

**Preparation Date:** 27-Jan-2009  
**Revision Number:** 2.2  
**Revision Date:** 19-Sep-2024  
**Date of Next Revision:** 18-Sep-2029

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product Name** Chlortech  
**Item#:** NZ14236  
**Recommended use** Low foam high performance chlorinated alkaline detergent  
**Uses advised against** Restricted to professional users

**Supplier** DeLaval Ltd,  
82 Greenwood street,  
Hamilton.  
New Zealand

**Telephone Number** (07) 849-6020  
(8am - 4:30pm Mon-Fri)

**Emergency Telephone Number** +64 3 474 7000 (National Poisons Centre)  
0800 243 622 CHEMCALL

## 2. HAZARD IDENTIFICATION

### 2.1. Classification of the substance or mixture according to GHS

Acute toxicity - Oral - Category 4  
Acute toxicity - Dermal - Category 4  
Skin corrosion/irritation - Category 1B  
Serious eye damage/eye irritation - Category 1  
Corrosive to metals - Category 1

### 2.2. Label Elements

#### Hazard Pictogram(s)



#### Signal word

DANGER

#### Hazard Statements

H290 - May be corrosive to metals  
H302 - Harmful if swallowed  
H312 - Harmful in contact with skin  
H314 - Causes severe skin burns and eye damage  
H318 - Causes serious eye damage

**Precautionary statements**

P102 - Keep out of reach of children  
 P234 - Keep only in original packaging  
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray  
 P264 - Wash hands and face thoroughly after handling  
 P270 - Do not eat, drink or smoke when using this product  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection  
 P301 + P317 - IF SWALLOWED: Get medical help  
 P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting  
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
 P302 + P361 + P354 - IF ON SKIN: Take off immediately all contaminated clothing. Immediately rinse with water for several minutes  
 P305 + P354 + P338 - IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 P316 - Get emergency medical help immediately  
 P330 - Rinse mouth  
 P362 + P364 - Take off contaminated clothing and wash it before reuse  
 P363 - Wash contaminated clothing before reuse  
 P390 - Absorb spillage to prevent material damage  
 P405 - Store locked up  
 P406 - Store in original container with a resistant inner layer.  
 P501 - Dispose of contents/container in accordance with local regulations

**Contains**

Sodium hydroxide, Sodium metasilicate pentahydrate

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Sodium hydroxide	1310-73-2	> 60%
Sodium carbonate	497-19-8	10 - 30%
Dichloroisocyanuric acid, sodium salt	2893-78-9	1 - 10%
Sodium metasilicate pentahydrate	10213-79-3	1 - 10%

### 4. FIRST AID MEASURES

**Workplace Facilities**

Eyewash bottle with clean water

**General Advice**

Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

**Eye contact**

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes  
 Call a physician immediately

**Skin contact**

Take off contaminated clothing and shoes immediately  
 Wash off immediately with plenty of water for at least 15 minutes  
 Call a physician immediately

**Inhalation**

Remove to fresh air and keep at rest in a position comfortable for breathing  
 If breathing is difficult, give oxygen  
 If symptoms persist, call a physician

**Ingestion**

Immediate medical attention is required. Remove from exposure, lie down. Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Drink 1 or 2 glasses of

water. Call a physician or Poison Control Center immediately.

**Notes to Physician**

Treat symptomatically.

**Protection of First-aiders**

Use personal protective equipment. Avoid contact with skin, eyes and clothing.

## 5. FIRE-FIGHTING MEASURES

**Hazchem Code**

2X

**Flammable Properties**

The product is not flammable.

**Suitable Extinguishing Media**

Dry chemical. Carbon dioxide (CO<sub>2</sub>). Water spray. alcohol-resistant foam.

**Unsuitable Extinguishing Media**

No information available.

**Specific hazards arising from the chemical**

Thermal decomposition can lead to release of irritating gases and vapours. May evolve toxic fumes in fire (toxic chlorine compounds). In the event of fire and/or explosion do not breathe fumes.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions**

Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Use personal protective equipment.

**Environmental Precautions**

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

**Methods for cleaning up**

Dam up. Take up mechanically and collect in suitable container for disposal. After cleaning, flush away traces with water.

## 7. HANDLING AND STORAGE

**Handling**

Avoid contact with skin and eyes. In case of insufficient ventilation, wear suitable respiratory equipment.

**Storage**

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labelled containers. Keep away from direct sunlight. Corrosive to metals. Keep away from metals.

**Type of Container/Package**

Store in original container

Handle and store according to AS/NZS Standards and the Responsible Care Management Systems: Managers Handbook.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical name	WES (New Zealand)
Sodium hydroxide	Ceiling: 2 mg/m <sup>3</sup>

<b>Engineering Controls</b>	Ensure adequate ventilation, especially in confined areas.
<b>Personal Protective Equipment</b>	
<b>Eye/face Protection</b>	Tightly fitting safety goggles. Face-shield.
<b>Skin Protection</b>	Long sleeved clothing, Chemical resistant apron, Boots
<b>Hand Protection</b>	Neoprene gloves
<b>Respiratory Protection</b>	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. In case of insufficient ventilation wear suitable respiratory equipment.

