

**1 Identification of substance****Product details**

**Trade name** **3-Amino-1-phenylbutane**  
**Stock number:** A18804  
L06537  
**Manufacturer/Supplier:** Alfa Aesar  
Shore Road  
Port of Heysham Industrial Park  
Heysham Lancashire LA3 2XY  
United Kingdom  
Office Tel: +44 (0) 1524 850506  
**Informing department:** Product safety department.  
**Emergency information:** Call Carechem 24 at +44 (0) 1865 407333

**2 Hazards identification****Hazard designation:**

T Toxic

**Information pertaining to particular dangers for man and environment**

R 24/25 Toxic in contact with skin and if swallowed.  
 R 34 Causes burns.  
 R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**GHS label elements****Danger**

H301 - Toxic if swallowed.  
 H311 - Toxic in contact with skin.

**Danger**

H314 - Causes severe skin burns and eye damage.

**Prevention:****Response:**

H412 - Harmful to aquatic life with long lasting effects.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P309 IF exposed or if you feel unwell:  
 P310 Immediately call a POISON CENTER or doctor/physician.

**3 Composition/information on ingredients****Chemical characterization:****Designation: (CAS#)****Identification number(s):****EINECS Number:**

3-Amino-1-phenylbutane (CAS# 22374-89-6)  
 244-942-2

**4 First aid measures****After inhalation**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

**After skin contact**

Seek immediate medical advice. Instantly wash with water and soap and rinse thoroughly.

**After eye contact**

Seek immediate medical advice.

**After swallowing**

Rinse opened eye for several minutes under running water. Then consult doctor. Seek immediate medical advice.

**5 Fire fighting measures****Suitable extinguishing agents****Special hazards caused by the material, its products of combustion or flue gases:**

CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

**Protective equipment:**

Can be released in case of fire:  
 Carbon monoxide and carbon dioxide  
 Nitrogen oxides (NOx)  
 Possibly HCN  
 Wear self-contained breathing apparatus.  
 Wear full protective suit.

**6 Accidental release measures****Person-related safety precautions:**

Wear protective equipment. Keep unprotected persons away.

**Measures for environmental protection:****Measures for cleaning/collecting:****Additional information:**

Ensure adequate ventilation  
 Do not allow material to be released to the environment without proper governmental permits.  
 Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
 Ensure adequate ventilation.  
 See Section 7 for information on safe handling  
 See section 8 for information on personal protection equipment.  
 See Section 13 for information on disposal.

**7 Handling and storage****Handling****Information for safe handling:**

Handle under dry protective gas.  
 Keep containers tightly sealed.  
 Store in cool, dry place in tightly closed containers.  
 Ensure good ventilation/exhaustion at the workplace.  
 Prevent formation of aerosols.

**Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

**Storage****Requirements to be met by storerooms and containers:****Information about storage in one common storage facility:**

No special requirements.

**Further information about storage conditions:**

Store away from oxidizing agents.  
 Do not store together with acids.  
 Store away from air.

Store under dry inert gas.  
 Keep container tightly sealed.

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Store in cool, dry conditions in well sealed containers.  
Store in a locked cabinet or with access restricted to technical experts or their assistants.  
This product is air sensitive.

**8 Exposure controls and 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.

**Components with critical values that require monitoring at the workplace:**

Not required.

**Additional information:**

No data

**Personal protective equipment****General protective and hygienic measures**

The usual precautionary measures should be adhered to in handling the chemicals.

Keep away from foodstuffs, beverages and food.  
Instantly remove any soiled and impregnated garments.  
Wash hands during breaks and at the end of the work.  
Avoid contact with the eyes and skin.

**Breathing equipment:**

Use breathing protection with high concentrations.

**Protection of hands:**

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

**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.

**Eye protection:**

Safety glasses

Face protection

**Body protection:**

Protective work clothing.

**9 Physical and chemical properties:****General Information**

**Form:** Liquid  
**Colour:** Colourless  
**Smell:** Amine-like

**Change in condition**

**Melting point/Melting range:** -50°C  
**Boiling point/Boiling range:** 221-222°C  
**Sublimation temperature / start:** Not determined

**Flash point:** 98°C**Ignition temperature:** 330°C**Decomposition temperature:** Not determined**Danger of explosion:** Product is not explosive.**Critical values for explosion:**

**Lower:** Not determined  
**Upper:** Not determined

**Steam pressure:** Not determined**Density at 20°C** 0.928 g/cm<sup>3</sup>**Solubility in / Miscibility with Water:** Slightly soluble**10 Stability and reactivity****Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

**Materials to be avoided:**

Oxidizing agents

Air

Carbon dioxide

Acids

**Dangerous reactions:**

No dangerous reactions known

**Dangerous products of decomposition:**

Carbon monoxide and carbon dioxide

Nitrous vitriol gases

Possibly HCN

**11 Toxicological information****Acute toxicity:****LD/LC50 values that are relevant for classification:**

Oral LD50 165 mg/kg (rat)

Dermal LD50 360 mg/kg (rat)

**Primary irritant effect:****on the skin:**

Caustic effect on skin and mucous membranes.

**on the eye:**

Strong caustic effect.

**Sensitization:**

No sensitizing effect known.

**Additional toxicological information:**

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

Danger by skin resorption.

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

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

**12 Ecological information:****Ecotoxicological effects:****Remark:**

Harmful to fish

**General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

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

Harmful to aquatic organisms

**13 Disposal considerations****Product:****Recommendation**

Consult state, local or national regulations for proper disposal.

Hand over to disposers of hazardous waste.

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Must be specially treated under adherence to official regulations.

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**Uncleaned packagings:  
Recommendation:**

Disposal must be made according to official regulations.

**14 Transport information****Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)**

**ADR/RID-GGVS/E Class:** 8 (CT1) Corrosive substances.  
**Kemler Number:** 86  
**UN-Number:** 2922  
**Packaging group:** III  
**Label:** 8+6.1  
**Designation of goods:** 2922 CORROSIVE LIQUID, TOXIC, N.O.S. (3-Amino-1-phenylbutane)

**Maritime transport IMDG/GGVSea:**

**IMDG/GGVSea Class:** 8  
**UN Number:** 2922  
**Label:** 8+6.1  
**Packaging group:** III  
**Marine pollutant:** No  
**Correct technical name:** CORROSIVE LIQUID, TOXIC, N.O.S. (3-Amino-1-phenylbutane)

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

**ICAO/IATA Class:** 8  
**UN/ID Number:** 2922  
**Label:** 8+6.1  
**Packaging group:** III  
**Correct technical name:** CORROSIVE LIQUID, TOXIC, N.O.S. (3-Amino-1-phenylbutane)

**UN "Model Regulation":**

UN2922, CORROSIVE LIQUID, TOXIC, N.O.S., 8 (6.1), III

**15 Regulatory information****Designation according to EC guidelines:****Code letter and hazard designation of product:**

T Toxic

**Risk phrases:**

24/25 Toxic in contact with skin and if swallowed.  
 34 Causes burns.  
 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety phrases:**

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
 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 (show the label where possible).  
 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

**National regulations****Information about limitation of use:**

For use only by technically qualified individuals.  
 Employment restrictions concerning young persons must be observed.

**Water hazard class:**

Water hazard class 1 (Self-assessment): slightly hazardous for water.

**16 Other information:**

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

**Department issuing data specification sheet:** Health, Safety and Environmental Department.**Contact:** Zachariah Holt**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 Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent