

SAFETY DATA SHEET

HYDRO 360

Infosafe No.: HC005 ISSUED Date : 24/04/2020 ISSUED by: Hydro-Chem Pty Ltd

1. IDENTIFICATION

GHS Product Identifier

HYDRO 360

Product Code

360

Product Type

WATER TREATMENT BIOCIDE

Company Name

Hydro-Chem Pty Ltd

Address

23B Industrial Drive Braeside

VIC AUSTRALIA

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 ${\bf 1}$

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

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.

Remove victim from exposure - avoid becoming a casualty.

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.

If swelling, redness, blistering or irritation occurs seek medical advice.

Remove contaminated clothing and wash before re-use.



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

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 (CO2 or dry chemical powder).

Hazchem Code

2X

6. ACCIDENTAL RELEASE MEASURES

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

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

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/m3 (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

Maintain concentration below recommended exposure limit.

Use with adequate ventilation.

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

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

рΗ

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

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

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

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

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

U.N. Number

1791

UN proper shipping name

HYPOCHLORITE SOLUTION

Transport hazard class(es)

8

Packing Group

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

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

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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