**General Hygiene Considerations**

Keep away from food, drink and animal feedingstuffs. When using, do not eat, drink or smoke. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin, eyes and clothing. Wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES
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<b>Appearance</b>	White
<b>Physical state</b>	Powder
<b>Odor</b>	Slight chlorine
<b>pH</b>	> 12
<b>Vapor Pressure</b>	No data available
<b>Vapor Density</b>	No data available
<b>Flash Point</b>	The product is not flammable
<b>Autoignition Temperature</b>	No data available
<b>Upper flammability limit:</b>	No data available
<b>Lower flammability limit:</b>	No data available
<b>Boiling Point/Range</b>	No data available
<b>Freezing Point/Range</b>	No data available
<b>Solubility</b>	Soluble in water
<b>Solubility in other solvents</b>	No data available
<b>Specific Gravity</b>	1.0
<b>Kinematic viscosity</b>	
<b>Corrosive to metals</b>	Corrosive to metals

10. STABILITY AND REACTIVITY
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<b>Chemical Stability</b>	Stable under normal conditions.
<b>Conditions to Avoid</b>	Exposure to air or moisture over prolonged periods. To avoid thermal decomposition, do not overheat. Extremes of temperature and direct sunlight.
<b>Incompatible Materials</b>	Incompatible with strong acids and bases, Incompatible with oxidizing agents
<b>Hazardous decomposition products</b>	Thermal decomposition can lead to release of irritating gases and vapours.

## 11. TOXICOLOGICAL INFORMATION

<b>Acute Toxicity</b>	
<b>Inhalation</b>	No information available.
<b>Eye contact</b>	No information available.
<b>Skin contact</b>	Harmful in contact with skin.
<b>Ingestion</b>	Harmful if swallowed.

**Component Information**

<b>Chemical name</b>	<b>LD50 Oral</b>	<b>LD50 Dermal</b>	<b>LC50 Inhalation</b>
Sodium hydroxide	325 mg/kg	1350 mg/kg	
Sodium carbonate	2800 mg/kg (Rat)	2000 mg/kg (Rabbit)	2300 mg/m <sup>3</sup> (Rat)
Dichloroisocyanuric acid, sodium salt	= 1823 mg/kg ( Rat )	> 5000 mg/kg ( Rat )	0.27 - 1.17 mg/L ( Rat ) 4 h
Sodium metasilicate pentahydrate	= 847 mg/kg ( Rat )		

<b>Irritation</b>	No information available
<b>Corrosivity</b>	Corrosive. Causes severe skin burns and eye damage.
<b>Sensitization</b>	No information available.
<b>Mutagenic effects</b>	No information available.
<b>Carcinogenicity</b>	There are no known carcinogenic chemicals in this product.
<b>Reproductive Effects</b>	No information available.
<b>Developmental Effects</b>	No information available.
<b>STOT - single exposure</b>	No information available
<b>STOT - repeated exposure</b>	No information available.

12. ECOLOGICAL INFORMATION
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**Ecotoxicity****Ecotoxicity effects**

Prevent release to the environment.

Chemical name	Algae/aquatic plants	Fish	Microtox	Waterflea
Sodium hydroxide		LC 50 (96 h) 45.4 mg/l (Oncorhynchus mykiss)		EC50 (48h): 40.4 mg/l (Ceriodaphnia dubia)
Sodium carbonate		310 - 1220: 96 h Pimephales promelas mg/L LC50 static 300: 96 h Lepomis macrochirus mg/L LC50 static		265: 48 h Daphnia magna mg/L EC50
Dichloroisocyanuric acid, sodium salt		0.13 - 0.36: 96 h Oncorhynchus mykiss mg/L LC50 static 0.176 - 0.267: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.207 - 0.389: 96 h Lepomis macrochirus mg/L LC50 flow-through 0.25 - 1: 96 h Lepomis macrochirus mg/L LC50 static 0.29: 96 h Oncorhynchus mykiss mg/L LC50		0.00018 - 0.00021: 48 h Daphnia magna mg/L EC50 0.093 - 0.16: 48 h Daphnia magna mg/L EC50

**Persistence and degradability** No information available**Bioaccumulation/Accumulation** Does not bioaccumulate.**Mobility** No information available

13. DISPOSAL CONSIDERATIONS
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**Waste Disposal Method** Should not be released into the environment. It must undergo special treatment, e.g. at suitable disposal site, to comply with local regulations. Dispose of in accordance with local regulations.**Contaminated Packaging** Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION
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<b>UN-No</b>	3262
<b>Proper Shipping Name</b>	CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. ( Sodium hydroxide )
<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b>Hazchem Code</b>	2X

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15. REGULATORY INFORMATION
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<b>ERMA NZ Registration Number</b>	HSR002526
<b>ERMA Group Standard</b>	Cleaning Products - (Corrosive) Group Standard 2006
<b>HSNO Conditions</b>	Hazardous Substances Location trigger quantity: N/A Approved Handler trigger quantity: N/A Secondary containment trigger quantity: 1000L or 1000kg Signage trigger quantity: 250L or 250kg Response Plan trigger quantity: 1000L or 1000kg
<b>ERMA Reference</b>	ERMA User Guide to the HSNO Controls, which links to the Hazardous Substances Regulations 2001

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16. OTHER INFORMATION
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<b>Prepared By</b>	DeLaval NV Industriepark-Drongen 10 9031 Gent Belgium
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<b>Reason for revision</b>	Update Section: 9 (physical state)
<b>References</b>	<ul style="list-style-type: none"><li>- Hazardous Substances (Hazardous Classification) Notice 2020</li><li>- Hazardous substances (Labelling) Notice 2017</li><li>- Hazardous Substances (Safety Data Sheets) Notice 2017</li><li>- GHS8</li><li>- European Agreement concerning the International Carriage of Dangerous Goods by Road</li><li>- New Zealand Workplace Exposure Standards (WES)</li><li>- International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 1: Carcinogenic to humans</li><li>- Chemical Classification and Information Database (CCID)</li></ul>

**Disclaimer**

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**End of SDS**