

SAFETY DATA SHEET

According to 1907/2006/EC, Article 31

Revision number: 2 Revision date: 02/09/2024

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

1.1 Product identifiers

Product name: Butylamine Product code: B0707

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

Identified uses: Reagents.

1.3 Details of the supplier of the safety data sheet

Supplier:

TCI EUROPE N.V. Boerenveldseweg 6 Haven 1063 B-2070 Zwijndrecht

Telephone: +32(0)3 735 07 00 E-mail: sales-eu@tcichemicals.com

1.4 Emergency telephone number: +32(0)70 245 245

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Flammable liquids Category 2
Acute toxicity (Oral) Category 4
Acute toxicity (Dermal) Category 3
Acute toxicity (Inhalation) Category 3
Skin corrosion/irritation Category 1A

Specific target organ toxicity - Single exposure [Category 3] Respiratory tract irritation

2.2 Label elements

Pictograms or hazard symbols



Signal word Danger

Hazard statements H225-Highly flammable liquid and vapour.

H302-Harmful if swallowed.

H311+H331-Toxic in contact with skin or if inhaled. H314-Causes severe skin burns and eye damage.

H335-May cause respiratory irritation.

Precautionary statements P260-Do not breathe dusts or mists.

 ${\bf P280\text{-}Wear\ protective\ gloves,\ protective\ clothing,\ face\ protection.}$

P301+P330+P331+P310-IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a

POISON CENTER or doctor.

P303+P361+P353+P310+P363-IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or doctor. Wash contaminated

clothing before reuse.

P304+P340+P310-IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Immediately call a POISON CENTER or doctor.

P305+P351+P338+P310-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable vPvB: Not applicable

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SECTION 3: Composition/information on ingredients

3.1 Substances

 Components:
 Butylamine

 Percent:
 >99.0%(GC)(T)

 CAS RN:
 109-73-9

 EC-No:
 203-699-2

Synonyms: 1-Aminobutane, Butan-1-amine

Chemical Formula: C₄H₁₁N

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a

POISON CENTER or doctor/physician.

Skin contact: Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water.

Immediately call a POISON CENTER or doctor/physician.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.Immediately call a POISON CENTER or doctor/physician.

Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.

Protection of first-aiders: A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

4.2 Most important symptoms and effects, both acute and delayed

No data available

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Dry chemical, foam, water in large amounts, carbon dioxide.

5.2 Special hazards arising from the

substance or mixture

Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.

Carbon monoxide, Carbon dioxide, Nitrogen oxides (NOx)

5.3 Advice for firefighters

Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Keep containers cool by spraying with water. Eliminate all ignition sources if safe to do so. When extinguishing fire, be sure to wear personal protective equipment

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use extra personal protective equipment (self-contained breathing apparatus). Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be

controlled around the leakage area by roping off, etc

6.2 Environmental precautions

Prevent product from entering drains

6.3 Methods and materials for containment and cleaning up

Absorb spilled material in dry sand or inert absorbent before recovering it into an airtight container. In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations. Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use spark-proof tools and

explosion-proof equipment.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapour or mist. Keep away from heat/sparks/open flame/hot surfaces. -No smoking. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated. Avoid contact with skin, eyes and clothing.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Store in a cool, dark and well-ventilated place. Store under inert gas. Store locked up. Store away from incompatible materials such as oxidizing agents.

Air-sensitive

7.3 Specific end use(s) No further relevant information available.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

ACGIH TLV(CL): 5 ppm (skin) OSHA PEL(CL): 5 ppm (skin) 5 ppm (skin) JSOH OELs(CL):

Install a closed system or local exhaust. Also install safety shower and eye bath. 8.2 Exposure controls

Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Respiratory protection:

Use respirators approved under appropriate government standards and follow local and national

regulations.

Hand protection: Impervious gloves.

Eye protection: Safety goggles. A face-shield, if the situation requires.

