

# SAFETY DATA SHEET

**HYDRO 360**

Infosafe No.: HC005  
ISSUED Date : 28/05/2015  
ISSUED by: Hydro-Chem Pty Ltd

## 1. IDENTIFICATION

### GHS Product Identifier

HYDRO 360

### Product Code

360

### Product Type

WATER TREATMENT BIOCIDES

### Company Name

Hydro-Chem Pty Ltd

### Address

23B Industrial Drive Braeside  
VIC 3195

### Telephone/Fax Number

Tel: (03) 9553 1011

### Emergency phone number

1300 558 788

### Emergency Contact Name

Tony Ventura

### Recommended use of the chemical and restrictions on use

Initial Dose - Use at the rate of 80 ml Hydro 360 per 1000 Litres of water.

Maintenance Dose - 20 ml Hydro 360 per 1000 Litres of water.

Consult your HydroChem technical representative for specific recommendations.

### Additional Information

Product Description : Biocide used for disinfection of open cooling water recirculating systems.

Other uses include Bleaching, Sterilising, Effluent treatment, Textiles, Wood Pulp and Domestic water.

## 2. HAZARD IDENTIFICATION

### GHS classification of the substance/mixture

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Eye Damage/Irritation: Category 1

Hazardous to the Aquatic Environment - Acute Hazard: Category 1

Skin Corrosion/Irritation: Category 1C

### Signal Word (s)

DANGER

### Hazard Statement (s)

AUH031 Contact with acids liberates toxic gas.

H314 Causes severe skin burns and eye damage.

H400 Very toxic to aquatic life.

### Pictogram (s)

Corrosion, Environment



**Precautionary statement – Prevention**

- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P264 Wash contaminated skin thoroughly after handling.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Precautionary statement – Response**

- P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
- P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 Immediately call a POISON CENTER or doctor/physician.
- P363 Wash contaminated clothing before reuse.
- P391 Collect spillage.

**Precautionary statement – Storage**

- P405 Store locked up.

**Precautionary statement – Disposal**

- P501 Dispose of contents/container to / in accordance with local regulations.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Information on Composition**

All ingredients in this product are listed on the Australian Inventory of Chemical Substances (AICS).

**Ingredients**

Name	CAS	Proportion
Sodium hypochlorite	7681-52-9	10-30 %
Sodium hydroxide	1310-73-2	0-0.99 %
Water	7732-18-5	TO 100%

**4. FIRST-AID MEASURES**

**Inhalation**

Remove victim from exposure - avoid becoming a casualty.  
 For all but the most minor symptoms arrange for patient to be seen by a doctor as soon as possible - either on site or at the nearest hospital.

**Ingestion**

Rinse mouth thoroughly with water immediately.  
 Give water to drink. DO NOT induce vomiting.  
 Seek immediate medical assistance.  
 For advice, contact a Poison Information Centre (Phone 13 11 26) or a doctor.

**Skin**

Wash affected areas with copious quantities of water immediately.  
 Remove contaminated clothing and wash before re-use.  
 If swelling, redness, blistering or irritation occurs seek medical advice.

**Eye contact**

Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open.  
Seek immediate medical assistance.

#### **Advice to Doctor**

Treat symptomatically as for strong alkalis.

Can cause corneal burns. Delayed pulmonary oedema may result. DO NOT use acid antidotes in the treatment of Sodium Hypochlorite Poisoning. Sodium Thiosulphate immediately reduces Hypochlorite to Non-Toxic products.

## **5. FIRE-FIGHTING MEASURES**

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### **Fire Fighting Measures**

Decomposes on heating emitting toxic fumes. If involved in a fire contact with metal may liberate Chlorine gases and vapours. Keep containers cool with water spray.

Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.

### **Suitable Extinguishing Media**

Extinguishing Media : Water fog (or if unavailable fine water spray), foam, dry agent (CO<sub>2</sub> or dry chemical powder).

### **Hazchem Code**

2X

## **6. ACCIDENTAL RELEASE MEASURES**

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### **Emergency Procedures**

In Case material is spilled or released : Major spills should be contained.

Use sand and earth. Increase ventilation and allow controlled access to drain accompanied by a large excess of water. Minor spills should be hosed down with excess water.

WASTE DISPOSAL METHODS: Refer to State Land Waste Management Authority.

Will require dilution to less than 5% available chlorine before acceptance to disposal site. Copious dilution with water prior to passing to drain is acceptable - within limits of no site licensing arrangements.

### **Spills & Disposal**

In Case material is spilled or released : Major spills should be contained.

Use sand and earth. Increase ventilation and allow controlled access to drain accompanied by a large excess of water. Minor spills should be hosed down with excess water.

WASTE DISPOSAL METHODS: Refer to State Land Waste Management Authority.

Will require dilution to less than 5% available chlorine before acceptance to disposal site. Copious dilution with water prior to passing to drain is acceptable - within limits of on site licensing arrangements.

## **7. HANDLING AND STORAGE**

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### **Precautions for Safe Handling**

Avoid skin and eye contact and breathing in vapour, mists and aerosols. Keep out of reach of children.

### **Conditions for safe storage, including any incompatibilities**

Store in cool place and out of direct sunlight.

Store away from foodstuffs.

Keep containers closed when not in use.

Store away from incompatible materials described in Section 10.

