



## SAFETY DATA SHEET

### BENZALKONIUM CHLORIDE

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Compilation date: 30/10/2017

Revision No: 5

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

##### 1.1. Product identifier

**Product name:** BENZALKONIUM CHLORIDE

**CAS number:** 68424-85-1

**EINECS number:** 270-325-2

**Synonyms:** ALKYLDIMETHYLBENZALKONIUM CHLORIDE

##### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Use of substance / mixture:** Industrial Biocide

##### 1.3. Details of the supplier of the safety data sheet

**Company name:** ZOONO LIMITED

31 Hannigan Drive

St Johns

Auckland 1072

NEW ZEALAND

**Tel:** 0064 21 65 99 77

**Email:** [info@zoono.com](mailto:info@zoono.com)

##### 1.4. Emergency telephone number

**Emergency tel:** +64 21 65 99 77

(office hours only)

#### Section 2: Hazards identification

##### 2.1. Classification of the substance or mixture

**Classification under CLP:** Acute Tox. 4: H302; Aquatic Chronic 1: H410; Skin Corr. 1B: H314; Aquatic Acute 1: H400

**Most important adverse effects:** Harmful if swallowed. Causes severe skin burns and eye damage. Very toxic to aquatic life with long lasting effects.

##### 2.2. Label elements

**Label elements:**

**Hazard statements:** H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H410: Very toxic to aquatic life with long lasting effects.

**Signal words:** Danger

**Hazard pictograms:** GHS05: Corrosion

GHS07: Exclamation mark

GHS09: Environmental

[cont...]

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**Precautionary statements:** P273: Avoid release to the environment.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P305+351+338: 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/physician.

### 2.3. Other hazards

**PBT:** This product is not identified as a PBT/vPvB substance.

## Section 3: Composition/information on ingredients

### 3.2. Mixtures

#### Hazardous ingredients:

C12-C16 ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE

EINECS	CAS	PBT / WEL	CLP Classification	Percent
270-325-2	68424-85-1	-	Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Skin Corr. 1B: H314; Acute Tox. 4: H302	30-50%

## Section 4: First aid measures

### 4.1. Description of first aid measures

**Skin contact:** Wash immediately with plenty of soap and water.

**Eye contact:** Bathe the eye with running water for 15 minutes.

**Ingestion:** Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Transfer to hospital as soon as possible.

**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

### 4.2. Most important symptoms and effects, both acute and delayed

**Skin contact:** There may be mild irritation at the site of contact.

**Eye contact:** There may be irritation and redness.

**Ingestion:** There may be irritation of the throat.

**Inhalation:** No symptoms.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

### 4.3. Indication of any immediate medical attention and special treatment needed

**Immediate / special treatment:** Eye bathing equipment should be available on the premises.

[cont...]

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### Section 5: Fire-fighting measures

#### 5.1. Extinguishing media

**Extinguishing media:** Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

#### 5.2. Special hazards arising from the substance or mixture

**Exposure hazards:** In combustion emits toxic fumes.

#### 5.3. Advice for fire-fighters

**Advice for fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

### Section 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions:** Refer to section 8 of SDS for personal protection details. Turn leaking containers leak-side up to prevent the escape of liquid. Mark out the contaminated area with signs and prevent access to unauthorised personnel.

#### 6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding.

#### 6.3. Methods and material for containment and cleaning up

**Clean-up procedures:** Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

#### 6.4. Reference to other sections

**Reference to other sections:** Refer to section 8 of SDS.

### Section 7: Handling and storage

#### 7.1. Precautions for safe handling

**Handling requirements:** Avoid the formation or spread of mists in the air. Avoid direct contact with the substance.

#### 7.2. Conditions for safe storage, including any incompatibilities

**Storage conditions:** Store in a cool, well ventilated area. Keep container tightly closed. The floor of the storage room must be impermeable to prevent the escape of liquids.

