

SAFETY DATA SHEET

Product Name: Benzalkonium Chloride 50% solution


Issue Date: 12/01/2018

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1. PRODUCT AND COMPANY INFORMATION

Product Name:	Benzalkonium Chloride 50% solution
Relevant identified uses:	Cleaning product containing 50% Benzalkonium Chloride
Molecular Formula:	Mixture
Supplier:	Kiwicare Corporation Limited / Chemcolour Industries (NZ) Ltd
Street Address:	225 Maces Road, Bromley, Christchurch, 8062 New Zealand / 24-26 Poland Road, Wairau Valley, North Shore, 0627
Postal Address:	P.O Box 15050, Aranui, Christchurch, 8643 New Zealand
Telephone	+64 3 389 0778 / +64 (9) 444 4650
Email:	info@kiwicare.co.nz / ProductSafety@chemcolour.com
Website:	www.kiwicare.co.nz / ProductSafety@chemcolour.com
Emergency Contact Numbers:	0800 764 766 (0800 POISON) / 0800 243 622
National Poisons Centre:	0800 764 766 (0800 POISON)

2. HAZARDS IDENTIFICATION

HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
6.1D (oral)	Not applicable for the UN RTDG Model Regulations		Warning	H302	P102 P103 ^b P264 P270	P101 ^b P301 + P312 P330	No storage statements	P501







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8.2B			Danger	H314	P102 ^b P103 ^b P260 P264 P280	P101 ^b P301 + P330 + P331 P303 + P361 + P353 P363 P304 + P340	P405	P501
8.3A	Not applicable for the UN RTDG Model Regulations		Danger	H318	P102 ^b P103 ^b P280	P101 ^b P305 + P351 + P338 P310	No storage statements	P501
9.1A			Warning	H400/H410 ^m	P103 ^b P273	P391	No storage statements	P501
9.3B	Not applicable for the UN RTDG Model Regulations		No Signal Word	H432	P103 ^b P273	P391	No storage statements	P501

Dangerous Goods:

Class 8, signal word = Danger

Packaging Group:

III

Hazardous Substance (HSNO) Codes:

6.1D (oral toxicity)
8.2B (Skin corrosive)
8.3A (Eye corrosive)
9.1A (Very ecotoxic in the aquatic environment)
9.3B (Ecotoxic to terrestrial vertebrates)

Hazard Statement:

H302: Harmful if swallowed.
H314: Causes severe skin burns.
H318: Causes serious eye damage.
H440/410: Very toxic to aquatic life.
H432: Toxic to terrestrial vertebrates.

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Precautionary Statements:

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

P102: Keep out of reach of children.

P103: Read label before use.

P260: Do not breathe vapours/spray.

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink when using this product.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P310: Immediately call a POISON CENTER or doctor/physician.

P330: Rinse mouth.

P363: Wash contaminated clothing before reuse.

P391: Collect spillage.

P405: Store locked up.

P501: In the case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Regulations 2001. This may also include any method of disposal that must be avoided.

P304+P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

Recommended Use: Hard surface cleaner and moss and mould killer.

Appearance: Clear to straw liquid

Ingredients

Ingredients	CAS #	Content %
Benzyl-C12-16-alkyldimethylammonium chloride	68424-85-1	50 %
Other ingredients	NA (Mixture)	to 100 %

4. FIRST AID MEASURES

General information: In case of accident, or if you feel unwell, seek medical advice (show the label where possible).

Ingestion: Rinse mouth. Do NOT induce vomiting. Seek medical advice or call NZ Poisons Centre on 0800 764 766. If medical advice is needed have product label at hand.

Eye Contact: Potentially cause eye corrosion. Rinse opened eye for several minutes under running water. If irritation persists seek medical advice or call NZ Poisons Centre on 0800 764 766. If medical advice is needed have product label at hand.

Skin Contact: Potentially cause skin corrosion. Immediately take off all contaminated clothing. Rinse skin with copious amounts of water and wash with soap and water. If you feel unwell seek immediate medical advice.

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4. FIRST AID MEASURES

Inhalation:	If symptoms develop move the exposed person to fresh air. Immediately obtain medical advice. Unlikely to present an inhalation hazard as the product is a stable liquid. If breathing problems develop, seek medical advice or call NZ Poisons Centre on 0800 764 766. If medical advice is needed have product label at hand.
Advice for Medical Doctors:	Treat symptomatically. Call a doctor or poison control centre for guidance, or call NZ Poisons Centre on 0800 764 766.

