1 Identification

GHS Product Identifier

PRO HYPO 12.5%

Other means of identification

Sodium Hypochlorite

Recommended use of the chemical and restriction on use

Bleaching agent.

Supplier's details

5 Heads Pty Ltd trading as:

Perth Progressive Supplies, **Street Address:** 230 Gnangara Rd, Landsdale WA 6065
Ph: 08 9303 9290
E:perthsales@progressivesupplies.com.au

Broome Progressive Supplies, **Street Address:** 7 Haynes Street, Broome WA 6725
Ph: 08 9192 6200
E: sales@progressivesupplies.com.au

Derby Progressive Supplies, **Street Address:** 24 Clarendon St Derby WA 6728
Ph: 08 9191 1000
E: derby@progressivesupplies.com.au

ACN: 098 396 546

Emergency phone number

National Poisons Information Centre: Phone Australia **13 11 26**.

2 Hazard(s) identification

Classification of the substance or mixture

This material is hazardous according to health criteria of Safe Work Australia.

Hazard Category: Corrosive (C)

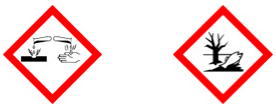
Hazard Classification: HAZARDOUS SUBSTANCE, DANGEROUS GOOD

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

Poison Schedule: S5 Caution
This material is a Scheduled S5 Poison and must be stored, handled and used according to the appropriate regulations..

Skin Corrosion/Irritation - Category 1C
Serious Eye Damage/Irritation - Category 1
Acute Hazard to the Aquatic Environment - Category 1

GHS label elements



Causes severe skin burns and eye damage

Harmful if inhaled

Very toxic to aquatic life

If medical advice is needed,have product container or label at hand.

Keep out of reach of children.

Read label before use.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wash hands, face and all exposed skin thoroughly after handling.

Avoid release to the environment.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.

IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

Wash contaminated clothing before reuse.

Collect spillage.

Store locked up.

Dispose of contents/container to accordance with local, regional, national and international regulations.

Other hazards which do not result in classification

Warning Statement:

WARNING -
Harmful if inhaled. Corrosive.
Toxic. Oxidizer. Light sensitive.
May cause methemoglobinemia.
Causes eye and skin burns.
Causes digestive and respiratory tract burns

3 Composition/information on ingredients

Description	CAS Number	EINECS Number	%	Note
sodium hypochlorite	7681-52-9		10 - 30	10.5 (m/m as avail Cl2)
ingredients determined to be non hazardous			0	Balance

4 First-aid measures

Description of necessary first-aid measures

Inhalation: Remove victim from exposure - avoid becoming a casualty. 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 advice if effects persist.

Skin Contact: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If swelling, redness, blistering or irritation occurs seek medical assistance. For gross contamination, immediately drench with water and remove clothing. Continue to flush skin and hair with plenty of water (and soap if material is insoluble). For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. If swelling, redness, blistering, or irritation occurs seek medical assistance.

Eye contact: Immediately irrigate with copious quantities of water for 15 minutes. Eyelids to be held open. Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport to hospital or medical centre. If in eyes wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.

Ingestion: Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Seek medical advice.

Most important symptoms/effects, acute and delayed

No Information provided.

Indication of immediate medical attention and special treatment needed, if necessary

Advice to Doctor:
Treat symptomatically.

In case of poisoning, contact Poisons Information Centre
In Australia call Tel: **131126**
In New Zealand Tel: 034747000

5 Fire-fighting measures

Suitable extinguishing media

If material is involved in a fire use water fog (or if unavailable fine water spray), alcohol resistant foam, standard foam, dry agent (carbon dioxide, dry chemical powder).

CAUTION: Use of water spray when fighting fire may be inefficient.

HAZCHEM CODE: 2X [Aust]

Specific hazards arising from the chemical

FLAMMABILITY Heat or damage to containers may release corrosive or toxic fumes.

Special protective actions for fire-fighters

Self-contained breathing apparatus (SCBA) required for fire-fighting personnel. If possible to do so safely, shut off fuel to fire.
Use water spray to spray to cool fire-exposed surfaces and to protect personnel.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
If tanks, drums or containers of this material are heated, they may rupture and project corrosive materials over a wide area.

Fire fighting further advice: Not combustible, however following evaporation of aqueous component residual material can burn if ignited.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Use suitable equipment (including PPE) to prevent contamination of skin, eyes and personal clothing. Remove ignition sources and provide sufficient ventilation.
Emergency procedures,
Evacuate the danger area or to consult an expert**.** Approach from upwind. Isolate the area. Wear self-contained breathing apparatus in confined spaces, in cases where the oxygen level is depleted, or in case of significant emissions. Prevent further leakage or spillage if safe to do so. Keep away from incompatible products.

Environmental precautions

If the product contaminates rivers and lakes or drains inform respective authorities. Do not flush into surface water or sanitary sewer system.
General Information: Use proper personal protective equipment as indicated in Section 8.

