# Chemical Safety Data Sheet MSDS / SDS

# sec-Butylamine

Revision Date: 2025-09-27 Revision Number: 1

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

#### **Product identifier**

 Product name
 : sec-Butylamine

 CBnumber
 : CB6853095

 CAS
 : 13952-84-6

 EINECS Number
 : 237-732-7

Synonyms: sec-Butylamine,SBA

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

Relevant identified uses : For R&D use only. Not for medicinal, household or other use.

Uses advised against : none

# **Company Identification**

Company : Chemicalbook

Address : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing

Telephone : 010-86108875

# SECTION 2: Hazards identification

# GHS Label elements, including precautionary statements

Symbol(GHS)



Signal word Danger

### Precautionary statements

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 or doctor/physician.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.

 $P305 + P351 + P338 \; \text{IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.} \\$ 

Continuerinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P405 Store locked up.

### Hazard statements

H225 Highly Flammable liquid and vapour

H301 Toxic if swalloed

H302 Harmful if swallowed

H314 Causes severe skin burns and eye damage

H318 Causes serious eye damage

H332 Harmful if inhaled

H400 Very toxic to aquatic life

H410 Very toxic to aquatic life with long lasting effects

# SECTION 3: Composition/information on ingredients

#### Substance

Product name : sec-Butylamine

Synonyms : sec-Butylamine,SBA

CAS : 13952-84-6
EC number : 237-732-7
MF : C4H11N
MW : 73.14

# SECTION 4: First aid measures

### Description of first aid measures

# General advice

First aiders need to protect themselves. Show this material safety data sheet to the doctor

### If inhaled

After inhalation: fresh air. Call in physician.

### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

#### In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

#### If swallowed

After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.

# 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

# Indication of any immediate medical attention and special treatment needed

No data available

# **SECTION 5: Firefighting measures**

# **Extinguishing media**

### Suitable extinguishing media

Carbon dioxide (CO2) Foam Dry powder

# Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

### Special hazards arising from the substance or mixture

Carbon oxides Nitrogen oxides (NOx) Combustible.

Pay attention to flashback.

Vapors are heavier than air and may spread along floors.

Development of hazardous combustion gases or vapours possible in the event of fire. Forms explosive mixtures with air at ambient temperatures.

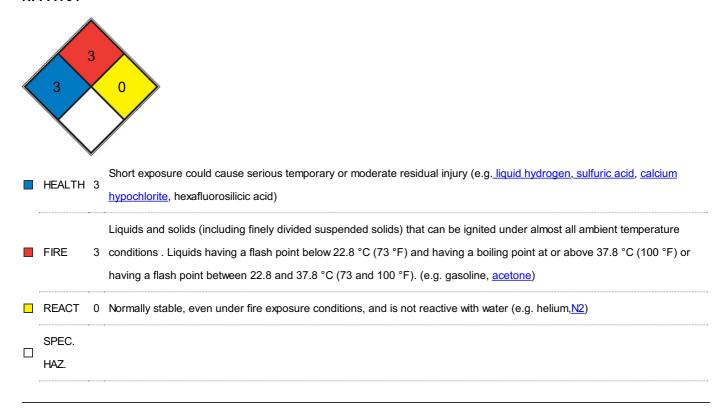
### Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

#### **Further information**

Remove container from danger zone and cool with water. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

### **NFPA 704**



# SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

from heat and sources of ignition.

Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

# **Environmental precautions**

Do not let product enter drains. Risk of explosion.

### Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb?). Dispose of properly. Clean up affected area.

#### Reference to other sections

For disposal see section 13.

# SECTION 7: Handling and storage

# Precautions for safe handling

### Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

### Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

### Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

# Conditions for safe storage, including any incompatibilities

# Storage conditions

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.

Light sensitive.

# Specific end use(s)

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

# SECTION 8: Exposure controls/personal protection

# control parameter

# Hazard composition and occupational exposure limits

Does not contain substances with occupational exposure limits.

# **Exposure controls**

# Personal protective equipment

#### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Splash contact Material: Viton?

Minimum layer thickness: 0,7 mm Break through time: 60 min Material tested:Vitoject? (KCL 890 / Aldrich Z677698, Size M)

**Body Protection** 

Flame retardant antistatic protective clothing.

Respiratory protection

required when vapours/aerosols are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type AX

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

Control of environmental exposure

Do not let product enter drains. Risk of explosion.

# SECTION 9: Physical and chemical properties

# Information on basic physicochemical properties

Appearance	liquid
Odour	No data available
Odour Threshold	0.17ppm
рН	No data available
Melting point/freezing point	Melting point/range: -72 °C - lit.
Initial boiling point and boiling range	63 °C - lit.
Flash point	-20 °C - DIN 51755 Part 1
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive	Upper explosion limit: 9,0 %(V) Lower explosion limit: 1,8 %(V)
limits	
Vapour pressure	No data available
Vapour density	No data available
Relative density	0.723 (20/4℃)
Water solubility	112g/l
Partition coefficient: n-octanol/water	No data available

Autoignition temperature	No data available
Decomposition temperature	No data available
Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
Explosive properties	No data available
Oxidizing properties	No data available

### Other safety information

No data available

# SECTION 10: Stability and reactivity

# Reactivity

Vapors may form explosive mixture with air.

# **Chemical stability**

The product is chemically stable under standard ambient conditions (room temperature) .