5. FIRE FIGHTING MEASURES

Specific Hazards:	Formation of toxic gases may occur if heated such as carbon monoxide, and other unidentified organic and inorganic compounds.
Suitable Extinguishing Media:	Keep fire exposed containers cool by spraying with water. Appropriate fire extinguishers are CO ₂ , Powder or Alcohol resistant foam. Use extinguishing media appropriate to the surrounding conditions.
Fire Fighting Advice:	Fire fighters should wear full protective gear, including self-contained breathing apparatus (AS/NZS 1715/1716). Keep unnecessary people away and move all other personnel to windward side of fire. Bund area with sand or earth to prevent contamination of drains or waterways. Dispose of fire control water or other extinguishing agent and spillage safely later.

6. ACCIDENTAL RELEASE MEASURES

Environmental precautions:	Prevent leakage or spillage if safe to do so.
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6. ACCIDENTAL RELEASE MEASURES

Minor Spills (Up to 20 kg):	Wear protective clothing. Clear area of unprotected personnel. Contain spill and collect. Do not allow product or washings to enter the waterways or sewer.
Major Spills (more than 20 kg):	Wear protective clothing. Clear area of unprotected personnel. Contain spill and collect. Do not allow product or washings to enter the waterways or sewer. If spill does enter waterway contact local authority. Contaminated absorbent and wash water should be disposed of according to local and national regulations. Collect in an appropriate sealable container for disposal in an approved landfill or incinerate at an authorised installation.
Additional information	Floors will become slippery. Vigorous flushing may generate copious foam. Must not be released into sewers, drains or wells. Personnel involved in clean-up require adequate respiratory, skin and eye protection in case of large spillage. Cleaning of Equipment: Clean with water.

7. HANDLING AND STORAGE

Precautions for safe handling:	Avoid prolonged or repeated contact with skin. Avoid inhaling vapour and/or mists. When handling product in drums, safety footwear should be worn and proper handling equipment should be used. Keep away from sources of ignition – No smoking, eating or drinking while handling this product. Always use good personal hygiene procedures when handling this product. Wash hands and face before eating, drinking or smoking. Read the label before use.
Conditions for safe Storage including incompatibilities:	Keep out of the reach of children. Store in original container in a cool, dry, ventilated place, away from direct heat of sunlight. Store away from foodstuffs, children and animals. Do not allow product to get wet in storage.

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7. HANDLING AND STORAGE

Protection against fire and explosion: Keep away from heat sources even though the product is not combustible. Avoid elevated temperatures. Reacts with copper, aluminium, zinc and their alloys. The product is not explosive. Keep away from oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Standards: See 'Exposure limits' below (Workplace Exposure Standards and Biological Exposure Indices 8th edition)

Engineering Controls: Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work.

Hand protection: Suitable chemical resistant gloves are recommended for applicants.

Eye protection: Wear safety glasses or full face shield if splashes are likely to occur.

Body protection: Body protection must be chosen depending on activity and possible exposure, for example apron, protecting boots. Skin protection not ordinarily required beyond standard issue work clothes. It is good practice to wear chemical resistant gloves.

General safety and hygiene measures: Handle in accordance with good hygiene and safety practice. Wearing of closed work clothing is recommended. Avoid contact with the skin, eyes and clothing. Store work clothing separately.

Environmental Exposure Controls: Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.

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A Substance	CAS #	TWA		STEL	
		ppm	mg/m ³	ppm	mg/m ³

None

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odour:	Colourless to pale yellow Liquid with slight odour
Solubility:	Soluble in water
Specific Gravity:	0.98 (20°C, g/ml)
Boiling Point:	~ 100 °C
Flash Point:	>93 °C
pH Value:	8.0
Evaporation Rate:	NA
Formula:	Mixture
Chemical Family:	Cleaning substance; cationic surfactant Benzalkonium chloride as the A.I.
Exposure Standards (TLV-TW):	Refer to section 8
Engineering Controls:	Refer to section 8

10. STABILITY AND REACTIVITY

Stability & Chemical reactivity:	Stable under normal conditions of use. Not explosive or oxidising.
Incompatibility or conditions to be avoid:	Avoid strong oxidising agents. Avoid heat, sparks and open flame. Mild steel. Copper. Copper alloys. Strong acids.
Corrosive Properties:	Potentially corrosive to skin and eyes.
Thermal Decomposition:	Toxic organic vapours/fumes, amines, CO, CO ₂ , nitrogen oxides, hydrogen chloride.

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11. TOXICOLOGICAL INFORMATION

The relevant hazard classes on ingredients:

50% Benzalkonium Chloride (63449-41-2): HSNO 6.1D, 8.2B, 8.3A, 9.1A and 9.3B. GHS H302, H314, H318, H400/410 and H432. 50% to give overall HSNO classifications

For the substance (final product):

Skin corrosion/irritation: HSNO classification 8.2B or GHS H314, Causes skin corrosion.

Serious eye damage/eye irritation: HSNO 8.3A or GHS H318; cause eye damage.

Respiratory or skin sensitization: Not a respiratory sensitizer.