Consult an expert regarding disposal of this product.

Methods and materials for containment and cleaning up

Spills/Leaks:
The spills can be neutralized using light reducing agents such as sodium sulphite, sodium bisulphite or sodium thiosulphate. Do not use sulphates or bi-sulphate! Contain and recover when is possible

Special precautions:
Do not use combustible materials, such as saw dust! **Do not use sulphates or bisulphates for spill neutralizing!**

7 Handling and storage

Precautions for safe handling

Protect against physical damage. Personnel which handling the product must wear protective equipment for hand, skin or eyes, and including protective breathing apparatus. Area should be well ventilated.

Advice on general occupational hygiene:
Avoid inhalation or ingestion and contact with skin and eyes. General occupational hygiene measures are required to ensure safe handling of the substance.

Handling: Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols.

Conditions for safe storage, including any incompatibilities

Store in a cool place and out of direct sunlight.
Store away from sources of heat or ignition.
Store away from oxidizing agents and strong acids.

Keep containers tightly closed, when not using the product.
Store in original packages as approved by manufacturer.

Keep in tightly closed containers, store in a cool, dry, well ventilated area. Isolate from incompatible substances. The aqueous solutions are sensitive to light and air. Avoid storage for long period because the product degrades over time. The recommended storing temperature is 15-25C. Storage at 15C reduces the rate of decomposition.
The electrical equipment should be corrosion resistant.
Incompatible materials: reducing agents, combustible materials (wood, cellulose), organic materials, metals, acids.
Materials to avoid: carbon steel, stainless steel, copper and its alloys, aluminium, unprotected metals.
Materials used for storage tanks:
• polyethylene; 5-7 years life time. The outdoor tanks will be UV proof.
• glass fibre reinforced plastics – designed accordingly
• steel rubber-lined (thickness of lining - ¾")
• steel Halar lined (Halar is a copolymer 1:1 ethylene- chlorotrifluoroetylene) ; 3-6 years life time function of quality of lining application.
• titanium – the best material used for tank construction but because the high price is used only for specific applications.

8 Exposure controls/personal protection

Control parameters

HCIS Airborne Exposure Limits: Chlorine: TWA 1 ppm (3 mg/m3 peak limitation)

As published by Safe Work Australia.
TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

STEL (Short Term Exposure Limit) - the average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept too as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

Appropriate engineering controls

Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use only in well ventilated areas. Use with local exhaust ventilation or while wearing appropriate respirator.

Individual protection measures

Personal Protection Equipment: SAFETY SHOES, OVERALLS, GLOVES, CHEMICAL GOGGLES, RESPIRATOR.

Wear safety shoes, overalls, gloves, chemical goggles, respirator. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.Available information suggests that gloves made from should be suitable for

intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols. Ensure that eyewash stations and safety showers are close to the workstation location

9 Physical and chemical properties

Physical and chemical properties

Appearance: clear, colourless liquid
Odour: chlorine odour
Odour threshold: Not available
pH: alkaline**,** >12
Melting point: Not available
Initial boiling point and boiling range: 100ºC approx.
Flash point: Not available
Evaporation rate: Not available
Flammability (solid, gas): Not available
Upper/lower flammability or explosive limits: Not available
Vapour pressure: 2500 Pa
Vapour density: Not available
Specific Gravity: 1.09 for 5.25%; 1.15 for 8.0%; 1.18 for 10.5%; 1.21 for 12.0%
Solubility: Miscible in all proportions
Partition coefficient: n-octanol/water: -3.42 (calculated value).
Auto-ignition temperature: Not available
Decomposition temperature: Not available
Viscosity: 2.6 mPa.s

10 Stability and reactivity

Reactivity

Absorbs carbon dioxide from air. Reacts exothermically on dilution with water.

Chemical stability

This material is thermally stable when stored and used as directed.

Possibility of hazardous reactions

HAZARDOUS POLYMERIZATION: Will not occur.

Conditions to avoid

Elevated temperatures and sources of ignition.

Incompatible materials

:Incompatible with acids , ammonia, metals , metal salts , reducing agents and peroxides.

Hazardous decomposition products

Corrosive to aluminium, zinc and tin, liberating flammable hydrogen gas. Reacts vigorously with acids liberating toxic chlorine gas.

11 Toxicological information

Toxicological (health) effects

No adverse health effects are expected, if the product is handled in accordance with this Safety Data Sheet and the product label.

Information on the likely routes of exposure

No Information provided.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms and effects that may arise if the product is mishandled and overexposure occurs are:

ACUTE HEALTH EFFECTS:

Swallowed:
Will cause burns to the mouth, mucous membranes, throat, oesophagus and stomach. If sufficient quantities are ingested (swallowed) death may occur.

Eye:
Will cause burns to the eyes with effects including: Pain, tearing, conjunctivitis and if duration of exposure is long enough, blindness will occur.

