



## Section 1: Identification of the Material and Supplier

**Product Name:** Citrafoam

**Other Names:** Aqueous solution of potassium hydroxide containing sodium hypochlorite and surfactants.

**Proper shipping name (ADG Code):** None assigned.

**Recommended use:** As a concentrated chlorine detergent for use in the cleaning and sanitising of equipment, walls and tables in the food and related industries. Dilute and use as directed on the product label.

**Supplier:** Hunters Products (TAS) Pty. Ltd.,  
A.C.N. 004 601 263

### HEAD OFFICE

60 Gleadow Street,  
INVERMAY TAS 7248  
Tel: 03 6331 4755  
Fax: 03 6334 1065

### HOBART OFFICE

105 Albert Road,  
MOONAH TAS 7009  
Tel: 03 6228 7955  
Fax: 03 6228 7988

### BURNIE OFFICE

22 Pearl Street,  
WIVENHOE TAS 7320  
Tel: 03 6431 9627  
Fax: 03 6432 2083

### Emergency Phone Numbers:

Transport/Fire Emergency:	<b>000</b>	(Emergency services)
Medical Emergency:	<b>131126</b>	(Poisons Information Centre)

## Section 2: Hazards Identification

Classified as hazardous according to criteria of Worksafe Australia.

Non-dangerous goods.

**Risk Phrases:** R: 36/38 Irritating to skin and eyes.  
R: 31 Contact with acids liberates toxic gas.

**Safety Phrases:** S: 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S: 28 After contact with skin, wash immediately with plenty of soap-suds.  
S: 37/39 Wear suitable gloves and eye/face protection.  
S: 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible).  
S: 50 Do not mix with acids or other types of oxidising agents.

### Section 3: Composition/Information on Ingredients

**Ingredients:**

Sodium hypochlorite	[7681-52-9]	< 10 %
Surfactants		< 10 %
Potassium hydroxide	[1310-58-3]	0.98 %
Other ingredients deemed not to be hazardous		< 10 %
Water	[7732-18-5]	to 100 %
Available chlorine	[7782-50-5]	5 %

### Section 4: First Aid Measures

**For advice, contact a Poisons Information Centre (Phone 131126) or a doctor.**

Swallowed: If swallowed do NOT induce vomiting.

Skin: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

Eyes: If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.

Inhaled: Remove from exposure, rest and keep warm. Unless exposure has been slight, obtain medical advice.

**First Aid facilities:**

Recommended: Eye wash. Hand wash basin.  
Emergency shower if handling industrial quantities.

**Advice to Doctor:**

Product is an aqueous solution of potassium hydroxide containing sodium hypochlorite and surfactants, with up to 5 % available chlorine. Irritating to skin and eyes. May cause burns to skin and eyes. If swallowed, vomiting should not have been induced because of risk of aspiration into the lungs.  
Contact Poisons Information Centre.

**Aggravated medical conditions:**

Pre-existing skin disorders, respiratory insufficiency.

## Section 5: Fire Fighting Measures

<b>HAZCHEM Code:</b>	None assigned.
<b>Extinguishant:</b>	Water.
<b>Risk of violent reaction or explosion:</b>	No.
<b>Products of combustion:</b>	Water vapour, oxides of carbon, chlorine, hydrogen chloride, oxides of nitrogen, oxides of sulphur.
<b>Protective Equipment:</b>	Breathing apparatus and protective gloves for fire only.

## Section 6: Accidental Release Measures

**Emergency Procedures:**

Contain.  
Increase ventilation.

**For large spills:**

Contain spillages with sand or earth. Transfer both liquid and solids to suitable container(s). Treat residues as for small spills.

**For small spills:**

If local regulations permit, mop up with plenty of water and run to waste, diluting greatly with running water. Otherwise absorb on inert absorbent and transfer to suitable container. Wash site of spillage thoroughly with water and detergent. Ventilate area to dispel any residual vapours.

## Section 7: Handling and Storage

**Precautions for safe handling:**

Avoid contact with skin and eyes.  
Avoid breathing vapours.  
Keep away from acids.  
Do not mix with other chemicals.

**Conditions for safe storage:**

Store in a cool, well ventilated place, out of reach of children. Large quantities should be stored in a bunded area. Store in original container. Keep container tightly closed and out of direct sunlight. Prevent vapours from collecting in enclosed or low lying spaces. Keep away from acids and other oxidising agents. Protect from physical damage. Clean up all spills and splashes promptly; avoid secondary accidents.

