

1660600

Revision: 19.05.2015  
Printing date: 07.07.2016

## 01 Identification of the substance/mixture and of the company/undertaking

- Product identifier
- Trade name:  
1-Amino-4-chloro-2-butyne · HCl
- Article number:  
new: 4010466    old: Q-1165
- CAS Number:  
77369-59-6
- Relevant identified uses of the substance or mixture and uses advised against
- Application of the substance / the preparation  
Laboratory chemicals
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:  
Bachem AG  
Hauptstrasse 144  
CH-4416 Bubendorf  
Switzerland  
E-mail msds@bachem.com  
Tel +41 58 595 2021  
Fax +41 58 595 2040
- Further information obtainable from:  
Department: Marketing
- Emergency telephone number:  
+41 44 251 51 51 (Tox Info Suisse)

## \* 02 Hazards identification

- Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008



GHS07

Acute Tox. 4 - H302 Harmful if swallowed.



GHS09

Aquatic Acute 1 - H400 Very toxic to aquatic life.

- Label elements
- Labelling according to Regulation (EC) No 1272/2008



GHS07



GHS09

- Signal word  
Warning
- Hazard statements  
H302 Harmful if swallowed.  
H400 Very toxic to aquatic life.
- Precautionary statements  
P264 Wash thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P273 Avoid release to the environment.

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- \* P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
- P330 Rinse mouth.
- P501 Dispose of contents/container in accordance with local/regional/ national/international regulations.
- Other hazards
- Results of PBT and vPvB assessment
- PBT:  
Not applicable.
- vPvB:  
Not applicable.

### 03 Composition/information on ingredients

- Chemical characterization: Substances
- CAS No.**                      **Description**  
77369-59-6                      1-Amino-4-chloro-2-butyne · HCl
- Identification number(s)
- EC number:  
-
- RTECS Number:  
-

### 04 First aid measures

- Description of first aid measures
- General information:  
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- After inhalation:  
Supply fresh air; consult doctor in case of complaints.
- After skin contact:  
Immediately wash with water and soap and rinse thoroughly.  
Seek immediate medical advice.
- After eye contact:  
Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing:  
Call for a doctor immediately.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed  
No further relevant information available.
- Indication of any immediate medical attention and special treatment needed  
No further relevant information available.

### 05 Firefighting measures

- Extinguishing media
- Suitable extinguishing agents:  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture  
No further relevant information available.
- Advice for firefighters
- Protective equipment:  
No special measures required.

### 06 Accidental release measures

- Personal precautions, protective equipment and emergency procedures  
Avoid formation of dust.  
Use respiratory protective device against the effects of fumes/dust/ aerosol.  
Wear protective clothing.
- Environmental precautions:

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Inform respective authorities in case of seepage into water course or sewage system.

Suppress gases/fumes/haze with water spray.

- Methods and material for containment and cleaning up:  
Dispose contaminated material as waste according to item 13.
- Reference to other sections

## 07 Handling and storage

- Handling:
  - Precautions for safe handling  
Open and handle receptacle with care.  
Prevent formation of dust.
  - Information about fire - and explosion protection:  
Keep respiratory protective device available.
- Conditions for safe storage, including any incompatibilities
- Storage:
  - Requirements to be met by storerooms and receptacles:  
No special requirements.
  - Information about storage in one common storage facility:  
Store away from foodstuffs.
  - Further information about storage conditions:  
Store in dry conditions.
  - Recommended storage temperature:  
2-8°C
  - Specific end use(s)  
No further relevant information available.

## 08 Exposure controls/personal protection

- Control parameters
- Ingredients with limit values that require monitoring at the workplace:
 

<b>CAS No.</b>	<b>Designation of material</b>
Not required.	
- Additional information:
  - The lists valid during the making were used as basis.
- Exposure controls
- Personal protective equipment:
  - General protective and hygienic measures:  
Keep away from foodstuffs, beverages and feed.  
Store protective clothing separately.
  - Respiratory protection:  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
  - Protection of hands:  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation  
Protective gloves
  - Material of gloves  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
  - Penetration time of glove material  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
  - Eye protection:  
Safety glasses

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## 09 Physical and chemical properties

### Information on basic physical and chemical properties

#### General Information

##### Appearance:

<b>Form:</b>	Powder
<b>Colour:</b>	Whitish
<b>Odour:</b>	Nearly odourless
<b>Odour threshold:</b>	Not determined.
<b>pH-value:</b>	Not determined.

