

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.08.2013

Revision: 05.08.2013

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

- **Product identifier** BDMA (Benzyldimethylamine)
- **Trade name: benzyldimethylamine, BDMA**
- **Article number:** AGR1060, AGR1061, AGR1062, AGR1062A, AGR1062B
- **CAS Number:**  
103-83-3
- **EC number:**  
203-149-1
- **Index number:**  
612-074-00-7
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the preparation:** Accelerator used in epoxy resins for microscopy.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Agar Scientific  
Elektron Technology UK Ltd  
Parsonage Lane  
Stansted CM24 8GF  
United Kingdom  
sales@agarscientific.com  
Tel: +44 (0) 1279 813 519



- **Further information obtainable from:** Technical Support
- **Emergency telephone number:** 24 hours: +44 (0)1856 407333

## 2 Hazards identification

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



GHS02 flame

Flam. Liq. 3      H226 Flammable liquid and vapour.



GHS05 corrosion

Skin Corr. 1B      H314 Causes severe skin burns and eye damage.



GHS07

Acute Tox. 4      H302 Harmful if swallowed.

Acute Tox. 4      H312 Harmful in contact with skin.

Acute Tox. 4      H332 Harmful if inhaled.

(Contd. on page 2)

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.08.2013

Revision: 05.08.2013

**Trade name: benzyldimethylamine, BDMA**

(Contd. of page 1)

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

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



C; Corrosive

R34: Causes burns.



Xn; Harmful

R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

R10-52/53: Flammable. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

• **Information concerning particular hazards for human and environment:** Not applicable.

• **Label elements**

• **Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

• **Hazard pictograms**



GHS02



GHS05



GHS07

• **Signal word** Danger

• **Hazard statements**

H226 Flammable liquid and vapour.

H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.

H314 Causes severe skin burns and eye damage.

H412 Harmful to aquatic life with long lasting effects.

• **Precautionary statements**

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

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

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 or doctor/physician.

P405 Store locked up.

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.

## 3 Composition/information on ingredients

• **Chemical characterization: Substances**

• **CAS No. Description**

103-83-3 benzyldimethylamine

• **Identification number(s)**

• **EC number:** 203-149-1

• **Index number:** 612-074-00-7

GB

(Contd. on page 3)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 07.08.2013

Revision: 05.08.2013

**Trade name: benzyldimethylamine, BDMA***(Contd. of page 2)*

### 4 First aid measures

- **Description of first aid measures**
- **General information:**  
Immediately remove any clothing soiled by the product.  
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. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**  
Call for a doctor immediately.  
Drink plenty of water and provide fresh air. 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.

### 5 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.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralizing agent.  
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** Ensure good ventilation/exhaustion at the workplace.

*(Contd. on page 4)*

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.08.2013

Revision: 05.08.2013

**Trade name: benzyldimethylamine, BDMA**

(Contd. of page 3)

- **Information about fire - and explosion protection:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.
- **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:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** 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.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.
- **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:**



Protective gloves

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

- **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:**



Tightly sealed goggles

GB

(Contd. on page 5)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 07.08.2013

Revision: 05.08.2013

**Trade name: benzyldimethylamine, BDMA**

(Contd. of page 4)

### 9 Physical and chemical properties

<ul style="list-style-type: none"> <li>· <b>Information on basic physical and chemical properties</b></li> <li>· <b>General Information</b></li> <li>· <b>Appearance:</b> <ul style="list-style-type: none"> <li>Form: Fluid</li> <li>Colour: Not determined.</li> </ul> </li> <li>· <b>Odour:</b> Characteristic</li> <li>· <b>Odour threshold:</b> Not determined.</li> </ul>	
· <b>pH-value:</b>	Not determined.
<ul style="list-style-type: none"> <li>· <b>Change in condition</b> <ul style="list-style-type: none"> <li>Melting point/Melting range: -75 °C</li> <li>Boiling point/Boiling range: 185 °C</li> </ul> </li> <li>· <b>Flash point:</b> 54 °C</li> <li>· <b>Flammability (solid, gaseous):</b> Not applicable.</li> <li>· <b>Ignition temperature:</b></li> <li>· <b>Decomposition temperature:</b> Not determined.</li> <li>· <b>Self-igniting:</b> Not determined.</li> <li>· <b>Danger of explosion:</b> Product is not explosive. However, formation of explosive air/vapour mixtures are possible.</li> <li>· <b>Explosion limits:</b> <ul style="list-style-type: none"> <li>Lower: Not determined.</li> <li>Upper: Not determined.</li> </ul> </li> <li>· <b>Vapour pressure at 20 °C:</b> 2.8 hPa</li> <li>· <b>Density at 20 °C:</b> 0.915 g/cm<sup>3</sup></li> <li>· <b>Relative density</b> Not determined.</li> <li>· <b>Vapour density</b> Not determined.</li> <li>· <b>Evaporation rate</b> Not determined.</li> <li>· <b>Solubility in / Miscibility with water:</b> Not miscible or difficult to mix.</li> <li>· <b>Partition coefficient (n-octanol/water):</b> Not determined.</li> <li>· <b>Viscosity:</b> <ul style="list-style-type: none"> <li>Dynamic: Not determined.</li> <li>Kinematic: Not determined.</li> </ul> </li> <li>· <b>Other information</b> No further relevant information available.</li> </ul>	

