

# Aniline hydrochloride: sc-252377



The Power to Question

## MATERIAL SAFETY DATA SHEET

### 1 Identification of substance:

**Product Name:** Aniline hydrochloride  
**Catalog Number:** sc-252377  
**Supplier:** Santa Cruz Biotechnology, Inc.  
2145 Delaware Avenue  
Santa Cruz, California 95060  
800.457.3801 or 831.457.3800  
**Emergency:** ChemWatch  
Within the US & Canada: 877-715-9305  
Outside the US & Canada: +800 2436 2255  
(1-800-CHEMCALL) or call +613 9573 3112

### 2 Hazards identification

#### Classification of the substance or mixture



GHS06 Skull and crossbones

H301 Toxic if swallowed.  
H311 Toxic in contact with skin.  
H331 Toxic if inhaled.



GHS08 Health hazard

H341 Suspected of causing genetic defects.  
H351 Suspected of causing cancer.  
H372 Causes damage to organs through prolonged or repeated exposure.



GHS05 Corrosion

H318 Causes serious eye damage.



GHS09 Environment

H400 Very toxic to aquatic life.



GHS07

H317 May cause an allergic skin reaction.

#### Classification according to Directive 67/548/EEC or Directive 1999/45/EC



T; Toxic

R23/24/25-48/23/24/25: Toxic by inhalation, in contact with skin and if swallowed.  
Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.



Xn; Harmful

R40-68: Limited evidence of a carcinogenic effect. Possible risk of irreversible effects.



Xi; Irritant

R41-43: Risk of serious damage to eyes. May cause sensitization by skin contact.



N; Dangerous for the environment

R50: Very toxic to aquatic organisms.

#### Label elements

#### Labelling according to EU guidelines:

#### Code letter and hazard designation of product:

T Toxic

N Dangerous for the environment

#### Risk phrases:

23/24/25 Toxic by inhalation, in contact with skin and if swallowed.  
40 Limited evidence of a carcinogenic effect.  
41 Risk of serious damage to eyes.  
43 May cause sensitization by skin contact.  
48/23/24/25 Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.  
68 Possible risk of irreversible effects.  
50 Very toxic to aquatic organisms.

#### Safety phrases:

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
27 Take off immediately all contaminated clothing.  
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
45 In case of accident or if you feel unwell, seek medical advice immediately.  
61 Avoid release to the environment. Refer to special instructions/Safety data sheets  
63 In case of accident by inhalation: remove casualty to fresh air and keep at rest

#### Hazard description:

#### WHMIS classification



#### Classification system

#### HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

|            |   |                            |
|------------|---|----------------------------|
| HEALTH     | 2 | Health (acute effects) = 2 |
| FIRE       | 1 | Flammability = 1           |
| REACTIVITY | 1 | Reactivity = 1             |

#### Other hazards

#### Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

### 3 Composition/information on ingredients

#### Chemical characterization: Substances

#### (CAS#) Description:

Aniline hydrochloride (CAS# 142-04-1)

#### Identification number(s):

EINECS Number: 205-519-8

Index number: 612-009-00-2

### 4 First aid measures

#### Description of first aid measures

#### After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice.

#### 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 Seek immediate medical advice.

### 5 Firefighting measures

#### Extinguishing media

#### Suitable extinguishing agents

Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**Special hazards arising from the substance or mixture**

In case of fire, the following can be released:

Carbon monoxide and carbon dioxide

Nitrogen oxides (NOx)

Possibly Hydrogen cyanide (HCN)

Hydrogen chloride (HCl)

**Advice for firefighters**

**Protective equipment:**

Wear self-contained respirator.

Wear fully protective impervious suit.

## 6 Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

**Environmental precautions:**

Do not allow material to be released to the environment without proper governmental permits.

**Methods and material for containment and cleaning up:**

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

**Reference to other sections**

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## 7 Handling and storage

**Handling**

**Precautions for safe handling**

Keep container tightly sealed.

Store in cool, dry place in tightly closed containers.

Ensure good ventilation at the workplace.

**Information about protection against explosions and fires:** Keep ignition sources away.

**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 water/moisture.

Store away from oxidizing agents.

