

# Safety data sheet

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

Printing date 19.07.2023

Version number 1

Revision: 19.07.2023

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

- **1.1 Product identifier**
- **Trade name:** Benzyltrimethylammonium chloride solution 60 %
- **Article number:** 1016
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Chemical.
- **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**



GHS06 skull and crossbones

Acute Tox. 3      H301 Toxic if swallowed.

Acute Tox. 3      H311 Toxic in contact with skin.



GHS08 health hazard

Muta. 2      H341 Suspected of causing genetic defects.



GHS07

Acute Tox. 4      H332 Harmful if inhaled.

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

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS06      GHS08

- **Signal word** Danger
- **Hazard-determining components of labelling:**  
benzyltrimethylammonium chloride
- **Hazard statements**  
H301+H311 Toxic if swallowed or in contact with skin.  
H332      Harmful if inhaled.  
H341      Suspected of causing genetic defects.

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H412 Harmful to aquatic life with long lasting effects.

· **Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P321 Specific treatment (see on this label).

P330 Rinse mouth.

P361+P364 Take off immediately all contaminated clothing and wash it before reuse.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Additional information:**

EUH070 Toxic by eye contact.

· **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

· **3.2 Mixtures**

· **Description:** Mixture: consisting of the following components.

· **Dangerous components:**

CAS: 56-93-9	benzyltrimethylammonium chloride	60.0%
EINECS: 200-300-3	 Acute Tox. 3, H301;  Acute Tox. 3, H311;  Muta. 2, H341;  Acute Tox. 4, H332; Aquatic Chronic 3, H412	

· **Additional information:**

EINECS-No: 200-300-3 Benzyltrimethylammoniumchloride

REACH-Registration-No: 01-2119963367-27

### SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **After inhalation:** Supply fresh air or oxygen; call for doctor.

· **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.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:**

Rinse out mouth and then drink plenty of water.

Call for a doctor immediately.

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

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### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Water, foam, alcohol-resistant foam, fire extinguishing powder
- **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:  
Carbon monoxide, carbon dioxide  
Nitrogen oxides (NO<sub>x</sub>)  
Hydrogen chloride (HCl)
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear fully protective suit.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Avoid contact with eyes and skin  
Do not inhale vapors.
- **6.2 Environmental precautions:** 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.  
See Section 13 for disposal information.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Avoid contact with skin, eyes and clothing.
- **Information about fire - and explosion protection:** Usual preventive fire protection measures.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Keep container tightly closed and store in a dry and well-ventilated place.
- **Information about storage in one common storage facility:** See section 10.5
- **Further information about storage conditions:**  
Keep container tightly sealed.  
Polyethylene container.  
Store in dry conditions.
- **Storage class:** 6.1 D
- **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:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.

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**· 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:**

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.

**· 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.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

**· Material of gloves**

Neoprene gloves

Nitrile rubber, NBR

PVC 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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**· 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 protective suit

## SECTION 9: Physical and chemical properties

**· 9.1 Information on basic physical and chemical properties****· General Information****· Physical state**

Fluid

**· Colour:**

colorless to light yellow

**· Odour:**

Amine-like

**· Odour threshold:**

Not determined.

**· Melting point/freezing point:**

Undetermined.

**· Boiling point or initial boiling point and boiling range**

No data available

**· Flammability**

Not applicable.

**· Lower and upper explosion limit****· Lower:**

Not determined.

**· Upper:**

Not determined.

**· Flash point:**

No data available.

**· Decomposition temperature:**

Not determined.

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· <i>pH at 20 °C</i>	6-8
· <i>Viscosity:</i>	
· <i>Kinematic viscosity</i>	<i>Not determined.</i>
· <i>Dynamic:</i>	<i>Not determined.</i>
· <i>Solubility</i>	
· <i>water:</i>	<i>Fully miscible.</i>
· <i>Partition coefficient n-octanol/water (log value)</i>	<i>Not determined.</i>
· <i>Vapour pressure at 20 °C:</i>	<i>&lt; 0.0001 hPa</i>
· <i>Density and/or relative density</i>	
· <i>Density at 20 °C:</i>	<i>1,070 - 1,080 g/cm<sup>3</sup></i>
· <i>Relative density</i>	<i>Not determined.</i>
· <i>Vapour density</i>	<i>Not determined.</i>

· <b>9.2 Other information</b>	
· <i>Appearance:</i>	
· <i>Form:</i>	<i>Fluid</i>
· <i>Important information on protection of health and environment, and on safety.</i>	
· <i>Auto-ignition temperature:</i>	<i>Product is not selfigniting.</i>
· <i>Explosive properties:</i>	<i>Product does not present an explosion hazard.</i>
· <i>Solvent content:</i>	
· <i>VOC (EC)</i>	<i>0,00 %</i>
· <i>Change in condition</i>	
· <i>Evaporation rate</i>	<i>Not determined.</i>

