

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 10.05.2023

Version number 1

Revision: 09.05.2023

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name:** *Benzyltrimethylamine*
- **Chemical Identification:** *N,N-dimethylbenzylamine*
- **Article number:** 1203
- **CAS Number:**
103-83-3
- **EC number:**
203-149-1
- **Index number:**
612-074-00-7
- **Registration number** 01-2119529232-48
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use SU3** Industrial uses: *Uses of substances as such or in preparations at industrial sites*
- **Environmental release category ERC6a** *Use of intermediate*
- **Application of the substance / the mixture**
Chemical.
Industrial use.
colors and paints
Additive
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Möller Chemie GmbH & Co. KG
Bürgerkamp 1
D-48565 Steinfurt
Tel.: 02551/9340-0
Fax: 02551/9340-60
- **Further information obtainable from:** *Product safety department*
- **1.4 Emergency telephone number:**
Poison Control Center Mainz - 24 hour emergency service - Tel.: +49 (0) 6131/19240

SECTION 2: Hazards identification

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



GHS02 flame

Flam. Liq. 3 *H226 Flammable liquid and vapour.*



GHS06 skull and crossbones

Acute Tox. 3 *H331 Toxic if inhaled.*



GHS05 corrosion

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



GHS09 environment

Aquatic Chronic 2 *H411 Toxic to aquatic life with long lasting effects.*

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GHS07

Acute Tox. 4 H302 Harmful if swallowed.
 Acute Tox. 4 H312 Harmful in contact with skin.

· 2.2 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 GHS06 GHS09

· Signal word Danger

· Hazard statements

H226 Flammable liquid and vapour.
 H302+H312 Harmful if swallowed or in contact with skin.
 H331 Toxic if inhaled.
 H314 Causes severe skin burns and eye damage.
 H411 Toxic to aquatic life with long lasting effects.

· Precautionary statements

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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/doctor.
 P321 Specific treatment (see on this label).
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· 2.3 Other hazards

The product does not contain any substance above the legal limits included on the list for endocrine disrupting properties established under Article 59(1) of Regulation (EC) No 1907/2006 or under Commission Delegated Regulation (EU) 2017/2100 or of Commission Regulation (EU) 2018/605 has endocrine disrupting properties.

· Results of PBT and vPvB assessment

· PBT:

The product does not contain any substances above legal limits that meet the criteria for PBT (persistent, bioaccumulative and toxic).

· vPvB:

The product does not contain any substances above legal limits that meet the criteria for vPvB (very persistent and very bioaccumulative).

SECTION 3: Composition/information on ingredients

· 3.1 Substances

· CAS No. Description

103-83-3 Benzyltrimethylamine

· Identification number(s)

· EC number: 203-149-1

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· **Index number:** 612-074-00-7

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Show this safety data sheet to the doctor in attendance.
- **After inhalation:**
Supply fresh air; consult doctor in case of complaints.
Seek medical treatment.
- **After skin contact:**
In case of contact with the skin, take off soiled, soaked clothing immediately and wash the skin immediately with plenty of water and soap.
Seek medical treatment.
- **After eye contact:**
Rinse opened eye for several minutes under running water. Then consult a doctor.
Remove any existing contact lenses if possible. Continue rinsing.
Seek medical treatment.
- **After swallowing:**
Do not induce vomiting. Rinse mouth immediately and then drink 200-300 ml of water, doctor's help
DO NOT ADMINISTER ACTIVATED CHARCOAL !
- **4.2 Most important symptoms and effects, both acute and delayed**
Causes burns through all routes of exposure. Difficulty breathing. Symptoms of overexposure may take the form of headache, dizziness, tiredness, nausea and vomiting: The product is a corrosive material. Gastric lavage or vomiting is contraindicated. A possible perforation of the stomach or esophagus must be investigated: if swallowed, it can cause severe swelling, severe damage to sensitive tissue and perforation.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** CO₂, powder or water spray. Fight larger fires with water spray.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Nitrogen oxides, carbon oxides
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Keep away from ignition sources.
Take measures against electrostatic charges.
Wear protective equipment. Keep unprotected persons away.
Provide adequate ventilation.
- **6.2 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.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomaceous earth, acid binder, universal binder, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Do not breathe vapor / aerosol.

· **Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

· **7.2 Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:**

Keep container tightly closed Keep us in a cool, well-ventilated place.

Protect from heat, UV radiation / sunlight

Store protected from frost.

· **Information about storage in one common storage facility:**

Store away from oxidising agents.

Store away from acids.

