

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: 21/06/2011 Revision date: 21/12/2021 Supersedes: 30/11/2016 Version: 3.0

CLM-2151

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

1.1. Product identifier

Product form : Substance

Substance name : L-ALANINE-N-T-BOC (3-13C, 99%)

EC-No. : 239-847-8 (Unlabeled) CAS-No. : 15761-38-3 (Unlabeled)

Product code : CLM-2151

Formula : *CH3CH(NH-t-BOC)COOH

Synonyms : Boc-L-alanine / N-(tert-Butoxycarbonyl)-L-alanine

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 <u>cilsales@isotope.com</u> 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

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SECTION 3: Composition/Information on ingredients

Substances

Name	Product identifier	%	Classification according to Directive 67/548/EEC
L-ALANINE-N-T-BOC (3-13C, 99%)	(CAS-No.) 15761-38-3 (Unlabeled) (EC-No.) 239-847-8 (Unlabeled) (EC Index-No.)	100	Not classified
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
L-ALANINE-N-T-BOC (3-13C, 99%)	(CAS-No.) 15761-38-3 (Unlabeled) (EC-No.) 239-847-8 (Unlabeled) (EC Index-No.)	100	Not classified

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

Name	Product identifier	%	GHS-US classification
L-ALANINE-N-T-BOC (3-13C, 99%) (Main constituent)	(CAS-No.) 15761-38-3 (Unlabeled)	100	Not classified

Full text of H-phrases: see section 16

Mixtures

Not applicable

SECTION 4: First aid measures

Description of first aid measures

First-aid measures general : Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of

dangerous area.

First-aid measures after inhalation : If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a

physician.

: Wash with soap and plenty of water. Consult a physician. First-aid measures after skin contact

First-aid measures after eye contact : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

First-aid measures after ingestion Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a

physician.

Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : May be harmful if inhaled. May cause respiratory tract irritation. Symptoms/effects after skin contact : May be harmful if absorbed through skin. May cause skin irritation.

Symptoms/effects after eye contact : May cause eye irritation. : May be harmful if swallowed. Symptoms/effects after ingestion

Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

Special hazards arising from the substance or mixture

: Combustible. Fire hazard

Advice for firefighters

Firefighting instructions : Wear self contained breathing apparatus for fire fighting if necessary. Fight fire with normal

precautions from a reasonable distance. 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

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas.

Ensure adequate ventilation. Avoid breathing dust.

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".

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Environmental precautions

Do not let product enter drains. Prevent entry to sewers and public waters. Avoid release to the environment.

Methods and material for containment and cleaning up

For containment : Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable,

closed containers for disposal.

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

Reference to other sections

For further information refer to section 13

SECTION 7: Handling and storage

Precautions for safe handling

Additional hazards when processed : Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional

processing occurs.

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate Precautions for safe handling

exhaust ventilation at places where dust is formed.

Wash hands and other exposed areas with mild soap and water before eating, drinking or Hygiene measures

smoking and when leaving work. Handle in accordance with good industrial hygiene and safety

Conditions for safe storage, including any incompatibilities

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

: Store refrigerated (-5°C to 5°C) and dessicated. Storage conditions

Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

Control parameters

No additional information available

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.

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









Materials for protective clothing Wear suitable protective clothing and gloves. Hand protection

Wear suitable protective clothing and gloves.

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

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

Information on basic physical and chemical properties

Physical state : Solid Powder Appearance

Molecular mass : 190.2 g/mol (Labeled)

Color : Beige

Odor No data available Odor threshold No data available No data available Relative evaporation rate (butyl acetate=1) : No data available : 79 - 83 °C (174 - 181 °F) Melting point

Freezing point No data available

: No data available **Boiling point** Flash point : No data available

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: No data available Auto-ignition temperature 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 : No data available Solubility

Log Pow 1.181

No data available Log Kow Viscosity, kinematic No data available : No data available Viscosity, dynamic Explosive properties : No data available : No data available Oxidizing properties **Explosion limits** : No data available

Other information

No additional information available

SECTION 10: Stability and reactivity

Reactivity

No additional information available

Chemical stability

Two years after receipt of order if stored as above. Re-QC after two years.

Possibility of hazardous reactions

No additional information available

Conditions to avoid

No additional information available

Incompatible materials 10.5.

Strong oxidizing agent.

Hazardous decomposition products

Carbon oxides (CO, CO2). Nitrogen oxides.

SECTION 11: Toxicological information

Information on toxicological effects 11.1.

Acute toxicity : Not classified 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 Not classified

exposure

: Not classified Aspiration hazard

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 tract irritation. Symptoms/effects after skin contact May be harmful if absorbed through skin. May cause skin irritation.

Symptoms/effects after eye contact : May cause eye irritation. Symptoms/effects after ingestion : May be harmful if swallowed.

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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.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

L-ALANINE-N-T-BOC (3-13C, 99%) (15761-38-3 (Unlabeled))

Log Pow 1.181

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 dangerous goods.

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 dangerous goods.

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

Not applicable

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SECTION 15: Regulatory information					
	15.1. US Federal regulations				
	L-ALANINE-N-T-BOC (3-13C, 99%) (15761-38-3	NINE-N-T-BOC (3-13C, 99%) (15761-38-3 (Unlabeled))			
	SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporing 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

No additional information available

15.2.1. **National regulations**

L-ALANINE-N-T-BOC (3-13C, 99%) (15761-38-3 (Unlabeled)) Listed on the Canadian NDSL (Non-Domestic Substances List)

15.3. US State regulations

L-ALANINE-N-T-BOC (3-13C, 99%)(15761-38-3 (Unia	_ANINE-N-T-BOC (3-13C, 99%)(15761-38-3 (Unlabeled))		
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		

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.

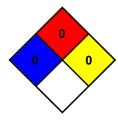
NFPA health hazard : 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.

: 0 - Materials that will not burn under typical fire conditions, NFPA fire hazard including intrinsically noncombustible materials such as

concrete, stone, and sand.

: 0 - Material that in themselves are normally stable, even

under fire conditions.



Hazard Rating

NFPA reactivity

Health : 0 Minimal Hazard - No significant risk to health

: 0 Minimal Hazard Flammability Physical : 0 Minimal Hazard

CIL Substance SDS

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