#### 7.3. Specific end use(s)

**Specific end use(s):** No data available.

### Section 8: Exposure controls/personal protection

#### 8.1. Control parameters

**Workplace exposure limits:** No data available.

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### DNEL/PNEC Values

**DNEL / PNEC** No data available.

### 8.2. Exposure controls

**Engineering measures:** The floor of the storage room must be impermeable to prevent the escape of liquids.

**Respiratory protection:** Respiratory protection not required.

**Hand protection:** Protective gloves.

**Eye protection:** Safety glasses. Ensure eye bath is to hand.

**Skin protection:** Protective clothing.

## Section 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

**State:** Liquid

**Colour:** Colourless to Pale Yellow

**Odour:** Faint Almond

**Evaporation rate:** No data available.

**Oxidising:** No data available.

**Solubility in water:** Miscible in all proportions

**Viscosity:** No data available.

**Boiling point/range°C:** No data available.

**Melting point/range°C:** No data available.

**Flammability limits %: lower:** No data available.

**upper:** No data available.

**Flash point°C:** No data available.

**Part.coeff. n-octanol/water:** No data available.

**Autoflammability°C:** No data available.

**Vapour pressure:** No data available.

**Relative density:** No data available.

**pH:** 6 - 8

**VOC g/l:** No data available.

### 9.2. Other information

**Other information:** No data available.

## Section 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity:** Stable under recommended transport or storage conditions.

### 10.2. Chemical stability

**Chemical stability:** Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

**Hazardous reactions:** Hazardous reactions will not occur under normal transport or storage conditions.

Decomposition may occur on exposure to conditions or materials listed below.

### 10.4. Conditions to avoid

**Conditions to avoid:** Heat.

[cont...]

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### 10.5. Incompatible materials

**Materials to avoid:** Strong oxidising agents. Strong acids.

### 10.6. Hazardous decomposition products

**Haz. decomp. products:** In combustion emits toxic fumes.

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

**Hazardous ingredients:**

#### C12-C16 ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE

DERMAL	RBT	LD50	3340	mg/kg
ORAL	RAT	LD50	344	mg/kg

**Relevant hazards for substance:**

Hazard	Route	Basis
Acute toxicity (ac. tox. 4)	ING	Hazardous: calculated
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated

### Symptoms / routes of exposure

**Skin contact:** There may be mild irritation at the site of contact.

**Eye contact:** There may be irritation and redness.

**Ingestion:** There may be irritation of the throat.

**Inhalation:** No symptoms.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

## Section 12: Ecological information

### 12.1. Toxicity

**Hazardous ingredients:**

#### C12-C16 ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE

ALGAE	96H ErC50	0.049	mg/l
Daphnia magna	48H EC50	0.016	mg/l
FISH	96H LC50	0.28	mg/l

### 12.2. Persistence and degradability

**Persistence and degradability:** Biodegradable.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential:** No bioaccumulation potential.

[cont...]

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**12.4. Mobility in soil**

**Mobility:** Readily absorbed into soil.

**12.5. Results of PBT and vPvB assessment**

**PBT identification:** This product is not identified as a PBT/vPvB substance.

**12.6. Other adverse effects**

**Other adverse effects:** No data available.

**Section 13: Disposal considerations**

**13.1. Waste treatment methods**

**Disposal operations:** Transfer to a suitable container and arrange for collection by specialised disposal company.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

**Section 14: Transport information**

**14.1. UN number**

**UN number:** UN1760

**14.2. UN proper shipping name**

**Shipping name:** CORROSIVE LIQUID, N.O.S.  
(ALKYLDIMETHYLBENZALKONIUMCHLORIDE)

**14.3. Transport hazard class(es)**

**Transport class:** 8

**14.4. Packing group**

**Packing group:** II

**14.5. Environmental hazards**

**Environmentally hazardous:** Yes

**Marine pollutant:** Yes

**14.6. Special precautions for user**

**Special precautions:** No special precautions.

**Tunnel code:** E

**Transport category:** 2

**Section 15: Regulatory information**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**Specific regulations:** Not applicable.

[cont...]

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### 15.2. Chemical Safety Assessment

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

### Section 16: Other information

#### Other information

**Other information:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

\* indicates text in the SDS which has changed since the last revision.

**Phrases used in s.2 and s.3:** H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.



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