# Possibility of hazardous reactions

Caution! In contact with nitrites, nitrous acid possible liberation of nitrosamines! Violent reactions possible with:

Strong oxidizing agents perchlorates

peroxi compounds nitrites

Alcohols anhydrides

Acid anhydrides sodium hypochlorite

organic nitro compounds nitrosyl compounds acids

Risk of explosion with:

nitrates

# Conditions to avoid

Light. Warming.

# Incompatible materials

various plastics, various alloys

# Hazardous decomposition products

In the event of fire: see section 5

# SECTION 11: Toxicological information

# Information on toxicological effects

### **Acute toxicity**

absorption

Symptoms: 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.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 sensitization

Germ cell mutagenicity

Test Type: Ames test Result: negative Remarks: (National Toxicology Program)

Carcinogenicity

No data available

Reproductive toxicity

Specific target organ toxicity - single exposure Specific target organ toxicity - repeated exposure Aspiration hazard

# **SECTION 12: Ecological information**

### **Toxicity**

# Toxicity to fish

LC50 - Leuciscus idus (Golden orfe) - 46 - 68 mg/l - 96 h Remarks: (External MSDS)

Toxicity to daphnia EC50 - Daphnia - 37,9 mg/l - 48 h

and other aquatic invertebrates

Remarks: (External MSDS)

### Toxicity to algae

IC50 - Desmodesmus subspicatus (green algae) - 0,54 mg/l - 72 h Remarks: (External MSDS)

### Toxicity to bacteria

EC10 - activated sludge - 1.995 mg/l - 30 min

Remarks: (External MSDS)

### Persistence and degradability

Biodegradability Result: 75 % - Readily biodegradable.

(OECD Test Guideline 301F)

# Bioaccumulative potential

# Mobility in soil

#### 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.

# **Toxics Screening Level**

The initial threshold screening level (ITSL) for sec-butylamine is 5 µg/m3 based on an annual averaging time.

### Other adverse effects

Discharge into the environment must be avoided.

# **SECTION 13: Disposal considerations**

#### Waste treatment methods

# Incompatibilities

Incompatible with organic anhydrides; isocyanates, vinyl acetate; acrylates, substituted allyls; alkylene oxides; epichlorohydrin, ketones, aldehydes, alcohols, glycols, phenols, cresols, caprolactum solution. Attacks some metals in presence of moisture.

### **Product**

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

### **Waste Disposal**

Use a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. All federal, state, and local environmental regulations must be observed.

# SECTION 14: Transport information

### **UN number**

ADR/RID: 3286 IMDG: 3286 IATA: 3286

### **UN proper shipping name**

 $ADR/RID: FLAMMABLE\ LIQUID,\ TOXIC,\ CORROSIVE,\ N.O.S.\ (sec.-butylamine)\ IMDG:\ FLAMMABLE\ LIQUID,\ TOXIC,\ TOXIC$ 

(sec.-butylamine)

IATA: Flammable liquid, toxic, corrosive, n.o.s. (sec.-butylamine)

# Transport hazard class(es)

ADR/RID: 3 (6.1, 8) IMDG: 3 (6.1, 8) IATA: 3 (6.1)(8)

### Packaging group

ADR/RID: II IMDG: II IATA: II

# **Environmental hazards**

ADR/RID: no IMDG Marine pollutant: no IATA: no

# Special precautions for user

# **SECTION 15: Regulatory information**

### Safety, health and environmental regulations/legislation specific for the substance or mixture

#### Regulations on the Safety Management of Hazardous Chemicals

China Catalog of Hazardous chemicals 2015:Listed. website: https://www.mem.gov.cn/

#### Measures for Environmental Management of New Chemical Substances

European Inventory of Existing Commercial Chemical Substances (EINECS):Listed. website: https://echa.europa.eu/

United States Toxic Substances Control Act (TSCA) Inventory:Listed. website: https://www.epa.gov/

Korea Existing Chemicals List (KECL):Listed. website: http://ncis.nier.go.kr

EC Inventory:Listed.

New Zealand Inventory of Chemicals (NZIoC):Listed. website: https://www.epa.govt.nz/

Chinese Chemical Inventory of Existing Chemical Substances (China IECSC):Listed. website: https://www.mee.gov.cn/

Philippines Inventory of Chemicals and Chemical Substances (PICCS):Listed. website: https://emb.gov.ph/

Vietnam National Chemical Inventory:Listed. website: https://chemicaldata.gov.vn/

# SECTION 16: Other information

### Abbreviations and acronyms

CAS: Chemical Abstracts Service

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

IMDG: International Maritime Dangerous Goods

IATA: International Air Transportation Association

TWA: Time Weighted Average

STEL: Short term exposure limit

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

#### References

- [1] CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple
- [2] ChemlDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp
- [3] ECHA European Chemicals Agency, website: https://echa.europa.eu/
- [4] eChemPortal The Global Portal to Information on Chemical Substances by OECD, website:

http://www.echemportal.org/echemportal/index?pageID=0&request\_locale=en

- [5] ERG Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg
- [6] Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp
- [7] HSDB Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm
- [8] IARC International Agency for Research on Cancer, website: http://www.iarc.fr/
- [9] IPCS The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home

# 【10】 Sigma-Aldrich, website: https://www.sigmaaldrich.com/

### Disclaimer:

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.