



## LIQUID CHLORINE

### 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

<b>Product Name</b>	Liquid Chlorine
<b>Product Code</b>	-
<b>Other Names</b>	Sodium Hypochlorite
<b>Product Use</b>	Sanitiser (processing equipment in dairy, food and beverage industries), bleaching agent (textile industry) and sanitizing agent (water treatment)
<b>Company Name</b>	Focus Products Pty Ltd
<b>Address</b>	35 Moreton St Heathwood QLD 4110 PO Box 131 Carole Park QLD 4300
<b>Telephone Number</b>	07 3879 3844
<b>Emergency Telephone</b>	0411 623 619 (A/H)

### 2. HAZARDS IDENTIFICATION

#### HAZARDOUS SUBSTANCE. DANGEROUS GOODS.

Classified as hazardous according to the criteria of Safe Work Australia.

<b>Hazards</b>	C – Corrosive
<b>Risk Phrases</b>	R31 - Contact with acids liberates toxic gas. R34 - Causes burns. R50 - Very toxic to aquatic organisms.
<b>Safety Phrases</b>	S1/2 - Keep locked up and out of reach of children. S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S28 - After contact with skin, wash immediately with plenty of water. S37/39 - Wear suitable gloves and eye/face protection. S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S50 - Do not mix with acids. S61 - Avoid release to the environment. Refer to special instructions/Material Safety Data Sheets.



**msds**

**focus**  
PRODUCTS PTY LTD  
www.focusproducts.com.au

P 1300 1 36287  
F 1300 2 36287

**NATIONAL OFFICE**  
A 35 Moreton Street  
HEATHWOOD Q 4110  
PO Box 131  
CAROLE PARK Q 4300

P +61 7 3879 3844  
F +61 7 3879 3855  
ABN 23 073 540 520

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient (common name)	CAS Number	Proportion
Sodium hydroxide	1310-73-2	<1%
Sodium hypochlorite	7681-52-9	10 - <30%
Water	7732-18-5	>60%

### 4. FIRST AID MEASURES

<b>Inhalation</b>	If inhaled remove victim to fresh air. Apply CPR if victim is not breathing. Administer oxygen if breathing is difficult. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Seek immediate medical attention.
<b>Ingestion</b>	Immediately rinse mouth with water. If swallowed, DO NOT induce vomiting. Give a glass of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.
<b>Skin</b>	If skin or hair contact occurs, immediately remove contaminated clothing and wash skin and hair with running water for at least 15 minutes. Seek medical attention if symptoms persist.
<b>Eyes</b>	If eye contact occurs, hold eyelids apart and flush the eye continuously with large amounts of water for at least 15 minutes. Seek immediate medical attention.
<b>Advice to doctor</b>	Treat symptomatically. Can cause corneal burns. Delayed pulmonary oedema may result.

### 5. FIRE FIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	For major fires call the Fire Brigade. Ensure that an escape path is available from any fire. Water fog, fine water spray, foam, dry agent (carbon dioxide, dry chemical powder).
<b>Hazardous Combustion Products</b>	Toxic fumes.
<b>Firefighting Equipment</b>	Wear Safe Work Australia approved self-contained breathing apparatus and full protective clothing.
<b>Unusual Fire or Explosion Hazards</b>	Non combustible material.
<b>Hazchem Code</b>	2X

# msds



P 1300 1 36287  
F 1300 2 36287

NATIONAL OFFICE  
A 35 Moreton Street  
HEATHWOOD Q 4110  
PO Box 131  
CAROLE PARK Q 4300

P +61 7 3879 3844  
F +61 7 3879 3855

ABN 23 073 540 520

## 6. ACCIDENTAL RELEASE

<b>Spills</b>	Isolate area and warn others. Slippery when spilt. Avoid accidents – clean up immediately. Wear fully protective equipment to prevent skin and eye contamination and inhalation of vapours. Work upwind or increase ventilation. Contain spill using absorbent material such as soil, sand or other inert material. Collect and seal in properly labeled containers for disposal. Wash area down with excess water. Prevent run off into drains or waterways.
---------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## 7. HANDLING AND STORAGE

<b>Handling</b>	Ensure good industrial hygiene practice. Avoid breathing in vapour and skin and eye contact while handling the product. Wash exposed areas with soap and water.
<b>Storage</b>	Store in a cool, dry place and out of direct sunlight. Keep containers closed when not in use. Check regularly for leaks. Store away from incompatible materials and foodstuffs.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Exposure Standards (Safe Work Australia)</b>	<b>Sodium hydroxide:</b> TWA: - ppm / - mg/m <sup>3</sup> (2 Peak limitation) STEL: - ppm / - mg/m <sup>3</sup>
<b>Engineering Controls</b>	Use local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. Controls should be sufficient so that applicable occupational exposure limits are not exceeded.
<b>Respiratory Protection</b>	If engineering controls do not maintain airborne concentrations below recommended exposure limits, use a Safe Work Australia approved full face supplied air respirator. See Australian Standards AS/NZS 1715 and 1716 for more information.
<b>Eye Protection</b>	Safety goggles or face shield.
<b>Skin Protection</b>	Overalls, elbow-length impervious gloves, splash apron, rubber boots or safety shoes.
<b>Hygienic Practices</b>	Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Pale yellow-green liquid – available chlorine 10-13%.
<b>Odour</b>	Slight chlorine odour
<b>Solubility in Water</b>	Miscible
<b>Boiling Point</b>	No information available