### 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.

GB

(Contd. on page 6)

Printing date 07.08.2013

Revision: 05.08.2013

Trade name: **benzylidimethylamine, BDMA**

(Contd. of page 5)

## 11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values relevant for classification:**

Oral	LD50	265 mg/kg (rat)
Dermal	LD50	1660 mg/kg (rabbit)
Inhalative	LC50/4 h	2.06 mg/l (rat)

- **Primary irritant effect:**

- **on the skin:** Caustic effect on skin and mucous membranes.

- **on the eye:** Strong caustic effect.

- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

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

## 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:** Harmful to fish

- **Additional ecological information:**

- **General notes:**

Water hazard class 2 (German Regulation) (Assessment by list): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralized.

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

Harmful to 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**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packaging:**

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

## 14 Transport information

- **UN-Number**

- **ADR, IMDG, IATA**

UN2619

(Contd. on page 7)

# Safety data sheet





## according to 1907/2006/EC, Article 31

Printing date 07.08.2013

Revision: 05.08.2013

**Trade name: benzyldimethylamine, BDMA**

(Contd. of page 6)

<ul style="list-style-type: none"> <li>· <b>UN proper shipping name</b></li> <li>· <b>ADR</b></li> <li>· <b>IMDG, IATA</b></li> </ul>	2619 BENZYLDIMETHYLAMINE BENZYLDIMETHYLAMINE
<ul style="list-style-type: none"> <li>· <b>Transport hazard class(es)</b></li> <li>· <b>ADR</b></li> </ul>	<div style="display: flex; justify-content: space-around; align-items: center;">   </div>
<ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul>	8 Corrosive substances. 8+3
<ul style="list-style-type: none"> <li>· <b>IMDG, IATA</b></li> </ul>	<div style="display: flex; justify-content: space-around; align-items: center;">   </div>
<ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul>	8 Corrosive substances. 8 + 3
<ul style="list-style-type: none"> <li>· <b>Packing group</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>	II
<ul style="list-style-type: none"> <li>· <b>Environmental hazards:</b></li> <li>· <b>Marine pollutant:</b></li> </ul>	No Yes (PP)
<ul style="list-style-type: none"> <li>· <b>Special precautions for user</b></li> <li>· <b>Danger code (Kemler):</b></li> <li>· <b>EMS Number:</b></li> </ul>	Warning: Corrosive substances. 83 F-E,S-C
<ul style="list-style-type: none"> <li>· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b></li> </ul>	Not applicable.
<ul style="list-style-type: none"> <li>· <b>Transport/Additional information:</b></li> </ul>	
<ul style="list-style-type: none"> <li>· <b>ADR</b></li> <li>· <b>Limited quantities (LQ)</b></li> <li>· <b>Transport category</b></li> <li>· <b>Tunnel restriction code</b></li> </ul>	1L 2 D/E
<ul style="list-style-type: none"> <li>· <b>UN "Model Regulation":</b></li> </ul>	UN2619, BENZYLDIMETHYLAMINE, 8 (3), II

### 15 Regulatory information

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

This information is based on our present knowledge and should assist the user with the safe handling of this material when properly applied. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing MSDS:** Sales department
- **Contact:**  
 sales@agarscientific.com  
 Tel: +44 (0) 1279 813 519

(Contd. on page 8)

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.08.2013

Revision: 05.08.2013

**Trade name: benzyldimethylamine, BDMA**

*(Contd. of page 7)*

· **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)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

PP: Severe Marine Pollutant

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

GB