rat	> 90000 mg/kg

HYDROCHLORIC ACID (7647-01-0)	
Additional information	Inhalation Inhalation may provoke the following symptoms: Respiratory irritation Cough Difficulty in breathing Pneumonia (Hydrochloric acid)

Skin corrosion/irritation	: Not classified pH: 6.0 - 8.0 at 25 °C (77 °F)
Serious eye damage/irritation	: Not classified pH: 6.0 - 8.0 at 25 °C (77 °F)
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
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/injuries after inhalation	: May be harmful if inhaled. May cause respiratory irritation.
Symptoms/injuries after skin contact	: May be harmful in contact with skin. May cause moderate irritation.
Symptoms/injuries after eye contact	: May cause eye irritation.

BETA-N-METHYLAMINO-L-ALANINE HCL (97% CP) UNLABELED 100 UG/ML IN 0.1M HCL

ULM-10493-S

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

Symptoms/injuries 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.

HYDROCHLORIC ACID (7647-01-0)

LC50 fish 1	24.6 mg/l - Lepomis macrochirus (Bluegill) - 96 h (Hydrochloric acid)
EC50 Daphnia 1	4.91 mg/l - Daphnia magna (Water flea)- 48 h (Hydrochloric acid)

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

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.

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.

BETA-N-METHYLAMINO-L-ALANINE HCL (97% CP) UNLABELED 100 UG/ML IN 0.1M HCL

ULM-10493-S

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

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

BETA-N-METHYLAMINO-L-ALANINE HCL (97% CP) UNLABELED 100 UG/ML IN 0.1M HCL	
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.
BETA-N-METHYLAMINO-L-ALANINE HCL (97% CP) UNLABELED (16012-55-8)	
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 Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
WATER UNLABELED (7732-18-5)	
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.
HYDROCHLORIC ACID (7647-01-0)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of United States SARA Section 313
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Subject to reporting requirements of United States SARA Section 313

15.2. International regulations

CANADA

BETA-N-METHYLAMINO-L-ALANINE HCL (97% CP) UNLABELED 100 UG/ML IN 0.1M HCL
Listed on the Canadian DSL (Domestic Substances List)

15.2.1. National regulations

No additional information available

15.3. US State regulations

BETA-N-METHYLAMINO-L-ALANINE HCL (97% CP) UNLABELED 100 UG/ML IN 0.1M HCL				
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	U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List			
BETA-N-METHYLAMINO-L-ALANINE HCL (97% CP) UNLABELED (16012-55-8)				
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	
WATER UNLABELED (7732-18-5)				
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	

BETA-N-METHYLAMINO-L-ALANINE HCL (97% CP) UNLABELED 100 UG/ML IN 0.1M HCL

ULM-10493-S

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

HYDROCHLORIC ACID (7647-01-0)				
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	

BETA-N-METHYLAMINO-L-ALANINE HCL (97% CP) UNLABELED (16012-55-8)

State or local regulations
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List

WATER UNLABELED (7732-18-5)

State or local regulations
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List

HYDROCHLORIC ACID (7647-01-0)

State or local regulations
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

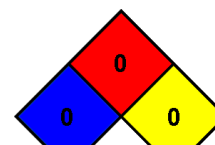
Other information : This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the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

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

Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Met. Corr. 1	Corrosive to metals Category 1
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H290	May be corrosive to metals
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
R20/22	Harmful by inhalation and if swallowed
R36/38	Irritating to eyes and skin
R37	Irritating to respiratory system
R39	Danger of very serious irreversible effects
R41	Risk of serious damage to eyes
Xi	Irritant
Xn	Harmful

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 dire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.



BETA-N-METHYLAMINO-L-ALANINE HCL (97% CP) UNLABELED 100 UG/ML IN 0.1M HCL

ULM-10493-S

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

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.

HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

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