

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: 24/09/2012

CLM-9097

Revision date: 30/03/2018

Supersedes: 24/09/2012

Version: 2.0

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

1.1. Product identifier

Product form : Substance

Substance name : 3-BROMO-L-TYROSINE (RING-13C6, 99%)

CAS No : 38739-13-8 (Unlabeled)

Product code : CLM-9097
Formula : *C6C3H10BrNO3

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

1.2.1. Relevant identified uses

Main use category : Professional use

Industrial/Professional use spec : For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.

50 Frontage Road Andover, MA 01810

USA

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

Emergency telephone number

Emergency numbers:

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin Irrit. 2 H315 Eye Irrit. 2 H319 STOT SE 3 H335

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

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

Xi; R36/37/38

Full text of R-phrases: see section 16

GHS-US classification

Skin Irrit. 2 H315 Eye Irrit. 2 H319 STOT SE 3 H335

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Causes eye irritation. May be harmful if swallowed. May be harmful if inhaled. Respiratory tract. May be harmful in contact with skin. Causes skin irritation.

30/03/2018 EN (English) 1/7

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

2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP) : Warning

Hazard statements (CLP) : H315 - Causes skin irritation

H319 - Causes serious eye irritation H335 - May cause respiratory irritation

Precautionary statements (CLP) : P261 - Avoid breathing dust, fume, gas, mist, spray, vapours

P264 - Wash hands, forearms and face thoroughly after handling

P271 - Use only outdoors or in a well-ventilated area

P280 - Wear eye protection, face protection, protective clothing, protective gloves

P302+P352 - IF ON SKIN: Wash with plenty of soap and water

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing P312 - Call a doctor, a POISON CENTER if you feel unwell

GHS-US labelling

Hazard pictograms (GHS-US)



GHS07

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H315 - Causes skin irritation

H319 - Causes serious eye irritation H335 - May cause respiratory irritation

Precautionary statements (GHS-US)

: P261 - Avoid breathing dust, fume, gas, mist, spray, vapours

P264 - Wash hands, forearms and face thoroughly after handling

P271 - Use only outdoors or in a well-ventilated area

P280 - Wear eye protection, face protection, protective clothing, protective gloves

P302+P352 - If on skin: Wash with plenty of water

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing

P312 - Call a doctor, a POISON CENTER if you feel unwell

P321 - Specific treatment (see Hazardous component(s) for labelling on this label)

P332+P313 - If skin irritation occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P403+P233 - Store in a well-ventilated place. Keep container tightly closed

P405 - Store locked up

P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous

waste

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%	Classification according to Directive 67/548/EEC
3-BROMO-L-TYROSINE (RING-13C6, 99%)	(CAS No) 38739-13-8 (Unlabeled)	100	Xi; R36/37/38

30/03/2018 EN (English) 2/7

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]
3-BROMO-L-TYROSINE (RING-13C6, 99%)	(CAS No) 38739-13-8 (Unlabeled)	100	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

Full text of R- and H-statements; see section 16

Name	Product identifier	%	GHS-US classification
3-BROMO-L-TYROSINE (RING-13C6, 99%) (Main constituent)	(CAS No) 38739-13-8 (Unlabeled)	100	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

Full text of H-statements: see section 16

Mixtures

Not applicable

SECTION 4: First aid measures

Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice (show the label where possible). Evacuate danger area.

When symptoms occur: go into open air and ventilate suspected area. If not breathing, give First-aid measures after inhalation

artificial respiration. Get medical advice/attention.

First-aid measures after skin contact Wash with plenty of soap and water. Get immediate medical advice/attention.

Immediately flush eyes thoroughly with water for at least 15 minutes. Get medical First-aid measures after eye contact

First-aid measures after ingestion Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get medical advice/attention.

Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May be harmful if inhaled. Causes respiratory tract irritation. Symptoms/injuries after skin contact : May be harmful in contact with skin. Causes skin irritation.

Symptoms/injuries after eye contact : Causes eye irritation. : May be harmful if swallowed. Symptoms/injuries after ingestion

Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Water spray. dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).

Special hazards arising from the substance or mixture

No additional information available

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 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 6.1.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment. : Avoid breathing vapours, mist, gas. Avoid dust formation. **Emergency procedures**

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".

Environmental precautions

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

Methods and material for containment and cleaning up

For containment : Take up mechanically (sweeping, shovelling) 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.

30/03/2018 EN (English)

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

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide adequate ventilation to minimize dust and/or vapour concentrations.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Handle in accordance with good industrial hygiene and safety

practice.

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.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Log Kow

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 : When appropriate, use NIOSH/CEN approved 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 : Solid

Appearance : Solid

Molecular mass : 266.04 g/mol (Labeled)

Colour : White.

Odour : No data available Odour threshold No data available No data available pΗ Relative evaporation rate (butylacetate=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 Vapour pressure : No data available Relative vapour density at 20 °C : No data available Relative density : No data available Solubility : No data available Log Pow : No data available

30/03/2018 EN (English) 4/7

: No data available

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

: No data available Viscosity, kinematic : No data available Viscosity, dynamic : No data available Explosive properties Oxidising properties : No data available Explosive limits : No data available

Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

Chemical stability

Stable if stored under recommended conditions.

Possibility of hazardous reactions

No additional information available

Conditions to avoid

No additional information available

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

Carbon oxides (CO, CO2). Nitrogen oxides.

SECTION 11: Toxicological information

Information on toxicological effects

: Not classified Acute toxicity

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified

STOT-single exposure : May cause respiratory irritation.

STOT-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. Causes respiratory tract irritation. Symptoms/injuries after skin contact : May be harmful in contact with skin. Causes skin irritation.

Symptoms/injuries after eye contact : Causes eye irritation.

Symptoms/injuries after ingestion : May be harmful if swallowed.

SECTION 12: Ecological information

12.1. **Toxicity**

The product is not considered harmful to aquatic organisms nor to cause long-term adverse Ecology - general effects in the environment.

Persistence and degradability

No additional information available

Bioaccumulative potential

No additional information available

Mobility in soil

No additional information available

30/03/2018 EN (English) 5/7

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

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.

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

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

3-BROMO-L-TYROSINE (RING-13C6, 99%) (38739-13-8 (Unlabeled))	
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.

15.2. International regulations

CANADA

3-BROMO-L-TYROSINE (RING-13C6, 99%) (38739-13-8 (Unlabeled))

Listed on the Canadian DSL (Domestic Substances List)

15.2.1. National regulations

No additional information available

30/03/2018 EN (English) 6/7

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

15.3. US State regulations

3-BROMO-L-TYROSINE (RING-13C6, 99%)(38739-13-8 (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.

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

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
R36/37/38	Irritating to eyes, respiratory system and skin
Xi	Irritant

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause

temporary incapacitation or residual injury.

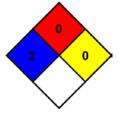
NFPA fire hazard : 0 - Materials that will not burn under typical dire conditions,

including intrinsically noncombustible materials such as

concrete, stone, and sand.

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

under fire conditions.



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

30/03/2018 EN (English) 7/7