Germ cell mutagenicity: Not mutagenic.

Carcinogenicity: Not carcinogenic.

Reproductivity: Not reproductive.

Acute Toxicity: Acute oral LD₅₀ = 688 mg/kg; acute dermal LD₅₀ = 6680 mg/kg (calculated).

Chronic Toxicity: No chronic toxicity.

12. ECOTOXICITY INFORMATION

Ecological information: HSNO 9.1A or GHS 400/410; Very ecotoxic in the aquatic environment. HSNO 9.3B or GHS 432; Ecotoxic to terrestrial vertebrates. EC₅₀ = 0.016 mg/l Daphnia magna (water flea) 48hrs.

Persistence / degradability: Biodegradable
OECD confirmatory Test: >90%
CO₂ Evolution: 95.5%
Readily biodegradable: OECD 301 B

Mobility: Water: completely soluble

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12. ECOTOXICITY INFORMATION

Soil Toxicity:	No soil toxicity.
Benzalkonium Chloride (68424-85-1):	9.1A: LC ₅₀ = 0.31 mg/l (present at 50%) 9.3B: LD ₅₀ = 150 mg/kg (present at 50%)

The substance triggers HSNO class 9.1A & 9.3B classifications. In addition, as the product label indicated that this product is not allowed or washings to enter the waterways or sewer and other appropriate controls. Therefore it is highly unlikely to be hazardous to the environment.

13. DISPOSAL CONSIDERATIONS

Waste treatment – recommendation:	In the case of a substance that is in compliance with a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Regulations 2001. Disposal requirements for class 8 & 9 – dispose of the substance in a landfill, incinerator, or a sewage facility if the landfill, incinerator, or sewage facility will treat the substance by changing the characteristics or composition of the substance so that the substance is no longer a hazardous substance.
Container Disposal:	Empty containers can be sent to landfill after cleaning if in compliance with local and national regulations. Consider recycling.

14. TRANSPORT INFORMATION

Road, Rail, Marine and Air

UN Number:	1903
Dangerous Goods Class:	8 (ADR/RID; IMDG; IATA/ICAO)
Hazchem Code:	2X
Packaging Group:	II

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14. TRANSPORT INFORMATION

Proper Shipping Name: DISENFECTANT, LIQUID, CORROSIVE, N.O.S.
(Benzalkonium chloride 50%)

Marine Pollutant: Yes

15. N.Z. REGULATORY INFORMATION

EPA HSNO Number: HSR002526

HSNO Classifications: 6.1D, 8.2B, 8.3A, 9.1A, 9.3B.

HSNO Controls: Refer to HSR002526

HSNO Approved codes of Practice: Refer to HSR002526

To avoid risks to man and the environment, comply with the instructions for use.

This information should be considered when making any hazard assessment.

Classification and labelling according to Regulation:

(EC) No 1272/2008 [EU-GHS/CLP]

16. OTHER INFORMATION

SDS date of preparation: 29 / 05 / 2017

SDS date of revision: 29 / 05 / 2022

Emergency Contact: 24 Hours
Work Hours: National Poisons Centre
Kiwicare Corporation: PO Box 913
225 Maces Road: Dunedin
PO Box 15050: Tel: 0800 764 766 (POISON)
Christchurch
Tel: (03) 389 0778
Fax: (03) 389 0669

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16. OTHER INFORMATION

All Safety Data Sheets are subject to review and should not be left longer than five years before and update is obtained.

For further information visit the Kiwicare web site, www.kiwicare.co.nz, or contact the original manufacturer of the substance.

The information in this document should be made available to all who may handle the product. For proper and safe use of this product, please refer to the product label.

This information is based on data believed by Kiwicare Corporation Limited to be accurate at the time of writing. It is given in good faith but no warranty expressed or implied is made as to its accuracy, completeness or otherwise. Every person dealing with the materials referred herein does so at their own risk absolutely and must make independent determinations of suitability and completeness of information from all sources to ensure their proper use.

Attention is drawn to the application and safety instructions set out on the label. This sheet is not a substitute for safety, hazard or application instructions set out on the label. As Kiwicare Corporation Limited and their distributors have no control over storage or use of this product no liability for accident or damage will be accepted.

Abbreviations:

ADR: European agreement concerning the international carriage of dangerous goods by Road.

CLP: Classification, Labelling and Packaging

IMDG: International Maritime Dangerous Goods.

IATA: International Air Transport Association.

ICAO: International Civil Aviation Organisation

RID: Regulations concerning the International carriage of Dangerous goods by rail.

GHS: Global Harmonized System

EU: European Union

EC: European Commission

TLV: Threshold Limit Value

TWA: Time Weighted Average

STEL: Short-Term Exposure Limit

H Phrase: Hazard phrase

P Phrase: Precautionary phrase

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