· **Further information about storage conditions:** Keep container tightly closed and label properly.

· **Storage class:**

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flammable

· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**

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

· **DNELs**

Benzyldimethylamine

INDEX no. 612-074-00-7 / EC no. 203-149-1 / CAS no. 103-83-3

DNEL long-term dermal (systemic), workers: 2.3 mg/kg

DNEL long-term inhalative (local), workers: 1 mg/m³

DNEL long-term inhalative (systemic), workers: 14.6 mg/m³

DNEL long-term dermal (systemic), consumer: 1.25 mg/kg

DNEL long-term inhalative (systemic), consumer: 43.7 mg/m³

· **PNECs**

Benzyldimethylamine

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PNEC aquatic, fresh water: 0.0048 mg/l

PNEC aquatic, marine water: 0.0004 mg/l

PNEC, soil: 0.0114 mg/kg

PNEC sewage treatment plant (STP): 543 mg/l

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Appropriate engineering controls** No further data; see item 7.

· **Individual protection measures, such as personal protective equipment**

· **General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Immediately remove all soiled and contaminated clothing

Avoid contact with the eyes and skin.

Do not inhale gases / fumes / aerosols.

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- **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.

- **Hand protection**



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.

Nitrile rubber, NBR

Butyl rubber, BR

- **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/face protection**



Tightly sealed goggles

- **Body protection:** Chemical work clothing. Flame-retardant and antistatic protective clothing.

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

· Physical state	<i>Fluid</i>
· Colour:	<i>Colourless</i>
· Odour:	<i>Amine-like</i>
· Odour threshold:	<i>Not determined.</i>
· Melting point/freezing point:	<i>-75 °C</i>
· Boiling point or initial boiling point and boiling range	<i>180 °C</i>
· Flammability	<i>Not applicable.</i>
· Lower and upper explosion limit	
· Lower:	<i>0.9 Vol %</i>
· Upper:	<i>6.3 Vol %</i>
· Flash point:	<i>57 °C</i>
· Decomposition temperature:	<i>Not determined.</i>
· pH (10 g/l) at 10 °C	<i>10</i>
· Viscosity:	
· Kinematic viscosity	<i>Not determined.</i>
· Dynamic at 20 °C:	<i>26.43 mPas</i>
· Solubility	
· water at 20 °C:	<i>8 g/l</i>
· Partition coefficient n-octanol/water (log value) at 25 °C	<i>1.98 log POW</i>
· Vapour pressure at 20 °C:	<i>2.136 hPa</i>
· Density and/or relative density	
· Density at 20 °C:	<i>0.9 g/cm³</i>

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· Relative density	<i>Not determined.</i>
· Vapour density	<i>Not determined.</i>
· 9.2 Other information	
· Appearance:	
· Form:	<i>Fluid</i>
· Important information on protection of health and environment, and on safety.	
· Auto-ignition temperature:	<i>250 °C</i>
· Explosive properties:	<i>Product is not explosive. However, formation of explosive air/vapour mixtures are possible.</i>
· Change in condition	
· Evaporation rate	<i>Not determined.</i>
· Information with regard to physical hazard classes	
· Explosives	<i>Void</i>
· Flammable gases	<i>Void</i>
· Aerosols	<i>Void</i>
· Oxidising gases	<i>Void</i>
· Gases under pressure	<i>Void</i>
· Flammable liquids	<i>Flammable liquid and vapour.</i>
· Flammable solids	<i>Void</i>
· Self-reactive substances and mixtures	<i>Void</i>
· Pyrophoric liquids	<i>Void</i>
· Pyrophoric solids	<i>Void</i>
· Self-heating substances and mixtures	<i>Void</i>
· Substances and mixtures, which emit flammable gases in contact with water	<i>Void</i>
· Oxidising liquids	<i>Void</i>
· Oxidising solids	<i>Void</i>
· Organic peroxides	<i>Void</i>
· Corrosive to metals	<i>Void</i>
· Desensitised explosives	<i>Void</i>

SECTION 10: Stability and reactivity

- **10.1 Reactivity** *No further relevant information available.*
- **10.2 Chemical stability**
The product is stable if the regulations / instructions for storage and handling are observed.
- **Thermal decomposition / conditions to be avoided:** *No decomposition if used according to specifications.*
- **10.3 Possibility of hazardous reactions** *No dangerous reactions known.*
- **10.4 Conditions to avoid**
Keep away from heat, hot surfaces, sparks, open flames and other types of ignition sources.
Do not smoke.
Hazardous decomposition products may form at high temperatures.
- **10.5 Incompatible materials:**
Strong oxidizing agents
acids
- **10.6 Hazardous decomposition products:**
Nitrogen oxides (NOx)
Thermal decomposition can release irritating and toxic gases and vapors; Carbon monoxide (CO), carbon dioxide (CO2)

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SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Harmful if swallowed or in contact with skin.