Skin and body protection: Impervious protective clothing. Protective boots, if the situation requires.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Liquid Physical state (20°C): Form: Clear Colour: Colorless Odour: Ammoniacal Odour threshold: 1.8 ppm

12.6 (100g/L H₂O 20°C) pH:

-49°C Melting point/freezing point: Boiling point/range: 77°C Flash point: -4°C

Evaporation rate(Butyl Acetate=1): No data available Flammability(solid, gas): No data available

Flammability or explosive limits:

Lower: 1.7% 9.8% Upper: 10.9kPa/20°C Vapour pressure:

Vapour density: 2.5

Relative density: 0.74

Solubility(ies): [Water]

Miscible

[Other solvents]

Ether, Alcohols Miscible:

Partition coefficient: 0.86

n-octanol/water:

312°C Autoignition temperature:

Decomposition temperature: No data available **Dynamic Viscosity:** No data available Kinematic viscosity: No data available

9.2 Other safety information No data available

SECTION 10: Stability and reactivity

10.1 Reactivity No data available

10.2 Chemical stability Stable under proper conditions.

10.3 Possibility of hazardous reactions No special reactivity has been reported.

10.4 Conditions to avoid Spark, Open flame, Static discharge

10.5 Incompatible materials Oxidizing agents, Strong acids

10.6 Hazardous decomposition products Carbon monoxide, Carbon dioxide, Nitrogen oxides (NOx)

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Skin corrosion/irritation:

Acute Toxicity: orl-rat LD50:366 mg/kg

skn-rbt LD50:850 uL/kg skn-rbt 500 mg open SEV eye-rbt 250 ug/24H SEV

Serious eye damage/irritation: eye-rbt 250 ug/24H 5
Respiratory or skin sensitization: No data available
Germ cell mutagenicity: No data available

Carcinogenicity:

IARC = No data available
NTP = No data available
Reproductive toxicity: No data available
STOT-single exposure: No data available
STOT-repeated exposure: No data available
Aspiration hazard: No data available
RTECS Number: EO2975000

SECTION 12: Ecological information

12.1 Toxicity

Fish: 96h LC50:32 mg/L (Lepomis macrochirus)

Crustacea: 48h EC50:8.2 mg/L (Ceriodaphnia dubia)

Algae: 72h EC50:17 mg/L (Selenastrum capricornutum)

12.2 Persistence and degradability 66% (NO2) , 85% (NH3) (by BOD) , 100% (by HPLC) , 98% (by TOC)

12.3 Bioaccumulative potential 3.2

12.4 Mobility in soil

Log Pow: 0.86

Soil adsorption (Koc): No data available Henry's Law (PaM ³/mol): No data available

12.5 Results of PBT and vPvB assessment

PBT: Not applicable vPvB: Not applicable

12.6 Other adverse effects No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recycle to process, if possible. Consult your local regional authorities. You may be able to burn in a chemical incinerator equipped with an afterburner and scrubber system but exert extra care in igniting as this material is highly flammable. Observe all federal, state and local regulations when disposing of the substance

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SECTION 14: Transport information

14.1 UN number 1125

14.2 UN proper shipping name

ADR/RID n-Butylamine
IMDG/IMO n-Butylamine
ICAO/IATA n-Butylamine

14.3 Transport hazard class(es)

ADR/RID
3: Flammable liquid
Subsidiary risk:
8: Corrosive.
IMDG/IMO
3: Flammable liquid
Subsidiary risk:
8: Corrosive.
ICAO/IATA
3: Flammable liquid

Subsidiary risk: 8: Corrosive.

14.4 Packaging group

ADR/RID II
IMDG/IMO II
ICAO/IATA II

14.5 Environmental hazards

Marine pollutant -

14.6 Special precautions for userNo data available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Water Hazard Classes (WGK):

Class 1 - Low hazard to waters

Substance of Very High Concern (SVHC) according to the

REACH Regulations (EC) No.1907/2006

A chemical safety assessment has not been carried out.

SECTION 16: Other information

15.2 Chemical safety assessment

Prepared by: TCI EUROPE N.V. Issue date: 02/09/2024

This SDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.

Not listed

End of Safety Data Sheet

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