Skin:
Will cause burns to the skin, with effects including; Redness, blistering, localised pain and dermatitis.

Inhaled:
Toxic if inhaled. Will cause severe irritation to the nose, throat and respiratory system with effects including: Dizziness, headache, coughing, loss of co-ordination, chest pains, respiratory paralysis and or failure.

Delayed and immediate effects and also chronic effects from short and long term exposure

Chronic:
Prolonged or repeated skin contact will lead to necrosis (death) of the skin.
Prolonged or repeated exposure or deliberately concentrating and inhaling the vapour(s) may result in lung function incapacity or death.

Numerical measures of toxicity (such as acute toxicity estimates)

Inhalation: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >20 mg/L
Skin contact: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >2,000 mg/Kg
Ingestion: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >2,000 mg/Kg LD50 (Mice): 5800 mg/kg (Sodium Hypochlorite)
Corrosion/Irritancy: Eye: this material has been classified as a Category 1 Hazard (irreversible effects to eyes). Skin: this material has been classified as a Category 1C Hazard (irreversible effects to skin).
Sensitisation: Inhalation: this material has been classified as not a respiratory sensitiser. Skin: this material has been classified as not a skin sensitiser.
Aspiration hazard: This material has been classified as non-hazardous.
Specific target organ toxicity (single exposure): This material has been classified as non-hazardous.
Chronic Toxicity
Mutagenicity: This material has been classified as non-hazardous.
Carcinogenicity: This material has been classified as non-hazardous.
Reproductive toxicity (including via lactation): This material has been classified as non-hazardous.

Specific target organ toxicity (repeat exposure): This material has been classified as non-hazardous.

Interactive effects

No Information provided.

Where specific chemical data are not available

No Information provided.

Mixtures

No Information provided.

Mixture versus ingredient information

No Information provided.

Other information

There is no other toxicological information available for this product.

12 Ecological information

Toxicity

In large concentrations, this product is detrimental to the aquatic environment. Avoid contaminating waterways.

Persistence and degradability

Readily Biodegradable.

Bioaccumulative potential

No Information provided.

Mobility in soil

Readily dilutes with water.

Other adverse effects

Chemical Fate Information: This substance may cause long term adverse effects in the aquatic environment.

13 Disposal considerations

Disposal methods

Refer to appropriate authority in your State. Dispose of material through a licensed waste contractor. Normally suitable for disposal by approved waste disposal agent.

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible material and its container should be recycled. If material or container cannot be recycled,

dispose in accordance with local, regional, national and international Regulations.

14 Transport information

UN Number

1791

UN Proper Shipping Name

HYPOCHLORITE SOLUTION

Transport hazard class(es)

Dangerous Goods Class: 8

Label: Corrosive (C)

Hazchem Code: 2X

Packing group, if applicable

III

Environmental hazards

No Information provided.

Special precautions for user

No Information provided.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No Information provided.

15 Regulatory information

Safety, health and environmental regulations specific for the product in question

Poison Schedule: S5 [Aust]

Inventory Status:

Inventory	*Status*
Australia (AICS)	All materials are listed.

16 Other information

Other information

Key Legend Information:
NOHSC -National Occupational Health & Safety Commission {Formerly Worksafe}[Aust]
SUSDP -Standard for the Uniform Scheduling of Drugs and Poisons [Aust]
TWA -Time Weighted Average [Int]
STEL -Short Term Exposure Limit [Int]

AICS -Australian Inventory of Chemical Substances
EPA -Environmental Protection Agency [Int]
NIOSH -National Institute for Occupational Safety and Health [US]
AS/NZS 1715 -Selection, use and maintenance of respiratory protective devices. [Aust/NZ]
AS/NZS 1716 -Respiratory protective devices. [Aust/NZ]
IATA -International Aviation Transport Authority [Int]
ICAO -International Civil Aviation Organization [Int]
IMO -International Maritime Organisation. [Int]
IMDG -International Maritime Dangerous Goods [Int]
United Nations Recommendations for the Transport of Dangerous Goods and Globally Harmonized System for the classification and labelling of Chemicals. [Int]
EU -European Union

[Aust/NZ] = Australian New Zealand
[Int] = International
[US] = United States of America

Removal of the heading of *Poison Schedule [Aust],* in section 3 and 15 of this Safety Data Sheet (SDS) makes this a valid health and safety document in other international jurisdictions/countries. For full compliance please contact your Federal, State or Local regulators for further information.

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THE SDS IN THE CONTEXT OF HOW THE PRODCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY, SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS.

OUR RESPONSIBILITY FOR PRODUCT SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If you are an employer it is your duty to tell your employees, and any others that may be affected, of any hazards described in this sheet and of any precautions that should be taken.
Safety Data Sheets are updated frequently. Please ensure you have a current copy.

Principal References:
Information supplied by manufacturer, reference sources including the public domain.

END OF SDS