Toxic if inhaled.

LD/LC50 values relevant for classification:

Dermal	LD50	1,660 mg/kg (rabbit)
Inhalative	LC50/ 4h	2.06 mg/l (rat)

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/irritation

Causes severe skin burns and eye damage.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT-single exposure Based on available data, the classification criteria are not met.

STOT-repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.

11.2 Information on other hazards

Endocrine disrupting properties Substance is not listed.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

Toxicity to fish:

static test LC50 - *Pimephales promelas* (fat-headed minnow) - 37.8 mg / l - 96 h (OECD test guideline 203)

Toxicity to *Daphnia* and other aquatic invertebrates:

static test EC50 - *Daphnia magna* (Big water flea) -> 100 mg / l - 48 h (Regulation (EC) No. 440/2008, Appendix, C.2)

Toxicity to algae:

Static test EC50 - *Desmodesmus subspicatus* (green algae) - 1.34 mg / l - 72 h (Directive 67/548 / EEC, Annex V, C.3.)

static test NOEC - *Desmodesmus subspicatus* (green algae) - 0.24 mg / l - 72 h (Directive 67/548 / EEC, Annex V, C.3.)

Toxicity to bacteria:

static test EC50 - *Pseudomonas putida* - 749.6 mg / l - 17 h (DIN 38412) EC50 - bacteria - 530 mg / l - 17 h

Notes: (external safety data sheet)

12.2 Persistence and degradability Not easily biodegradable

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

12.5 Results of PBT and vPvB assessment

PBT: The product is not considered to be persistent, bioaccumulating nor toxic (PBT).

vPvB: The product is not considered to be persistent or very bioaccumulative (vPvB).

12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse 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 unneutralised.

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

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Harmful to aquatic organisms

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SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Disposal according to local regulations.
This product and its container must be disposed of as hazardous waste.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- | | |
|--|---|
| · 14.1 UN number or ID number
· ADR, IMDG, IATA | UN2619 |
| · 14.2 UN proper shipping name
· ADR
· IMDG, IATA | 2 6 1 9 B E N Z Y L D I M E T H Y L A M I N E ,
E N V I R O N M E N T A L L Y H A Z A R D O U S
B E N Z Y L D I M E T H Y L A M I N E |
| · 14.3 Transport hazard class(es)
· ADR |  |
| · Class
· Label | 8 (CF1) Corrosive substances.
8+3 |
| · IMDG |  |
| · Class
· Label | 8 Corrosive substances.
8/3 |
| · IATA |  |
| · Class
· Label | 8 Corrosive substances.
8 (3) |
| · 14.4 Packing group
· ADR, IMDG, IATA | II |
| · 14.5 Environmental hazards:
· Marine pollutant:
· Special marking (ADR): | Environmentally hazardous substance, liquid
No
Symbol (fish and tree) |
| · 14.6 Special precautions for user
· Hazard identification number (Kemler code):
· EMS Number: | Warning: Corrosive substances.
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F-E,S-C |

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· Stowage Category	A
· Stowage Code	SW1 Protected from sources of heat. SW2 Clear of living quarters.
· Segregation Code	SG35 Stow "separated from" SGG1-acids
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· Transport category	2
· Tunnel restriction code	D/E
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 2619 BENZYLDMETHYLAMINE, 8 (3), II, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** Substance is not listed.
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 40
- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**
Substance is not listed.
- **REGULATION (EU) 2019/1148**
- **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**
Substance is not listed.
- **Annex II - REPORTABLE EXPLOSIVES PRECURSORS** Substance is not listed.
- **Regulation (EC) No 273/2004 on drug precursors** Substance is not listed.
- **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**
Substance is not listed.
- **National regulations:**
- **Other regulations, limitations and prohibitive regulations**
The product is subject to Annex 2 of the Chemicals Prohibition Ordinance (ChemVerbotsV) - requirements in relation to the levy.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has been carried out.

SECTION 16: Other information

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.

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· **Department issuing SDS:** Product safety department

· **Contact:** Mrs. Steyer

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international 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 Harmonised 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)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Acute Tox. 3: Acute toxicity – Category 3

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

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