



## Section 1: Identification of the Material and Supplier

**Product Name:** Sodium hypochlorite 12.5 %

**Other Names:** Bleach; Sodium hypochlorite solution with 12.5 % available chlorine

**Proper shipping name (ADG Code):** Hypochlorite solution 12.5 %

**Recommended use:** As a chlorinating bleach and sanitiser. Use as directed on the product label. In prescribed premises, rinse all food areas with potable water after use.

**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: 000 (Emergency services)  
Medical Emergency: 131126 (Poisons Information Centre)

## Section 2: Hazards Identification

Classified as hazardous according to criteria of Worksafe Australia.

Dangerous goods.

**Risk Phrases:** R: 31 Contact with acids liberates toxic gas.  
R: 34 Causes burns.

**Safety Phrases:** S: 1/2 Keep locked up and out of the reach of children.  
S: 28 After contact with skin, wash immediately with plenty of soap-suds.  
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 other chemicals.

## Section 3: Composition/Information on Ingredients

**Ingredients:**

Sodium hypochlorite	[7681-52-9]	10 - 30 %
Other ingredients deemed not to be hazardous		10 - 30 %
Water	[7732-18-5]	to 100 %
Available chlorine	[7782-50-5]	12.5 %

## 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. Continue flushing with water until advised to stop by the Poisons Information Centre or a doctor. Wash clothing thoroughly before re-use.

Eyes: If in eyes, hold eyelids open 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 attention.

**First Aid facilities:**

Mandatory: Eye wash. Hand wash basin.

Recommended: Emergency shower if handling industrial quantities.

**Advice to Doctor:**

Product is a strong solution of sodium hypochlorite. If swallowed, may cause fall in blood pressure, corrosion and possible perforation of oesophagus and stomach, laryngeal oedema.

Emesis is not recommended because of the risks associated with re-exposure of the oesophagus to sodium hypochlorite. (3)

Treat with antacids to neutralise hypochlorous acid formed in the stomach, then as for alkaline materials. Inhalation over-exposure may cause delayed-onset pulmonary oedema. Observation is indicated. Treat symptomatically. Contact Poisons Information Centre.

**Aggravated medical conditions:**

Pre-existing respiratory disease, or sensitivity to chlorine.

## Section 5: Fire Fighting Measures

<b>HAZCHEM Code:</b>	2 X
<b>Evacuate:</b>	No.
<b>Extinguishant:</b>	Water fog or fine water spray.
<b>Risk of violent reaction or explosion:</b>	No.
<b>Products of combustion:</b>	Chlorine, hydrogen chloride.
<b>Protective Equipment:</b>	Full protective clothing including breathing apparatus and protective gloves.

## 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 closed 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 concentrated vapours.  
Keep away from combustible materials, acids, nitro compounds including amines and ammonium compounds, other chlorinating materials.

**Conditions for safe storage:**

Store in a cool, well ventilated place, out of reach of children. Large quantities should be stored in a bonded dangerous goods store. Store in original container. Containers should be vented with at least 5 % ullage, or unvented with at least 10 % ullage @ 23 °C. Do not store in unlined metal drums. Keep container tightly closed and out of direct sunlight. Prevent vapours from collecting in enclosed or low lying spaces. Keep away from acids, other oxidising agents, combustible materials. Protect from physical damage. Clean up all spills and splashes promptly; avoid secondary accidents.

**Incompatibles:**

Acids, other oxidising agents, combustible materials, metals, metal salts, formic acid, amines, ammonium compounds, aziridine, methanol.

## Section 8: Exposure Controls/Personal Protection

**National Exposure Standards:**

<b>ES-TWA:</b>	None assigned by NOHSC, but see: Chlorine	1 ppm, 3 mg/m <sup>3</sup>
<b>ES-STEL:</b>	None assigned.	
<b>ES-PEAK:</b>	None assigned by NOHSC, but see: Chlorine	1 ppm, 3 mg/m <sup>3</sup>
<b>Notations:</b>	None.	

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

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

**Engineering Controls:**

Avoid using wood, wood products or unprotected metals 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:**

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

*CAUTION: Cotton or linen overalls impregnated with oxidising agents may be readily ignited and can burn fiercely.*

## Section 9: Physical and Chemical Properties

Appearance:	Clear, almost colourless, mobile liquid. May become yellowish on long storage.
Odour:	Characteristic odour of chlorine bleach. Odour threshold (chlorine): 0.3 ppm
pH:	About 13.
Vapour Pressure:	17.5 mm Hg @ 20 °C
Vapour Density:	Heavier than air.
Boiling Point:	From about 100 °C
Melting Point:	No data.
Volatiles:	12.5 % as available chlorine.
Volatile Organic Compounds (VOC):	None.
Evaporation Rate:	No data.
Solubilities:	Miscible with water.
Specific Gravity/Density:	1.21 g/mL @ 20 °C
Flash Point:	None.
Flammable Limits:	None.
Dust Explosion:	Not applicable.
Auto-ignition Temperature:	No data.