**Further information about storage conditions:**

This product is hygroscopic. Store at room temperature.

Keep container tightly sealed.

Store in cool, dry conditions in well sealed containers.

Protect from humidity and water.

## 8 Exposure controls/personal protection

**Additional information about design of technical systems:**

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

**Control parameters**

**Components with limit values that require monitoring at the workplace:** Not required.

**Additional information:** No data

**Exposure controls**

**Personal protective equipment**

**General protective and hygienic measures**

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

**Breathing equipment:** Use suitable respirator when high concentrations are present.

**Protection of hands:**

Impervious gloves

Check protective gloves prior to each use for their proper condition.

**Material of gloves**

The selection of suitable gloves not only depends on the material, but also on quality.

Quality will vary from manufacturer to manufacturer.

**Eye protection:** Safety glasses

**Body protection:** Protective work clothing.

## 9 Physical and chemical properties

**Information on basic physical and chemical properties**

**General Information**

**Appearance:**

**Form:** Crystalline powder

**Formula:** C<sub>6</sub>H<sub>5</sub>NH<sub>2</sub> • HCl

**Weight:** 129.59

|   |   |
|---|---|
| <b>pH-value:</b>                                  | Not applicable.                               |
| <b>Change in condition</b>                        |   |
| <b>Melting point/Melting range:</b>               | 196-200°C (385-392 °F)                        |
| <b>Boiling point/Boiling range:</b>               | Not determined                                |
| <b>Sublimation temperature / start:</b>           | Not determined                                |
| <b>Flash point:</b>                               | 193°C (379 °F)                                |
| <b>Flammability (solid, gaseous)</b>              | Not determined.                               |
| <b>Ignition temperature:</b>                      | Not determined                                |
| <b>Decomposition temperature:</b>                 | Not determined                                |
| <b>Auto igniting:</b>                             | Not determined.                               |
| <b>Danger of explosion:</b>                       | Product does not present an explosion hazard. |
| <b>Explosion limits:</b>                          |   |
| <b>Lower:</b>                                     | Not determined                                |
| <b>Upper:</b>                                     | Not determined                                |
| <b>Vapor pressure:</b>                            | Not applicable.                               |
| <b>Density at 20°C (68 °F):</b>                   | 1.221 g/cm <sup>3</sup> (10.189 lbs/gal)      |
| <b>Relative density</b>                           | Not determined.                               |
| <b>Vapour density</b>                             | Not applicable.                               |
| <b>Evaporation rate</b>                           | Not applicable.                               |
| <b>Solubility in / Miscibility with</b>           |   |
| <b>Water at 20°C (68 °F):</b>                     | 1070 g/l                                      |
| <b>Segregation coefficient (n-octanol/water):</b> | Not determined.                               |
| <b>Viscosity:</b>                                 |   |
| <b>dynamic:</b>                                   | Not applicable.                               |
| <b>kinematic:</b>                                 | Not applicable.                               |
| <b>Other information</b>                          | No further relevant information available.    |

## 10 Stability and reactivity

### Reactivity

#### Chemical stability

#### Thermal decomposition / conditions to be avoided:

Decomposition will not occur if used and stored according to specifications.

**Possibility of hazardous reactions** No dangerous reactions known

#### Incompatible materials:

Water/moisture

Oxidizing agents

#### Hazardous decomposition products:

Carbon monoxide and carbon dioxide

Nitrogen oxides

Hydrogen chloride (HCl)

Possibly Hydrogen cyanide (HCN)

## 11 Toxicological information

### Information on toxicological effects

#### Acute toxicity:

#### LD/LC50 values that are relevant for classification:

|                    |          |                                      |
|--------------------|----------|--------------------------------------|
| Oral               | LD50     | 841 mg/kg (mouse)<br>840 mg/kg (rat) |
| Irritation of skin | moderate | 500 mg/24H (rabbit)                  |
| Irritation of eyes | moderate | 20 mg/24H (rabbit)                   |

#### Primary irritant effect:

**on the skin:** May cause irritation

**on the eye:** Strong irritant with the danger of severe eye injury.

**Sensitization:** Sensitization possible through skin contact.

#### Other information (about experimental toxicology):

Tumorigenic effects have been observed on tests with laboratory animals.

