

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY:

YIELD

SUPPLIER NAME: Zelam Limited
MANUFACTURER: None
SUPPLIER ADDRESS: Hudson Road, Bell Block, New Plymouth, New Zealand
SUPPLIER PHONE: +64 6 755 9234 SUPPLIER FAX: +64 6 755 1174
EMERGENCY PHONE: 0800 243 622, 0800 CHEMCALL INTERNATIONAL EMERGENCY PH: +64 3 353 0199
CHEMICAL FAMILY: Quaternary USE: Biocide

2. COMPOSITION / INFORMATION ON INGREDIENTS:

COMMON NAME:	CAS NUMBER:	CONCENTRATION %:	HAZARD CLASSIFICATIONS:
Benzalkonium Chloride	8001-54-5	50 %	Class 6, 8, 9.
Inerts		<1%	
Water		Balance	

3. HAZARDS IDENTIFICATION:

Toxic - may be fatal if swallowed, inhaled or absorbed through the skin.
Toxic - may cause respiratory sensitisation. Avoid inhalation of vapours/mist.
Harmful - may cause skin sensitisation from prolonged skin contact. Avoid skin contact.
Harmful - may cause organ damage from repeated oral exposure at high doses.
Danger - this product is corrosive to the skin and may cause burns.
Danger - this product is corrosive and may cause eye damage.
Very toxic to fish/aquatic organisms with long-lasting effects. Avoid contamination of any water supply with product or empty container.
Toxic to terrestrial vertebrates [birds].
Refer to Section 15 for ERMA Requirements.

4. FIRST - AID MEASURES:

EYE CONTACT: Immediately flush eyes with flowing water for at least 15 minutes. Get prompt medical attention.
SKIN CONTACT: Immediately flush with plenty of water while removing contaminated clothing. Continue for at least 15 minutes. Wash clothing before reuse. Seek medical attention.
INHALATION: If ill-effects occur, move the victim to fresh air. If there is difficulty breathing, seek medical attention.
INGESTION: If swallowed, rinse mouth with water immediately. DO NOT induce vomiting. Seek medical attention.
NOTES TO DOCTOR: No specific antidote. Treat symptomatically.

5. FIRE FIGHTING MEASURES:

FLASHPOINT: >93°C (PMCC). HAZCHEM Code: 2X
FLAMMABLE LIMITS: Not established.
EXTINGUISHING MEDIA: Dry chemical, water spray (fog), foam or carbon dioxide.
THERMAL DECOMPOSITION PRODUCTS: Includes oxides of carbon and nitrogen.
SPECIAL FIRE FIGHTING METHODS: Addition of water may cause excessive foaming. Vapours may be toxic. Self contained breathing apparatus required. Do not allow contaminated runoff to enter drains.
UNUSUAL FIRE OR EXPLOSION HAZARDS: None.

6. ACCIDENTAL RELEASE MEASURES:

Use appropriate protective equipment. Clear area of unnecessary personnel. Spills may be slippery and should be cleaned up immediately.
Large spill: Dike and pump as much as possible to a salvage container. Absorb the remaining liquid and any small spills with clay granules, sand or other absorbent material and sweep to a waste container. Cover the spill area with water and absorb. Minimise runoff into waterways or drains.
Warning this substance is very toxic to aquatic organisms. Avoid contamination of any water supply with this substance or empty container.

7. HANDLING AND STORAGE:

Store in original container, tightly closed under lock and key, away from food stuffs. Wash protective clothing daily after work.
Toxic - Keep out of reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION:

EXPOSURE LIMITS: No exposure limits (WES, TEL, or EEL's) have been specifically assigned for this product.
EYE PROTECTION: Chemical goggles or face shield where splash may occur.
RESPIRATORY PROTECTION: Air respirator with organic vapour canister or self contained breathing apparatus when exposed to vapours from heated material.
PROTECTIVE CLOTHING: When handling wear waterproof gloves, overalls and boots.
Wash protective clothing daily after work.
VENTILATION: General (mechanical) room ventilation is considered satisfactory.
HYGIENE PRECAUTIONS: Do not eat drink or smoke while working with this product. Remove clothing that becomes soaked or contaminated and wash before reuse. Wash hands before breaks and after work. The use of a skin barrier cream is useful to give additional skin protection.

9. PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE / STATE / ODOUR: Clear to light straw coloured liquid. Amine odour.

BOILING POINT:	>100°C.	pH:	6.8 - 7.8
DENSITY:	0.984	SETTING POINT:	Not Available.
DECOMPOSITION TEMP:	Not Available.	AUTOIGNITION TEMP:	Not Applicable.
FLASHPOINT:	> 93°C.	VAPOUR DENSITY:	Not Available.
EXPLOSION PROPERTIES:	Not Applicable.	VAPOUR PRESSURE:	Not Available.
SOLUBILITY:	Mixes readily with water.		
OTHER DATA:			
OCTANOL / WATER PARTITION COEFFICIENT:	Not Available.		

10. STABILITY AND REACTIVITY:

CONDITIONS TO AVOID: None.
MATERIALS TO AVOID: None.
HAZARDOUS DECOMPOSITION PRODUCTS: None.

11. TOXICOLOGICAL INFORMATION:

ACUTE ORAL: LD50 Male rats: 975 mg/Kg.
ACUTE DERMAL: LD50 Male rats: > 1000 mg/Kg.
ACUTE INHALATION: Not reported
OTHER TOXICITY INFORMATION: 6.1C; Toxic - may be fatal if swallowed, inhaled or absorbed through the skin.
6.5A; Toxic - may cause respiratory sensitisation. Avoid inhalation of vapours/mist.
6.5B; Harmful - may cause skin sensitisation from prolonged skin contact. Avoid skin contact.
6.9B; Harmful - may cause organ damage from repeated oral exposure at high doses.
8.2C; Danger - this product is corrosive to the skin and may cause skin burns.
8.3A; Danger - this product is corrosive and may cause eye damage.

12. ECOLOGICAL INFORMATION:

Aquatic Toxicity: Very toxic to fish.
Soil Toxicity: Not toxic to worms.
Terrestrial Vertebrates - Birds: Toxic to birds.
Terrestrial Invertebrates - Bees: Not toxic to bees.

9.1A; Very toxic to aquatic organisms. Avoid contamination of any water supply with this product or empty container.
9.3B; Toxic to terrestrial vertebrates [birds]

13. DISPOSAL CONSIDERATIONS:

Dispose of this product only by using according to the label. Triple rinse container and add rinsate to spray tank. Crush or puncture cleaned, empty containers and dispose of container at an approved landfill or Agrecovery Depot. Avoid contamination of any water supply or stream with this product or empty container.

14. TRANSPORT INFORMATION:

Proper Shipping Name:	Corrosive Liquid, N.O.S.	UN Hazard Class:	8
UN Number:	1760	Packing Group:	III
Hazchem Code:	2X		
Additional Information:	Contains Alkyl dimethyl benzyl ammonium chloride.		

Do not carry more than 1 L of this product on a passenger service vehicle

15. REGULATORY INFORMATION:

Approved Handler: For volumes of more than 1 litre an approved handler is required or the substance must be stored in a secure locked shed that has access controlled by a key. If an approved handler is to be present at the facility where the substance is being handled, or the approved handler has provided guidance to the person in respect to the handling of the product and is present at all times a non approved handler may handle the product.

Tracked Substance: This is a tracked substance, the location and movement of amounts greater than 1 litre of this substance must be recorded at each stage of the products life cycle by the approved handler. These records must be kept for at least three years. The person in charge must ensure all approved handler and appropriate hazard classifications are met on transfer of this product.

Record Keeping: Record keeping is required if more than 200ml is used within 24 hours in a place where: a) Public are lawfully present. b) The substance is likely to enter air or water and leave the place. The information must be kept for a minimum of three years.

ERMA Approval Code: HSR000822. ACVM Pesticide Number: P004927.
See the ERMA Website for more details: www.ermanz.govt.nz

16. OTHER INFORMATION:

The data given here is based on current knowledge and experience. The purpose of this safety data sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the product's properties.