

SAFETY DATA SHEET

Date of Issue: 29/03/2019

Issue No 3

Last revision: March 2019

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1. PRODUCT IDENTIFIER & IDENTITY FOR THE CHEMICAL**Product Identifier: ASTROCHLOR****Other Names:**

Chemical Family/Type: Alkali

Proper shipping name (ADG): Corrosive Liquid N.O.S. (Sodium Hydroxide)

SUSMP name: Poison Schedule 6 (Sodium Hydroxide)

Product Code: M0897

Recommended use of the chemical and restrictions on use: Foaming detergent sanitizer. No restrictions**Supplier Details****PERTH:**

Environex International Pty Ltd;

19 Motivation Drive

Wangara WA 6065

EMAIL: sales@environex.net.au

ABN: 371 5988 7117

FAX: (08) 9302 5000

TEL: (08) 9302 4000

BUNBURY:

Environex International Pty Ltd;

18 Halifax Drive,

Bunbury WA 6230

CONTACT POINT - Chemist - TELEPHONE (08) 9302 4000

EMERGENCY TELEPHONE NUMBER: A/H +61 407 994 198 or Toll Free 1800 999 196

2. HAZARD IDENTIFICATION**Classification of the hazardous chemical****Emergency overview:** Harmful if inhaled. Corrosive. Toxic. Oxidizer. Light sensitive. May cause methemoglobinemia. Causes eye and skin burns. Causes digestive and respiratory tract burns. Releases chlorine if mixed with acid

Classification by the ADG Code: A dangerous good.

Classification by Hazardous Chemical Information System (HCIS) (Australia):

Specific target organ toxicity (single exposure) – category 3, H335

Skin Corr. Cat 1A; H314

Aquatic Acute cat 1, H400

Contact with acids liberates toxic gas, AUH031

Label elements according to the National model Code of Practice for the Labelling of Workplace Hazardous Chemicals (2015):**Hazard pictograms:**

Exclamation Mark (GHS07) Corrosion (GHS05) Environment (GHS09)

Signal word: DANGER**Hazard Statements:**

H314: Causes severe skin burns and eye damage.

H335: May cause respiratory irritation.

H400: Very toxic to aquatic life.

AUH031: Contact with acids liberates toxic gas. (Specific concentration limit \geq 5%)**Precautionary statements:**

P260 Do not breathe dusts or mists.

P264 Wash ...thoroughly after handling.

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P280 Wear protective gloves/ protective clothing/ eye protection/face protection.

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.

P321 Specific treatment (see ... on this label) (cleansing agent if appropriate)

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

P501 Dispose of contents/ container in accordance with local/regional/ national/international Regulations

Other hazards which do not result in classification: No data.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<i>Substance Name</i>	<i>Concentration, %</i>	<i>Product Identifier</i>	<i>Hazard Classes and Hazard Categories</i>
Sodium Hydroxide	5-10	CAS No. 1310-73-2 EC No. 215-185-5	STOT SE 3, H335 Skin Corr. 1A , H314
Sodium Hypochlorite	<10 (as Cl ₂)	CAS No. 7681-52-9 EC No. 231-668-3 Index No. 017-011-00-1	Skin Corr. 1B , H314 Aquatic Acute 1; H400 STOT SE 3, H335 Contact with acids liberates toxic gas, AUH031

Ingredients either below cut off levels or not classified in “Implementing GHS – Annex 9”

<i>Substance Name</i>	<i>Concentration, %</i>	<i>Product Identifier</i>	<i>Hazard Classes and Hazard Categories</i>
Water	>60	CAS No. 7732-18-5 EC No. 231-791-2	Not Listed

4. FIRST AID MEASURES

Description of necessary first aid measures

Ingestion: If the person is conscious, give him large quantities of water immediately to dilute the sodium hydroxide. Do not attempt to make the exposed person vomit. GET MEDICAL ATTENTION IMMEDIATELY.