#### Change in condition

<b>Melting point/Melting range:</b>	186 °C
<b>Boiling point/Boiling range:</b>	Undetermined.
<b>Flash point:</b>	Not applicable.
<b>Flammability (solid, gaseous):</b>	Not applicable.
<b>Ignition temperature:</b>	
<b>Decomposition temperature:</b>	Not determined.
<b>Self-igniting:</b>	Not determined.
<b>Danger of explosion:</b>	Not determined.

#### Explosion limits:

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.

<b>Vapour pressure:</b>	Not determined.
<b>Density:</b>	Not determined.

#### Solubility in / Miscibility with

<b>water:</b>	Not determined.
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#### Viscosity:

<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.

<b>Other information</b>	No further relevant information available.
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## 10 Stability and reactivity

- Reactivity
- Chemical stability
- Thermal decomposition / conditions to be avoided:  
No decomposition if used according to specifications.
- Possibility of hazardous reactions  
No dangerous reactions known.
- Conditions to avoid  
No further relevant information available.
- Incompatible materials:  
No further relevant information available.
- Hazardous decomposition products:  
No dangerous decomposition products known.

## 11 Toxicological information

- Information on toxicological effects
- Acute toxicity:  
No further relevant information available.
- Primary irritant effect:
- on the skin:  
No further relevant information available.
- on the eye:

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No further relevant information available.

- Sensitization:  
No sensitizing effects known.

## 12 Ecological information

- Toxicity
- Aquatic toxicity:  
No further relevant information available.
- Persistence and degradability  
No further relevant information available.
- Behaviour in environmental systems:
- Bioaccumulative potential  
No further relevant information available.
- Mobility in soil  
No further relevant information available.
- Ecotoxicological effects:
- Remark:  
Very toxic for fish
- Results of PBT and vPvB assessment
- PBT:  
Not applicable.
- vPvB:  
Not applicable.
- Other adverse effects  
No further relevant information available.

## 13 Disposal considerations

- Waste treatment methods
- Waste disposal key:  
18 02 05
- Uncleaned packaging:
- Recommendation:  
Disposal must be made according to official regulations.

## 14 Transport information

- UN-Number  
**ADR** UN3077  
**IMDG** UN3077  
**IATA** UN3077
- UN proper shipping name  
**ADR** 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (1-Amino-4-chloro-2-butyne · HCl)  
**IMDG** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (1-Amino-4-chloro-2-butyne · HCl)  
**IATA** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (1-Amino-4-chloro-2-butyne · HCl)
- Transport hazard class(es)  
**ADR**  
**Class** 9 (M7) Miscellaneous dangerous substances and articles.

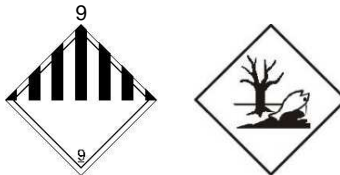
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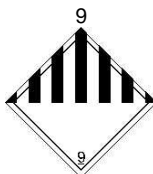
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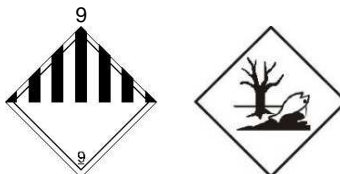
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**Label**

**IMDG**

9 Miscellaneous dangerous substances and articles.

**Class**
**Label**

**IATA**

9 Miscellaneous dangerous substances and articles.

**Class**
**Label**


- Packing group

**ADR**

III

**IMDG**

III

**IATA**

III

- Environmental hazards:

Not applicable.

- Special precautions for user

Warning: Miscellaneous dangerous substances and articles.

**Danger code (Kemler):**

90

**EMS Number:**

F-A,S-F

- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

- Transport/Additional information:

Not applicable.

**Excepted quantities (EQ):**

E1

**Limited quantities (LQ)**

5 kg

**Transport category**

3

**Tunnel restriction code**

E

- UN "Model Regulation":

UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (1-AMINO-4-CHLORO-2-BUTYNE · HCL), 9, III

## 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Chemical safety assessment:  
A Chemical Safety Assessment has not been carried out.

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Safety data sheet  
according to 1907/2006/EC, Article 31

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This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing MSDS:  
Department: Marketing
- Abbreviations and acronyms:  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
ICAO: International Civil Aviation Organisation  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)  
EINECS: European Inventory of Existing Commercial Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
RTECS: Registry of Toxic Effects of Chemical Substances  
vPvB: very Persistent and very Bioaccumulative