**Incompatibles:**

Acids, oxidising agents.

## Section 8: Exposure Controls/Personal Protection

### National Exposure Standards:

<b>ES-TWA:</b>	Potassium hydroxide	2 mg/m <sup>3</sup>
	Chlorine	1 ppm, 3 mg/m <sup>3</sup>
<b>ES-STEL:</b>	None assigned.	
<b>ES-PEAK:</b>	Potassium hydroxide	2 mg/m <sup>3</sup>
	Chlorine	1 ppm, 3 mg/m <sup>3</sup>

**Notations:** None.

*[Peak] indicates a ceiling concentration which should not be exceeded, even momentarily.*

**Biological Limit Values:** No data found.

### Engineering Controls:

Do not use active metals (such as aluminium, tin, zinc or galvanised iron) or wood as materials of construction. Ensure adequate ventilation (same as outdoors) when using. If handling industrial quantities, or if vapour risk exists, consider local mechanical exhaust/extraction to keep airborne contamination as low as possible and at least below the TLV.

### Personal Protective Equipment:

Avoid contact with skin and eyes. Avoid breathing vapours. Personal protection to be selected from those recommended below, as appropriate to mode of use, quantity handled and degree of hazard:-

#### Normal Use:

Eye/face protection  
Gloves, rubber or plastic.

#### Industrial Quantities:

Positive pressure air hood  
Face shield or safety glasses  
Gloves, rubber or plastic  
Plastic apron, sleeves and boots  
Impervious overalls.

## Section 9: Physical and Chemical Properties

Appearance: Clear, pale amber, mobile, frothing liquid.  
Odour: Smell of citrus.  
pH: 12.7  
Vapour Pressure: No data.  
Vapour Density: No data.  
Boiling Point: From 100 °C  
Melting Point: No data.  
Volatiles: About 90 %  
Volatile Organic Compounds (VOC): < 1 %  
Evaporation Rate: No data.  
Solubilities: Miscible with water in all proportions.  
Specific Gravity/Density: About 1.09 g/mL  
Flash Point: None.  
Flammable Limits: None.  
Dust Explosion: Not applicable.  
Auto-ignition Temperature: No data.

### Other Information:

Alkaline mixture. Will react vigorously with acids, generating chlorine, a toxic gas. May absorb carbon dioxide from the air, forming potassium carbonate. Oxidising bleach, with up to 5 % available chlorine. May react with other types of oxidising agent. Will react vigorously with reducing agents. Contact with active metals (such as aluminium, tin, zinc or galvanised iron) may generate hydrogen, a flammable gas. May attack wood and wood products. Contact with combustible material may cause fire. Slippery when spilled.

## Section 10: Stability and Reactivity

**Chemical Stability:** Stable under normal conditions.  
Sodium hypochlorite may decompose slowly on exposure to light and air.

**Conditions to Avoid:** Incompatible materials, light, air.

**Incompatible Materials:** Acids, reducing agents, active metals, wood and wood products, other types of oxidising agents.

**Hazardous Decomposition Products:** Chlorine, hydrogen chloride, oxides of nitrogen, oxides of sulphur.

**Hazardous Reactions:** Contact with acids will generate chlorine.  
Contact with active metals may generate hydrogen.  
May react vigorously or violently with other types of oxidising agents.  
May react vigorously or violently with reducing agents.

## Section 11: Toxicological Information

### Health Effects:

No data available for the mixture. Information presented relates to individual ingredients.

*Corrosive. May produce severe burns. Attacks skin and eyes.  
Wear eye protection and protective gloves when mixing or using.  
[AHMAC]*

