

Safety Data Sheet **BENZALKONIUM CHLORIDE Solution**

SDS no. BW96FT0Q • Version 1.0 • Date of issue: 2026-03-09

SECTION 1: Identification

GHS Product identifier

Product name BENZALKONIUM CHLORIDE Solution

Other means of identification

Product Product Code

BENZALKONIUM CHLORIDE 10% Solution BL010

BENZALKONIUM CHLORIDE 50% Solution TG BT064

Alkyl dimethyl benzyl ammonium chloride

Recommended use of the chemical and restrictions on use

Fungicide, surface antiseptic, cationic detergent and laboratory reagent.

Supplier's details

Name ChemSupply Australia Pty Ltd
Address 38-50 Bedford Street
5013 Gillman South Australia
Australia

Telephone 08 8440 2000
email www.chemsupply.com.au

Emergency phone number

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

SECTION 2: Hazard identification

General hazard statement

Dangerous goods of Class 8 (Corrosive) are incompatible in a placard load with any of the following:

Class 1, Class 4.3, Class 5, Class 6, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids, Class 7; and are incompatible with food and food packaging in any quantity.

Classified as dangerous goods according to the Australian Dangerous Goods Code (ADG).

Classified as Hazardous according to the Globally Harmonised System of classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classification of the substance or mixture

GHS classification in accordance with: UN GHS revision 7

- Acute toxicity, oral, Cat. 4
- Hazardous to the aquatic environment, short-term (acute), Cat. 1
- Serious eye damage/eye irritation, Cat. 1

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- Corrosive to metals, Cat. 1
- Skin corrosion/irritation, Cat. 1B

GHS label elements, including precautionary statements

Pictograms



Signal word

Danger

Hazard statement(s)

H302
H313
H314
H290
H400

Harmful if swallowed
May be harmful in contact with skin
Causes severe skin burns and eye damage
May be corrosive to metals
Very toxic to aquatic life

Precautionary statement(s)

P260
P264
P270
P280
P301+P312
P301+P330+P331
P302+P312
P303+P361+P353

P304+P340
P305+P351+P338

Do not breathe dust/fume/gas/mist/vapors/spray.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/protective clothing/eye protection/face protection.
IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell,
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN: Call a POISON CENTER/doctor/...if you feel unwell.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER/doctor/physician
Specific treatment (see ... on this label).
Rinse mouth.
Wash contaminated clothing before reuse.
Store locked up.
Dispose of contents/container to an approved waste disposal facility
Keep only in original packaging.
Absorb spillage to prevent material-damage.
Store in a corrosive resistant/... container with a resistant inner liner.
Avoid release to the environment.
Collect spillage.

P310
P321
P330
P363
P405
P501
P234
P390
P406
P273
P391

SECTION 3: Composition/information on ingredients

Mixtures

Component	Identification	Weight %
Water	CAS no.: 7732-18-5 EC no.: 231-791-2	50 - <= 90 %
Benzalkonium chloride	CAS no.: 8001-54-5 EC no.: 264-151-6 Index no.: 612-140-00-5	10 - <= 50 %

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SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice	For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor (at once). First Aid Facilities: Maintain eyewash fountain in work area.
If inhaled	If inhaled, remove from contaminated area to fresh air immediately, avoid becoming a casualty. Make patient comfortable, keep warm and at rest until fully recovered. If breathing is difficult (or develops a bluish skin discolouration), supply oxygen by a qualified person. Apply artificial respiration with a respiratory medical device if not breathing. Do not use mouth to mouth resuscitation. Immediately medical attention is required.
In case of skin contact	Wash affected areas with copious quantities of water immediately for at least 15 minutes while removing contaminated clothing and shoes. Seek medical attention.
In case of eye contact	If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Seek medical attention.
If swallowed	Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek immediate medical advice.

Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of immediate medical attention and special treatment needed, if necessary

For advice, contact the National Poisons Information Centre (Phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Small fire: Use dry chemical, CO₂ or water spray. If safe to do so, move undamaged containers from fire area.

Large fire: Use dry chemical, CO₂, foam or water spray – Do not use water jets. Cool containers with flooding quantities of water until well after fire is out. Avoid getting water inside containers.

Specific hazards arising from the chemical

Hazards from Combustion Products: May liberate toxic fumes in fire including of carbon and nitrogen.

Special protective actions for fire-fighters

Wear SCBA and chemical splash suit. Fully-encapsulating, gas-tight suits should be worn for maximum protection. Structural firefighter's uniform is NOT effective for these materials.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Evacuate the area of all non-essential personnel. Avoid inhalation, contact with skin, eyes and clothing.

Wear protective clothing specified for normal operations (see Section 8)

Methods and materials for containment and cleaning up

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Absorb or contain liquid with sand, earth or spill control material. Shovel up using non sparking tools and place in a labelled, sealable container for subsequent safe disposal. Put leaking containers in a labelled drum or overdrum.

