

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)
Classifications according to Regulation (EC) No 1272/2008.
Printdate 16 Aug 2022

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product name:

sec-Butylamine

1.1. Catalog No.:

685143

1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical
uses: R&D

1.3. Uses advised against:

HPC Standards GmbH
Am Wieseneck 7

04451 Cunnersdorf
Deutschland

Tel. +49 34291 3372-36
Fax. +49 34291 3372-39
contact@hpc-standards.com

1.4. Emergency telephone number

HPC Standards Tel. +49 34291 3372-36
This number is only available during office hours.

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
Flammable liquids (Category 2), H225
Acute toxicity, Oral (Category 3), H301
Acute toxicity, Inhalation (Category 4), H332
Skin corrosion (Category 1A), H314
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

2.2. Label elements

2.2.1. Pictogram



2.2.2.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram Signal word Danger Hazard statement(s)

H225 Highly flammable liquid and vapour.

H301 Toxic if swallowed.

H314 Causes severe skin burns and eye damage.

H332 Harmful if inhaled.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

Supplemental Hazard

Statements

none

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Synonyms : (±)-2-Aminobutane

(±)-sec-Butylamine

Formula : C₄H₁₁N

Molecular weight : 73,14 g/mol

CAS-No. : 13952-84-6

EC-No. : 237-732-7

Index-No. : 612-052-00-7

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component Classification Concentration

2-Aminobutane

CAS-No.

EC-No.

Index-No.

13952-84-6

237-732-7

612-052-00-7

Flam. Liq. 2; Acute Tox. 3;

Acute Tox. 4; Skin Corr. 1A;

Aquatic Acute 1; Aquatic

Chronic 1; H225, H301, H332,

H314, H400, H410

M-Factor - Aquatic Acute: 10

<= 100 %

3.1.1. Formula

C₄H₁₁N

3.1.2. Molecular Weight (g/mol)

73.14

3.1.3. CAS-No.

13952-84-6

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take

victim immediately to hospital. Consult a physician In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with

water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides (NOx)

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Use water spray to cool unopened containers

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Light sensitive.

Storage class (TRGS 510): 3: Flammable liquids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance Form: liquid

b) Odour No data available

c) Odour Threshold No data available

d) pH No data available e) Melting point/freezing point

Melting point/range: -72 °C - lit.

f) Initial boiling point and boiling range

63 °C - lit.

g) Flash point -19 °C - closed cup

h) Evaporation rate No data available

i) Flammability (solid, gas) No data available

j) Upper/lower flammability or

explosive limits
No data available
k) Vapour pressure No data available
l) Vapour density No data available
m) Relative density 0,724 g/cm³ at 25 °C
n) Water solubility No data available
o) Partition coefficient: noctanol/
water
No data available
p) Auto-ignition
temperature
No data available
q) Decomposition
temperature
No data available
r) Viscosity No data available
s) Explosive properties No data available
t) Oxidizing properties No data available
9.2 Other safety information
No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity
No data available
10.2 Chemical stability
Stable under recommended storage conditions.
10.3 Possibility of hazardous reactions
No data available
10.4 Conditions to avoid
Heat, flames and sparks. Extremes of temperature and direct sunlight.
10.5 Incompatible materials
Strong oxidizing agents, Carbon dioxide (CO₂)
10.6 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NO_x)
Other decomposition products - No data available
In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
Acute toxicity
absorption
Inhalation: Absorption LD50 Dermal - Rabbit - 2.500 mg/kg
Remarks: (RTECS)
Dermal: absorption
Skin corrosion/irritation
Skin - Rabbit
Result: Causes burns.
Remarks: (External MSDS)
Serious eye damage/eye irritation
Eyes - Rabbit
Result: Causes burns.
Remarks: (External MSDS)
Causes serious eye damage.
Respiratory or skin sensitisation
Germ cell mutagenicity
Ames test
Result: negative
(National Toxicology Program)

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

Specific target organ toxicity - single exposure

Acute inhalation toxicity - mucosal irritations, Cough, Shortness of breath, Possible damages: damage of respiratory tract, Inhalation may lead to the formation of oedemas in the respiratory tract., Symptoms may be delayed.

Specific target organ toxicity - repeated exposure

Aspiration hazard

Additional Information

RTECS: EO3325000 Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and

skin., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Systemic effects:

Discomfort, Convulsions, Unconsciousness, Coma

Damage to:

Kidney

Other information

Under given conditions, contact with nitrites or nitric acid can lead to it to be carcinogenic in animal experiments.

Further data:

Handle in accordance with good industrial hygiene and safety practice.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish LC50 - *Leuciscus idus* (Golden orfe) - 46 - 68 mg/l - 96 h(2-Aminobutane)

Remarks: (External MSDS)

Toxicity to daphnia and

other aquatic

EC50 - *Daphnia* (water flea) - 37,9 mg/l - 48 h(2-Aminobutane)

Remarks: (External MSDS) invertebrates

Toxicity to algae IC50 - *Desmodesmus subspicatus* (green algae) - 0,54 mg/l - 72 h(2-Aminobutane)

Remarks: (External MSDS)

Toxicity to bacteria EC10 - activated sludge - 1.995 mg/l - 30 min(2-Aminobutane)

Remarks: (External MSDS)

12.2 Persistence and degradability

Biodegradability Result: 75 % - Readily biodegradable.

(OECD Test Guideline 301F)

12.3 Bioaccumulative potential

12.4 Mobility in soil

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Very toxic to aquatic life with long lasting effects.

Discharge into the environment must be avoided

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging
Dispose of as unused product

14. TRANSPORT INFORMATION

14.1 UN number
ADR/RID: 3286 IMDG: 3286 IATA: 3286
14.2 UN proper shipping name
ADR/RID: FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (2-Aminobutane)
IMDG: FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (2-Aminobutane)
IATA: Flammable liquid, toxic, corrosive, n.o.s. (2-Aminobutane)
14.3 Transport hazard class(es)
ADR/RID: 3 (6.1, 8) IMDG: 3 (6.1, 8) IATA: 3 (6.1)(8)
14.4 Packaging group
ADR/RID: II IMDG: II IATA: II
14.5 Environmental hazards
ADR/RID: no IMDG Marine pollutant: no IATA: no
14.6 Special precautions for user
No data available

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.
15.2 Chemical safety assessment
For this product a chemical safety assessment was not carried out

16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide.
The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. For lab use only!