Mutagenic effects have been observed on tests with mammals.

#### Subacute to chronic toxicity:

#### Subacute to chronic toxicity:

The Registry of Toxic Effects of Chemical Substances (RTECS) reports the following effects in laboratory animals:

Blood - methemoglobinemia-carboxyhemoglobin.

Blood - changes in spleen.

Blood - changes in erythrocyte (RBC) count.

Blood - tumors.

Endocrine - changes in spleen weight.

Nutritional and Gross Metabolic - changes in iron.

Vascular - tumors.

Reproductive - Specific Developmental Abnormalities - blood and lymphatic systems (including spleen and marrow).  
Reproductive - Maternal Effects - other effects.  
Reproductive - Fertility - post-implantation mortality (e.g. dead/or resorbed implants per total number of implants).  
Reproductive - Effects on Embryo or Fetus - fetotoxicity (except death, e.g., stunted fetus).  
Tumorigenic - carcinogenic by RTECS criteria.

**Additional toxicological information:**

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

Danger through skin absorption.

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

## 12 Ecological information

**Toxicity**

**Aquatic toxicity:** No further relevant information available.

**Persistence and degradability** No further relevant information available.

**Behavior in environmental systems:**

**Bioaccumulative potential** No further relevant information available.

**Mobility in soil** No further relevant information available.

**Ecotoxicological effects:**

**Remark:** Very toxic for aquatic organisms

**Additional ecological information:**

**General notes:**

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Do not allow material to be released to the environment without proper governmental permits.

Very toxic for aquatic organisms

**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**

**Recommendation** Consult state, local or national regulations to ensure proper disposal.

**Uncleaned packagings:**

**Recommendation:** Disposal must be made according to official regulations.

**Recommended cleansing agent:** Water, if necessary with cleansing agents.

## 14 Transport information

**DOT regulations:**



|   |  |
|---|--|
| <b>Hazard class:</b>                          | 6.1  |
| <b>Identification number:</b>                 | UN1548   |
| <b>Packing group:</b>                         | III  |
| <b>Proper shipping name (technical name):</b> | ANILINE HYDROCHLORIDE                            |
| <b>Label</b>                                  | 6.1  |
| <b>Remarks:</b>                               | Special marking with the symbol (fish and tree). |

**Land transport ADR/RID (cross-border)**



|                                 |                            |
|---------------------------------|----------------------------|
| <b>ADR/RID class:</b>           | 6.1 (T2) Toxic substances  |
| <b>Danger code (Kemler):</b>    | 60                         |
| <b>UN-Number:</b>               | 1548                       |
| <b>Packaging group:</b>         | III                        |
| <b>Special marking:</b>         | Symbol (fish and tree)     |
| <b>UN proper shipping name:</b> | 1548 ANILINE HYDROCHLORIDE |

**Maritime transport IMDG:**



**IMDG Class:** 6.1  
**UN Number:** 1548  
**Label** 6.1  
**Packaging group:** III  
**Marine pollutant:** Yes (P)  
Symbol (fish and tree)  
**Proper shipping name:** ANILINE HYDROCHLORIDE

**Air transport ICAO-TI and IATA-DGR:**



**ICAO/IATA Class:** 6.1  
**UN/ID Number:** 1548  
**Label** 6.1  
**Packaging group:** III  
**Proper shipping name:** ANILINE HYDROCHLORIDE

**UN "Model Regulation":** UN1548, ANILINE HYDROCHLORIDE, 6.1, III  
**Environmental hazards:** Environmentally hazardous substance, solid; Marine Pollutant  
**Special precautions for user** Warning: Toxic substances  
**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

## 15 Regulatory information

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

**Product related hazard informations:**

**Hazard symbols:**

T Toxic  
N Dangerous for the environment

**Risk phrases:**

23/24/25 Toxic by inhalation, in contact with skin and if swallowed.  
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**National regulations**

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.  
This product contains a chemical known to the state of California to cause cancer or reproductive toxicity.  
All components of this product are listed on the Canadian Domestic Substances List (DSL).

**Information about limitation of use:** For use only by technically qualified individuals.  
**Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information:

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.