### Other Information:

Alkaline solution. Contact with acids will generate chlorine, a toxic gas. Contact with combustible materials may cause fire. May react violently if mixed with other types of chlorinating compounds. May form explosive products with amines, ammonium compounds, aziridine, methanol, formic acid, phenylacetonitrile. May generate oxygen on prolonged storage. Pressure may build up on long storage, especially in non-vented containers. Corrosive to many metals. Will decompose on heating above 40 °C, on exposure to air or sunlight, and on contamination. Slippery when spilled.

## Section 10: Stability and Reactivity

<b>Chemical Stability:</b>	Stable under normal conditions. May decompose slowly on long storage.
<b>Conditions to Avoid:</b>	Incompatible materials, heating, sunlight, prolonged exposure to air.
<b>Incompatible Materials:</b>	Acids, other oxidising agents, combustible materials, amines, ammonium compounds, formic acid, methanol, phenylacetonitrile, reducing agents, metal salts, metals, wood and wood products.
<b>Hazardous Decomposition Products:</b>	Chlorine, hydrogen chloride.
<b>Hazardous Reactions:</b>	Contact with combustible materials may cause fire. May react explosively with formic acid, phenylacetonitrile. Forms explosive products with amines, ammonium compounds, aziridine, methanol. Contact with acids will generate chlorine gas.

## Section 11: Toxicological Information

### Health Effects:

<b>Acute:</b>	<b>Swallowed:</b>	Corrosive and irritating if swallowed. May cause corrosion of the mucous membranes of the mouth, throat and gastrointestinal tract, a burning sensation, pain, abdominal cramps, oesophageal or gastric perforation, laryngeal oedema. May cause general depressed activity, lowering of blood pressure, nausea, vomiting, weakness, delirium, loss of consciousness and coma.
	<b>Skin:</b>	Corrosive or irritating to skin. May cause redness, pain and blisters. Prolonged contact may cause dermatitic effects and/or burns
	<b>Eyes:</b>	Corrosive or irritating to eyes. May cause redness, pain, severe deep burns. Prolonged contact may lead to permanent injury.
	<b>Inhaled:</b>	Inhalation of vapours or aerosols may cause coughing, shortness of breath and a burning sensation. May cause severe bronchial irritation and pulmonary oedema (fluid build-up in the lungs). Onset of symptoms may be delayed by several hours after exposure. Pulmonary complications, e.g. from aspiration, may contribute to the death of a casualty. <span style="float: right;">(3)</span>
<b>Chronic:</b>		Chronic skin exposure may cause skin sensitisation in some rare cases, but sodium hypochlorite is not classified as a sensitiser. Chronic exposure to sodium hypochlorite may lead to methaemoglobinaemia, characterised by chocolate-brown coloured blood, headache, dizziness, weakness, shortness of breath, cyanosis, rapid heart rate, unconsciousness and possible death.  Sodium hypochlorite is classified by IARC (1991) as a carcinogen, group 3; unclassifiable as to carcinogenicity to humans (on inadequate animal data, no human data). (1) Mutagenic effects have been reported in experimental animals and in human lymphocyte, human embryo cells. (2)(4)
<b>LD<sub>50</sub> :</b>	Sodium hypochlorite	8,910 mg/kg oral, rat. 5,800 mg/kg oral, mouse.
<b>TDLo:</b>	Sodium hypochlorite	1,000 mg/kg oral, woman - general depressed activity, lowered blood pressure, skin burns (after topical exposure).

## Section 12: Ecological Information

<b>Ecotoxicity:</b>	Harmful to aquatic organisms.
<b>Persistence and degradability:</b>	Will degrade on exposure to air, sunlight.
<b>Mobility:</b>	Readily transported by water and through soil.
<b>Environmental Fate:</b>	Decomposes over time.
<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.  
Do not store in unlined metal containers.

**Special precautions for landfill or incineration:**

Unsuitable for incineration.  
May be unsuitable for landfill.

## Section 14: Transport Information

<b>UN Number:</b>	UN 1791
<b>UN Proper shipping name:</b>	Hypochlorite solution with 12.5 % available chlorine.
<b>Class and subsidiary risk:</b>	8 Corrosive.
<b>Packaging group:</b>	III
<b>Special precautions for user:</b>	Do not mix with other chemicals. Keep containers cool. Keep away from combustible materials. Do not store or transport with DG Classes 1, 4.3, 5.1, 5.2, 7, acids.
<b>HAZCHEM Code:</b>	2 X
<b>Material for export:</b>	Refer to <b>IMO/IMDG</b> or <b>IATA/ICAO</b> .



*Handbook of Reactive Chemical Hazards - Bretherick.*  
*Hawley's Condensed Chemical Dictionary - Wiley Interscience.*  
*AUSREG's Chemical Data Package for PCs - AUSREG Consultancy.*