SECTION 7: Handling and storage

Precautions for safe handling

Do not breathe vapour. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Under no circumstances eat, drink or smoke while handling this material. Contaminated clothing should be removed and washed before reuse.

Always add material to water and NEVER water to material.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry, well-ventilated place away from direct sunlight. Store at room temperature (15 - 25 °C). Keep only in original container.

SECTION 8: Exposure controls/personal protection

Appropriate engineering controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

Skin protection

Clean impervious clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Body protection

Footwear: Safety boots in industrial situations is advisory, foot protection should comply with AS 2210, Occupational protective footwear - Guide to selection, care and use.

Body Protection: Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Respiratory protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/ mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to Australian Standards AS/ NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/ NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	
Color	Clear almost colourless

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Odor	Aromatic odour.
Odor threshold	
Melting point/freezing point	<0 °C
Boiling point or initial boiling point and boiling range	>100 °C (approx.)
Flammability	Not readily combustible.
Lower and upper explosion limit/flammability limit	n/a
Flash point	n/a
Auto-ignition temperature	n/a
Decomposition temperature	>100 °C (approx.)
pH	Basic
Kinematic viscosity	n/d
Solubility	Miscible in water
Partition coefficient n-octanol/water (log value)	n/d
Vapor pressure	n/d
Density and/or relative density	> 1
Relative vapor density	n/d
Particle characteristics	n/a

Further safety characteristics (supplemental)

Foams strongly when shaken.

SECTION 10: Stability and reactivity

Reactivity

Stable under normal conditions of storage and handling.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal use conditions.

Hazardous Polymerization: Will not occur.

Conditions to avoid

Avoid storing in direct sunlight and avoid extremes of temperature.

Incompatible materials

Strong oxidising agents and strong acids.

Hazardous decomposition products

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Carbon monoxide, nitrogen oxides and hydrogen chloride.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Ingestion: Harmful if swallowed. Corrosive to the gastrointestinal tract. May cause nausea, vomiting, abdominal irritation, pain, tissue damage to mouth, throat and oesophagus with extreme discomfort or pain if swallowed. Ingestion of concentrated product or strong solutions could be fatal.

Inhalation: The vapour is discomforting to the upper respiratory tract and may be harmful if inhaled. Inhalation may cause irritation, coughing, dyspnoea, headache, dizziness and nausea. Aspiration of liquid spray or mist may cause severe irritation and damage to respiratory tract.

Skin corrosion/irritation

Corrosive in contact with skin. May cause burns if not immediately washed off. Strong irritant effect. May be severe with sensitive individuals or after repeated contact.

Serious eye damage/irritation

Corrosive to the eyes and is capable of causing severe conjunctivitis. Corneal damage may develop, with possible impairment of vision, if not promptly and adequately treated. May cause permanent injury and impairment of vision.

Respiratory or skin sensitization

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

Specific target organ toxicity (STOT) - single exposure

Not classified based on available information.

Specific target organ toxicity (STOT) - repeated exposure

Not classified based on available information.

Aspiration hazard

Not classified based on available information.

Additional information

Chronic Effects: Repeated or prolonged exposure may cause allergic contact dermatitis.

Asthma-like symptoms may continue for months or even years after exposure to the material ceases.

SECTION 12: Ecological information

Toxicity

Ecological Information: A harmful effect on aquatic organisms cannot be excluded in the event of improper handling or disposal.

SECTION 13: Disposal considerations

Disposal methods

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Product disposal

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

Other disposal recommendations

Do not discharge this material into waterways, drains and sewers.

SECTION 14: Transport information

ADG (Road and Rail)

UN Number: 1760

Class: 8

Packing Group: II

Proper Shipping Name: CORROSIVE LIQUID, N.O.S. (contains benzyl-C12-16-alkyldimeyhyllammonium chloride)

Hazchem emergency action code (EAC)

2X

IMDG

UN Number: 1760

Class: 8

Packing Group: II

Proper Shipping Name: CORROSIVE LIQUID, N.O.S. (contains benzyl-C12-16-alkyldimeyhyllammonium chloride)

IATA

UN Number: 1760

Class: 8

Packing Group: II

Proper Shipping Name: CORROSIVE LIQUID, N.O.S. (contains benzyl-C12-16-alkyldimeyhyllammonium chloride)

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Australia SUSMP

Poison Schedule: S5

SECTION 16: Other information

Further information/disclaimer

ChemSupply Australia Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon ChemSupply Australia Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of ChemSupply Australia Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

Preparation information

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Standard for the Uniform Scheduling of Medicines and Poisons, Commonwealth of Australia

National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.'

Safe Work Australia, 'National Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals', July 2020.

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Safe Work Australia, 'National Guide for Classifying Hazardous Chemicals', July 2020.

Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants, December 2019

Safe Work Australia, Hazardous Chemical Information System (HCIS), hcis.safeworkaustralia.gov.au

IATA, Dangerous Goods Regulations (DGR)

IMO, International Maritime Dangerous Goods Code (IMDG)