- Acute:**
- Swallowed:** May cause irritation or burns. Likely to cause gastric upset with abdominal discomfort or pain, nausea, vomiting and diarrhoea. Very large doses may cause lowering of blood pressure, weakness and corrosion of the mucous membranes of the mouth, throat and gastrointestinal system. An aspiration risk.
- Skin:** Irritating to skin. Will degrease the skin. May cause redness, pain and blisters. Prolonged contact may lead to dermatitis and burns.
- Eyes:** Both liquid and vapours are irritating to eyes. Splashes into the eyes may cause redness, pain and severe deep burns. Risk of permanent damage.
- Inhaled:** Inhalation of chlorine vapour may cause irritation of the upper respiratory tract, coughing, a burning sensation, shortness of breath. Prolonged exposure may cause bronchial irritation and pulmonary oedema (fluid build-up in the lungs). Aspiration of froth into the lungs during swallowing or vomiting may lead to chemical pneumonitis (irritation of lung tissues) and pulmonary oedema. Onset of symptoms may be delayed.
- Chronic:** Repeated skin contact may lead to irritation, burns and dermatitic effects. Long term, low level exposure to chlorine vapour may cause chloracne and erosion of the teeth. Chronic exposure to sodium hypochlorite may cause methaemoglobinaemia (characterised by chocolate-brown coloured blood), headache, dizziness, weakness, shortness of breath, cyanosis, rapid heart rate, possible loss of consciousness. Hypochlorite salts have been classified by IARC as a carcinogen, group 3; unclassifiable as to carcinogenicity to humans, on inadequate evidence in experimental animals and no available human data. (1)

<b>LD50:</b>	Sodium hypochlorite	8,910 mg/kg oral, rat. 5,800 mg/kg oral, mouse.
	Potassium hydroxide	273 mg/kg oral, rat.
<b>TDL0:</b>	Sodium hypochlorite	1,000 mg/kg oral, woman - general depressed activity, blood pressure lowering, corrosive to skin (after topical exposure).

## Section 12: Ecological Information

<b>Ecotoxicity:</b>	Harmful to aquatic organisms.
<b>Persistence and degradability:</b>	Sodium hypochlorite component decomposes on exposure to air and light. No data found on surfactants used in this product.
<b>Mobility:</b>	Readily transported by water.
<b>Environmental Fate:</b>	No data.
<b>Bioaccumulative potential:</b>	No data.
<b>Other adverse environmental effects:</b>	No data.

## Section 13: Disposal Considerations

The generator of any wastes from this product is responsible for its proper classification, transport and disposal.

Consult appropriate local and State regulations.

**Disposal methods and containers:**

Avoid disposal to natural waters or the environment.  
Avoid use of aluminium or galvanised iron containers.

**Special precautions for landfill or incineration:**

Unsuitable for incineration.

## Section 14: Transport Information

**UN Number:** None assigned.

**UN Proper shipping name:** None assigned.

**Class and subsidiary risk:** None.

**Packaging group:** None.

**Special precautions for user:** Keep away from acids. Protect from light. Keep away from combustible materials.

**HAZCHEM Code:** None assigned.

**Material for export:** Not regulated.

## Section 15: Regulatory Information

**Poisons (SUSDP):** Schedule 5  
*Potassium hydroxide solution containing 5 % or less of potassium hydroxide and with a pH more than 11.5.*

**Dangerous Goods:** No.

<b>Carcinogen:</b>	<b>Australia</b>	<b>IARC</b>	<b>NTP</b>	<b>RTECS</b>
	No.	Yes.	No.	No data.

**Agricultural and Veterinary Chemicals Act:** Not applicable.

**Australian Inventory of Chemical Substances (AICS):** Listed.

**Other National/International Regulations:** No data.

## Section 16: Other information

**Date of MSDS preparation:** March 2005

**Abbreviations:**

NOHSC - National Occupational Health and Safety Commission.  
 ACGIH - American Conference of Governmental Industrial Hygienists.  
 MAK - Maximum workplace concentration - Germany,  
*(maximale Arbeitsplatzkonzentration)*  
 IARC - International Agency for Research on Cancer (France).  
 NPT - National Toxicology Program (USA).  
 RTECS - Registry of Toxic Effects of Chemical Substances.

**Literature references:**

(1) *IARC Monographs, Vol. 52 (1991), (p.159)*

**Other Available Sources of Data:**

*National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [2011(2003)] - NOHSC.*

*Australian Dangerous Goods Code.*

*Standard for the Uniform Scheduling of Drugs and Poisons - AHMAC.*

*Exposure Standards for Atmospheric Contaminants in the Occupational Environment [1003]- NOHSC.*

*List of Designated Hazardous Substances [10005] - NOHSC.*

*Merck Index - Merck Inc.*

*Sax's Dangerous Properties of Industrial Materials - Lewis.*

*Handbook of Toxic and Hazardous Chemicals and Carcinogens - Sittig.*

*Handbook of Reactive Chemical Hazards - Bretherick.*

*Hawley's Condensed Chemical Dictionary - Wiley Interscience.*

*AUSREG's Chemical Data Package for PCs - AUSREG Consultancy.*