### **Other Information**

Will react with peroxides, metal salts and reducing agents. Containers must be vented.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### Occupational exposure limit values

No value assigned for this specific product by the National Occupational Health and Safety Commission (NOHSC). However, Decomposition Product : Chlorine (Peak Limitation) = 3 mg/m<sup>3</sup> (1 ppm)

As published by NOHSC.

Peak Limitation - a ceiling concentration which should not be exceeded over a measurement period which should be as short as possible but not exceeding 15 minutes.

### Appropriate Engineering Controls

Use with adequate ventilation.

Maintain concentration below recommended exposure limit.

### Personal Protective Equipment

Wearing of the following personal protective equipment is recommended.

Overalls or similar protective apparel.

Safety glasses, goggles or faceshield as appropriate.

PVC, neoprene or nitrile rubber gloves.

Rubber gloves.

If risk of inhalation of spray mist exists, wear combined organic vapour/particulate respirator. If using a respirator' ensure that the cartridges are correct for the potential air contamination and are in good working order.

### Hygiene Measures

Wash hands before eating, drinking, smoking and using the toilet.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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### Form

Liquid

### Appearance

Pale yellow liquid with a slight chlorine odour.

### Melting Point

-6°C (5% Solution)

### Boiling Point

100°C

### Solubility in Water

Completely miscible

### Specific Gravity

1.2 @ 20°C

### pH

13.0

### Vapour Pressure

Not available

### Vapour Density (Air=1)

Data not available

### Viscosity

Not available

### Flash Point

Data not available.

### Flammability

Not flammable under conditions of use.

**Auto-Ignition Temperature**

Data not available

**Flammable Limits - Lower**

Not available

**Flammable Limits - Upper**

Not available

## 10. STABILITY AND REACTIVITY

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**Possibility of hazardous reactions**

STABILITY : Product is unstable and only has a limited shelf life due to decomposition.

CONDITIONS TO AVOID : Exposure to light and heat will release oxygen which can create pressure buildup in drums.

HAZARDOUS DECOMPOSITION PRODUCTS: Chlorine.

HAZARDOUS POLYMERIZATION: Will not occur.

INCOMPATIBILITY (Materials to avoid): Reacts violently with acids producing dangerous levels of gaseous chlorine. Also metals, metal salts, reducing agents, peroxides and ethylene diamine tetra acetic acid.

## 11. TOXICOLOGICAL INFORMATION

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**Toxicology Information**

Toxicity Data : Oral LD50 (rat) = 8910 mg/kg

**Ingestion**

An alkaline poison, primary irritant to mucous membranes, throat, gastrointestinal tract.

**Inhalation**

Primary irritant to respiratory tract with prolonged exposure.

**Skin**

Contact with skin will result in moderate irritation.

**Eye**

Corrosive to eyes; contact can cause corneal burns.

**Chronic Effects**

An alkaline poison and primary irritant to muscous membranes, throat, gastrointestinal tract and respiratory tract. Low system toxicity.

## 12. ECOLOGICAL INFORMATION

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**Ecotoxicity**

Avoid Contaminating Waterways.

48 hr LC50 (fish) = 0.07 - 5.9 mg/l

**Persistence and degradability**

Data not available

**Mobility**

Data not available

**Environmental Fate**

This product is Biodegradable.

**Bioaccumulative Potential**

Data not available

### 13. DISPOSAL CONSIDERATIONS

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#### **Waste Disposal**

Refer to State Land Waste Management Authority or a Licensed disposal contractor for disposal.  
Empty containers must be decontaminated, rinse with water before landfill disposal.

### 14. TRANSPORT INFORMATION

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#### **U.N. Number**

1791

#### **UN proper shipping name**

HYPOCHLORITE SOLUTION

#### **Transport hazard class(es)**

8

#### **Packing Group**

III

#### **Hazchem Code**

2X

#### **Storage and Transport**

Must be stored and transported in accordance with State and Territory dangerous goods regulations. Store in a cool place and out of direct sunlight.

Observe the requirements of the Australian Code for the transport of dangerous goods by road and rail.

#### **IERG Number**

37

### 15. REGULATORY INFORMATION

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#### **Poisons Schedule**

S5

#### **Packaging & Labelling**

Dangerous goods Class : 8

Packaging Group : III

As required by the ADG Code and the Standard for the Uniform Scheduling of Drugs and Poisons.

### 16. OTHER INFORMATION

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#### **Date of preparation or last revision of SDS**

01/06/2005

#### **Contact Person/Point**

Normal Working Hours - Ph: (03) 9553 1011 Fax: (03) 9553 1387  
Ask for the Facilities Manager, Sales Manager or Services Manager.  
After Hours - Ph : 1300 558 788

Further information/advice is available to those persons responsible for the design of safe work practices on their written request to HydroChem.

This SDS summarises to the best of our knowledge at the date of issue, the health and safety hazard information of the selected

substance and how to safely handle the selected substance in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace, including in conjunction with other products.

Hydro-Chem Pty Ltd responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

If clarification or further information is required, the user should contact Hydro-Chem Pty Ltd using the contact details provided.

### **Empirical Formula & Structural Formula**

NaOCl

### **Revisions Highlighted**

Sections : 3, 4, 5, 8, 9, 10, 11, 12 & 16.

## **END OF SDS**

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