· <b>Information with regard to physical hazard classes</b>	
· <i>Explosives</i>	<i>Void</i>
· <i>Flammable gases</i>	<i>Void</i>
· <i>Aerosols</i>	<i>Void</i>
· <i>Oxidising gases</i>	<i>Void</i>
· <i>Gases under pressure</i>	<i>Void</i>
· <i>Flammable liquids</i>	<i>Void</i>
· <i>Flammable solids</i>	<i>Void</i>
· <i>Self-reactive substances and mixtures</i>	<i>Void</i>
· <i>Pyrophoric liquids</i>	<i>Void</i>
· <i>Pyrophoric solids</i>	<i>Void</i>
· <i>Self-heating substances and mixtures</i>	<i>Void</i>
· <i>Substances and mixtures, which emit flammable gases in contact with water</i>	<i>Void</i>
· <i>Oxidising liquids</i>	<i>Void</i>
· <i>Oxidising solids</i>	<i>Void</i>
· <i>Organic peroxides</i>	<i>Void</i>
· <i>Corrosive to metals</i>	<i>Void</i>
· <i>Desensitised explosives</i>	<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:** *Stable under normal conditions.*
- **10.3 Possibility of hazardous reactions** *No dangerous reactions known.*
- **10.4 Conditions to avoid** *Avoid all sources of ignition: heat, sparks, open flames.*
- **10.5 Incompatible materials:**  
*Strong oxidizing agents*  
*Strong bases*
- **10.6 Hazardous decomposition products:**  
*Hydrogen chloride (HCl)*

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Nitrogen oxides (NO<sub>x</sub>)· **Additional information:** Contact with water produces flammable gases.

### SECTION 11: Toxicological information

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

Toxic if swallowed or in contact with skin.

Harmful if inhaled.

· **LD/LC50 values relevant for classification:****ATE (Acute Toxicity Estimates)**

Dermal	LD50	500 mg/kg
Inhalative	LC50/ 4h	2.5 mg/l

**56-93-9 benzyltrimethylammonium chloride**

Dermal	LD50	300 mg/kg (ATE)
Inhalative	LC50/ 4h	1.5 mg/l (ATE)

· **Skin corrosion/irritation** Based on available data, the classification criteria are not met.· **Serious eye damage/irritation** Based on available data, the classification criteria are not met.· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.· **Germ cell mutagenicity**

Suspected of causing genetic defects.

· **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**

None of the ingredients is listed.

### SECTION 12: Ecological information

· **12.1 Toxicity**· **Aquatic toxicity:**LC50/48 h > 1000 mg/l (*Oryzias latipes*)EC50/48 h: 11,94 mg/l (*Daphnia magna*)

Harmful to aquatic organisms.

· **12.2 Persistence and degradability** 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** For information on endocrine disrupting properties see section 11.· **12.7 Other adverse effects**· **Remark:** Harmful to fish· **Additional ecological information:**· **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

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

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**SECTION 13: Disposal considerations**

- **13.1 Waste treatment methods**
- **Recommendation** Disposal according to local regulations.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

**SECTION 14: Transport information**

· <b>14.1 UN number or ID number</b> · <b>ADR, IMDG, IATA</b>	UN2810
· <b>14.2 UN proper shipping name</b> · <b>ADR</b> · <b>IMDG, IATA</b>	2810 TOXIC LIQUID, ORGANIC, N.O.S. (benzyltrimethylammonium chloride) TOXIC LIQUID, ORGANIC, N.O.S. (benzyltrimethylammonium chloride)
· <b>14.3 Transport hazard class(es)</b> · <b>ADR</b>	
	
· <b>Class</b> · <b>Label</b>	6.1 (T1) Toxic substances. 6.1
· <b>IMDG, IATA</b>	
	
· <b>Class</b> · <b>Label</b>	6.1 Toxic substances. 6.1
· <b>14.4 Packing group</b> · <b>ADR, IMDG, IATA</b>	III
· <b>14.5 Environmental hazards:</b> · <b>Marine pollutant:</b>	No
· <b>14.6 Special precautions for user</b> · <b>Hazard identification number (Kemler code):</b> · <b>EMS Number:</b> · <b>Stowage Category</b> · <b>Stowage Code</b>	Warning: Toxic substances. 60 F-A,S-A A SW2 Clear of living quarters.
· <b>14.7 Maritime transport in bulk according to IMO instruments</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>ADR</b> · <b>Limited quantities (LQ)</b>	5L

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· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>Transport category</b>	2
· <b>Tunnel restriction code</b>	E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5L
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>UN "Model Regulation":</b>	UN 2810 TOXIC LIQUID, ORGANIC, N.O.S. (BENZYLTRIMETHYLAMMONIUM CHLORIDE), 6.1, III

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
No further relevant information available.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **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.

- **Relevant phrases**  
H301 Toxic if swallowed.  
H311 Toxic in contact with skin.  
H332 Harmful if inhaled.  
H341 Suspected of causing genetic defects.  
H412 Harmful to aquatic life with long lasting effects.
- **Department issuing SDS:** Product safety department
- **Contact:** Mrs. Steyer
- **Abbreviations and acronyms:**  
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
ICAO: International Civil Aviation Organisation  
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  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
VOC: Volatile Organic Compounds (USA, EU)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Acute Tox. 3: Acute toxicity – Category 3  
Acute Tox. 4: Acute toxicity – Category 4  
Muta. 2: Germ cell mutagenicity – Category 2  
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3