# msds



P 1300 1 36287  
F 1300 2 36287

NATIONAL OFFICE  
A 35 Moreton Street  
HEATHWOOD Q 4110  
PO Box 131  
CAROLE PARK Q 4300

P +61 7 3879 3844  
F +61 7 3879 3855

ABN 23 073 540 520

Freezing Point	No information available
Vapour Pressure (mm of Hg @ 25°C)	No information available
Specific Gravity (Water = 1)	1.2 @ 20°C
pH	12.5 (1% w/w)
Flash Point	Not applicable
Flammable Limit – Lower	Not applicable
Flammable Limit – Upper	Not applicable

## 10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Incompatible Materials	Acids, metals, metal salts, reducing agents and peroxides.
Hazardous Decomposition Products	Decomposes on heating, emitting toxic fumes.
Hazardous Polymerization Conditions to Avoid	No information available Heat.

## 11. TOXICOLOGICAL INFORMATION

Toxicity	<b>Sodium hydroxide:</b> Intraperitoneal LD <sub>50</sub> (rat) = 1400 mg/kg Irritation data: Eye (monkey) = 1% / 24 hour - severe Eye (rabbit) = 1% / 24 hour - severe Skin (rabbit) = 500mg / 24 hour – severe Very corrosive. Causes severe burns. May cause serious permanent eye damage. Very harmful by ingestion. Harmful by skin contact or by inhalation of dust.
	<b>Sodium hydroxide:</b> Oral LD <sub>50</sub> (mouse) = 5800 mg/kg Oral TD <sub>Lo</sub> (women) = 1000 mg/kg Intravenous TD <sub>Lo</sub> (man) = 45 mg/kg Corrosive. Causes burns to skin and eyes. Harmful by ingestion, inhalation and through skin contact. Skin irritant. Degree of harm depends upon the concentration of hypochlorite.
Routes of Exposure	Inhalation, ingestion, eye and skin
Acute Health Effects	Inhalation: Can cause respiratory irritation and delayed pulmonary oedema (fluid build up in lungs delayed up to 48 hours). Ingestion: Can cause nausea, vomiting, diarrhea, abdominal pain and chemical burns to the gastrointestinal tract. Eye: A severe eye irritant. Corrosive to eyes. Contact can cause corneal burns. Contamination of eyes can result in permanent injury.



<b>Chronic Health Effects</b>	Skin: Can cause severe irritation and skin burns. Corrosive to skin.
<b>Existing Conditions</b>	No information available.
<b>Aggravated by Exposure</b>	No information available.
<b>Carcinogenicity</b>	No (Safe Work Australia)

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	<b>Aquatic organisms:</b> LC <sub>50</sub> (fish) = 0.07-5.9mg/L – 48 hour Very toxic to aquatic organisms. Avoid contaminating waterways. This material is biodegradable. Expected to be harmful to terrestrial species.
<b>Mobility</b>	No information available.

## 13. DISPOSAL CONSIDERATIONS

<b>Disposal methods and containers</b>	Dispose according to applicable local and state government regulations.
<b>Special precautions for landfill or incineration</b>	Please consult your state Land Waste Management Authority for more information

## 14. TRANSPORT INFORMATION

Classified as a dangerous good according to the Australian Code for the Transport of Dangerous goods by road or rail.

<b>UN Number</b>	1791
<b>Proper Shipping Name</b>	HYPOCHLORITE SOLUTION
<b>Dangerous Goods Class</b>	8
<b>Hazchem Code</b>	2X
<b>Packing Group</b>	III
<b>Special Precautions</b>	Not applicable

## 15. REGULATORY INFORMATION

Sodium hydroxide, sodium hypochlorite and water are listed in the Australian Inventory of Chemical Substances (AICS).

**Poisons Schedule: 5**



## 16. OTHER INFORMATION

**Last Revision of MSDS** Rev 2.0 (26/06/2014)  
Rev 3.0 (20/11/2014) – Section 14.

**Prepared by** MSDS.COM.AU Pty Ltd

[www.msds.com.au](http://www.msds.com.au)

**Abbreviations Used** IARC: International Agency for Research on Cancer  
STEL: Short term exposure limit  
TWA: Time weighted average

### Emergency Contacts

<b>Focus Products Pty Ltd</b>	<b>07 3879 3844</b>
<b>Focus Products Pty Ltd – Emergency Number</b>	<b>0411 623 619 (A/H)</b>
<b>Police and Fire Brigade</b>	<b>000</b>
<b>Poisons Information Centre</b>	<b>13 11 26</b>

The information contained in this material safety data sheet is provided in good faith and is believed to be accurate at the date of issuance. Focus Products Pty Ltd makes no representation of the accuracy or comprehensiveness of the information and to the full extent allowed by law excludes all liability for any loss or damage related to the supply or use of the information in this material safety data sheet. MSDS.COM.AU Pty Ltd is not in a position to warrant the accuracy of the data herein. The user is cautioned to make their own determinations as to the suitability of the information provided to the particular circumstances in which the product is used.

Please read instructions / label before using product.

This MSDS is prepared in accord with the Safe Work Australia document “Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - December 2011”