



## SECTION 4 – FIRST AID MEASURES

### First Aid

- Swallowed: Immediately rinse mouth with water. If swallowed DO NOT induce vomiting. Give a 1-3 glasses of water to drink. If vomiting occurs, place victim head lower than hips to prevent vomiting entering lungs. Seek immediate medical assistance or contact the Poisons Information Centre immediately.
- Eye: If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised by the Poisons Information Centre or a doctor, or for at least 15 minutes. Seek immediate medical assistance or contact the Poisons Information Centre immediately.
- Skin: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair immediately with running water. If swelling, redness, blistering or irritation occurs seek medical advice. For skin burns, immediately flood with plenty of water and cover with a clean dry dressing. Seek immediate medical advice
- Inhaled Remove victim from further exposure. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical attention if effects persist.

### Advice to Doctor

Treat symptomatically and as for strongly alkaline corrosive material

## SECTION 5 – FIRE FIGHTING MEASURES

### Fire/Explosion Hazard

Corrosive to aluminium, zinc and tin, liberating flammable hydrogen gas. Reacts violently with acids and liberates chlorine gas. Reacts with ammonium salts liberating ammonia gas. Absorbs carbon dioxide from air. Reacts exothermically on dilution with water. Keep containers cool by spraying with water to prevent pressure building up inside the drums, causing them to burst.

### Extinguishing Media

Fire fighters must wear full protective clothing including self contained breathing apparatus. Not combustible, however reaction with metals will produce flammable hydrogen gas, which will burn if ignited. Use water fog ( or if unavailable fine water spray ), foam, dry agent ( carbon dioxide, dry chemical powder )

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

### Spills

Increase ventilation. Wear protective equipment to prevent skin and eye contamination and inhalation of vapours or mists. Contain using sand or soil – prevent run off into drains and waterways. Use absorbent ( soil, sand vermiculite or other inert material). Collect and seal in properly labelled drums for disposal. If contamination of sewers or waterways has occurred advise local emergency services. Caution heat may be evolved on contact with water

## SECTION 7 – HANDLING AND STORAGE

Handling : Avoid skin and eye contact

**Storage :** Under normal weather conditions store in a well-ventilated area. Store in a dry cool environment. Keep containers closed at all times when not in use. Store away from acids and ammonium salts. Do not store in aluminium or galvanised containers or use die cast zinc. Check regularly for leaks. Remove drum bungs slowly to release any internal pressure.

## SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

**Occupational Exposure Limits :** Occupational Exposure Limits : Threshold Limit Values  
Threshold Limit Value ( TLV ) = 2 mg/m<sup>3</sup> ( Potassium Hydroxide ) ( Peak Limitation )  
Time Weighted Average ( TWA ) = 3 mg/m<sup>3</sup> ( Chlorine )

Exposure Standards (TWA) is the time-Weighted average airborne concentration over an eight-hour working day, for a five day working week over an entire working life. According to current knowledge this concentration should neither impair the health or, cause undue discomfort to, nearly all workers.

Peak Limitation : For some rapidly acting substances and irritants, the averaging of airborne concentration over an eight hour period is inappropriate. These substances may induce acute effects after relatively brief exposure to high concentrations and so the exposure standard for these substances represents a maximum or peak concentration to which workers may be exposed.

**Engineering Control Measures :** Ensure ventilation is adequate to maintain air concentrations below recommended exposure standard. Keep containers closed when not in use

### **Personal Protective Equipment :**

Eye: Use chemical face shield to prevent eye and face contact  
Hands: Use nitrile rubber gloves when skin contact is possible  
Other: Use rubber boots and apron to prevent skin contact  
Respirator: If inhalation risk exists wear canister type respirator suitable for particulates and alkaline gases.

Always wash hands before eating, drinking, smoking or using the toilet.  
Wash contaminated clothing and other protective equipment before storage and reuse.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odour:	Clear Water White Liquid	pH (as is):	13 to 14
Melting Point:	0oC	Flash Point:	Not applicable
Boiling Point:	100°C (approximately)	Volatiles	Water only
Density: @ 25°C	1.25 grams/mL (approximately)	Flammable Limits:	Not applicable
Solubility:	Miscible	Odour	Chlorine

## SECTION 10 – STABILITY AND REACTIVITY

**Stability** Store away from acids, oxidising materials and ammonium salts

**Reactivity** Corrosive to aluminium, zinc and tin, liberating flammable hydrogen gas.  
Reacts violently with acids and liberates chlorine gas  
Absorbs carbon dioxide from air. Reacts exothermically on dilution with water

## SECTION 11 – TOXOLOGICAL INFORMATION

### **Health Effects**

No adverse health effects expected if the material is handled in accordance with the Material Safety Data Sheet. Symptoms that may arise if the material is mishandled are :

## Acute Effects

- Swallowing: May cause nausea, vomiting, diarrhoea, abdominal pain, swelling of the larynx and perforation of the gastrointestinal tract  
Oral LD50 = 500 mg/kg (rabbit)
- Eye: A severe eye irritant. May cause severe eye damage. Corrosive to eyes.  
May cause corneal damage. Eye ( rabbit) severe irritation 1mg / 30sec rinse
- Skin: Contact with skin will result in severe irritation. Repeated or prolonged skin contact may cause burns and permanent damage. Corrosive to skin  
Dermal LD50 = 500 mg/ 24H ( rabbit )
- Inhaled: Vapour or mist may be irritant to mucous membranes and respiratory tract.  
Possible harmful corrosive effects including lesions of the nasal septum, pulmonary oedema, pneumonitis and amphysema

## Chronic Effects

Principal routes of exposure are by accidental skin or eye contact  
Prolonged or repeated skin contact may have a corrosive action on human tissues

### SECTION 12 – ECOLOGICAL INFORMATION

Avoid contaminating waterways. Spills should be contained, absorbed by sand or earth and placed in sealed plastic or epoxy-lined drums for disposal

### SECTION 13 – DISPOSAL CONSIDERATIONS

Refer to Waste Management Authority .

### SECTION 14 – TRANSPORT INFORMATION

Classified as a Dangerous Good by the Criteria of the Australian Dangerous Good Code

Proper Shipping Name :	Corrosive Liquid N.O.S	UN Number :	1760
Dangerous Goods Class :	8	Subsidiary Risk :	Not applicable
Hazchem Code :	2R	Packing Group :	III

### SECTION 15 – REGULATORY INFORMATION

**Classification** Based upon information, classified as hazardous according to criteria of Safe Work Australia

**Poisons Schedule** Schedule 6

### SECTION 16 – OTHER INFORMATION

Contact Points

<b>Organisation</b>	<b>Location</b>	<b>Telephone</b>	<b>Ask For</b>
Tasman Chemicals Pty Ltd	Braeside, Victoria, Australia	(03) 9587 6777	Technical Manager

Poisons Information Centre 13 1126

MSDS are updated frequently. Please ensure that you have a current copy.

*This MSDS summarises our best knowledge of the health and safety hazard information of the product; how to safely handle and use the product in the workplace. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact Tasman Chemicals Pty Ltd. Our responsibility for products sold are subject to our standard terms and conditions, a copy of which appears on all invoices. It is also available on request. Where health or safety data given discloses a risk to the user or environment, it is the responsibility of the Purchaser to pass on that information to employees or those who may be using the product, ensuring that adequate safety procedures are used including good industrial hygiene.*