

# Safety Data Sheet

According to 1907/2006/EC, Article 31

Revision: 07/10/2023

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

- **Product Identifier** – BDMA, Benzyldimethylamine
- **Article Number** - 21365
- **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/preparation:** Accelerator used in epoxy resins for microscopy.
- **Details of the supplier of the safety data sheet**

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## 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 vapor



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.

Aquatic Chronic 3

H412

Harmful to aquatic life with long lasting effects.

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

**Label elements**

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

The product has been classified and labelled according to the CLP regulation.

**Hazard pictograms**



**GHS02**



**GHS05**



**GHS07**

**Signal word** Danger

**Hazard statements**

H226	Flammable liquid and vapor
H302+H313+H332	Harmful if swallowed, if 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	benzyl dimethylamine

**Identification number(s):**

**EC number:** 302-149-1

**Index number:** 612-074-00-7

### 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 or oxygen; Keep patient warm and call for doctor if necessary.

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 medical help immediately.

Drink plenty of water and provide fresh air

**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 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:**

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

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

Dilute with plenty water.

Do not allow to enter sewers and surface or ground waters.

**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.

Open and handle receptacle with care.

Prevent formation of aerosols.

**Information about fire and explosion protection:** Keep ignition sources away. Do not smoke.

Protect against electrostatic discharges.

#### **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.

**Special 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

## 9. Physical and chemical properties

**Information on basic physical and chemical properties****General information****Appearance:**

**Form:** Liquid  
**Color:** Colorless

**Odor:** Characteristic

**Odor threshold:** Not determined

**pH value:** Not determined

**Change in condition**

**Melting point/Melting range:** -75°C

**Boiling point/Boiling range:** 185°C

**Flash point:** 54°C

**Flammability:** Not applicable

**Ignition temperature:**

**Decomposition temperature:** Not determined

**Self-igniting:** Not determined

**Danger of explosion:** Product does not present an explosion hazard. However, formation of explosive air/vapor mixtures are possible.

**Explosion limits:**

**Lower:** Not determined

**Upper:** Not determined

**Vapor pressure at 20°C:** 2.8 hPa

**Density at 20°C:** 0.915 g/cm<sup>3</sup>

**Relative density:** Not determined

**Vapor density:** Not determined

**Evaporation rate:** Not determined

**Solubility in/**

**Miscibility with water:** Not miscible or is difficult to mix.

**Partition coefficient:** Not determined

**Viscosity:**

**Dynamic:** Not determined

**Kinematic:** Not determined

**Other information:** No further relevant information available

## 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:

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

#### 111-30-8 glutaral

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:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Toxic, Harmful, Corrosive, Irritant

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

**Behavior 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, even in small quantities.

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

Danger to drinking water if even extremely 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**UN proper shipping name****ADR** 2619 Benzyldimethylamine**IMDG** Benzyldimethylamine**IATA** Benzyldimethylamine**Transport hazard class(es)****ADR, IMDG****Class** 8 Corrosive substances**Label** 8 + 3**IATA****Class** 8 Corrosive substances**Label** 8 + 3**Packing group****ADR, IMDG, IATA** II**Environmental hazards:****Marine pollutant:** No**Special precautions for user:** Warning: Corrosive substances**Danger code (Kemler):** 83**EMS Number:** F-E, S-C**Transport in bulk according  
to Annex II of MARPOL 73/78  
and the IBC Code:**

Not applicable

**Transport/Additional information:****ADR**

<b>Limited quantities (LQ)</b>	1L
<b>Transport category</b>	2
<b>Tunnel restriction code</b>	D/E

**UN “Model Regulation”:** 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.

**Contact**

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**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

**GHS:** Globally Harmonized System of Classification and Labelling of Chemicals

**EINECS:** European Inventory of Existing Commercial Chemical Substances

**ELINCS:** European List of Notified Chemical Substances

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

**LC50:** Lethal concentration, 50 percent

**LD50:** Lethal dose, 50 percent