Inhalation: Move the exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. If breathing is difficult, give oxygen. Keep the affected person warm and at rest. GET MEDICAL ATTENTION IMMEDIATELY.

Skin: Immediately flush contaminated skin with water. If large areas of the body are contaminated or if clothing is penetrated, immediately use safety shower, removing clothing while under the shower. Flush exposed areas with large amounts of water for at least 15 minutes. GET MEDICAL ATTENTION IMMEDIATELY. Wash clothing before reuse.

Eyes: Immediately flush eyes with a directed stream of water for at least 15 minutes. Forcibly hold eyelids apart to ensure complete irrigation of all eye and lid tissue. Washing eyes within 1 minute is

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essential to achieve maximum effectiveness. GET MEDICAL ATTENTION IMMEDIATELY. Contact lenses should not be worn when working with this chemical.

Symptoms caused by exposure: Burning sensation to skin and eyes and throat

Medical Attention and Special Treatment

Notes to Physician: For methemoglobinemia, administer oxygen alone or with Methylene blue depending on the methemoglobinemia concentration in the blood.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: This product is not combustible. Water spray, foam, carbon dioxide, or dry chemicals may be used where this product is stored.. Cool containers with flooding quantities of water until well after fire is out.

Specific hazards arising from the chemical

Fire: Not considered to be a fire hazard. Contact with metals may evolve flammable hydrogen gas.

Explosion: Not considered to be an explosion hazard.

Autoignition Temperature: Not available.

Explosion Limits, Lower: N/A, **Upper:** N/A

Hazchem Code: 2X

Special protective equipment and precautions for fire fighters

Advice for firefighters: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Use proper personal protective equipment as indicated in Section 8. Wear self-contained breathing apparatus in confined spaces, or in case of significant emissions. Prevent further leakage or spillage if safe to do so. Keep away from incompatible products. Persons not wearing protective equipment and clothing should be restricted from areas of spills until cleanup has been completed.

Environmental precautions: If the product contaminates rivers and lakes or drains inform respective authorities. Do not flush into surface water or sanitary sewer system.

Methods and materials for containment and cleaning up: Leaks should be stopped. Spills should be contained and cleaned up immediately. Spills should be removed by using a vacuum truck. Neutralize remaining traces of material with sodium metabisulfite. The spill area should then be flushed with water. All clean-up material should be removed and placed in approved containers, labelled and stored in a safe place to await proper treatment or disposal. Spills on areas other than pavement (dirt or sand) may be handled by removing the affected soils and placing in approved containers.

7. HANDLING AND STORAGE

Precautions for safe handling: Wash thoroughly after handling. Use only in a well ventilated area. Keep container tightly closed. Do not get on skin or in eyes. Do not ingest or inhale. Discard contaminated shoes.

Conditions for safe storage, including any incompatibilities: Store according to Australian Standards AS 3780-1994. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from metals. Corrosives area. Do not store in metal containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters – exposure standards, biological monitoring**

HCIS Airborne Exposure Limits: Sodium Hydroxide: TWA 2 mg/m³, STEL Peak Limitation.

Chlorine: TWA 1.0 ppm (3 mg/m³) – peak limitation

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Appropriate engineering controls: Facilities storing or utilising this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits

Personal protective equipment (PPE)

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles

Skin: Wear appropriate gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respiratory Protection (AS/NZS 1715/1716 Approved): Wear a full-face piece dust/mist respirator
For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator.

Work/Hygienic Practices: Avoid contact with the skin and avoid breathing mist. Do not eat, drink, or smoke in work area. Wash hands before eating, drinking, or using toilet facilities.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Semi viscous yellow liquid with a chlorine odour

pH (neat) 13.2± 0.5

Melting Point/Range: No data

Boiling Point/Range: N/A

Solubility in Water: 100%

Vapour Pressure (mmHg): No data

Specific Gravity (Water=1): 1.13 @ 20°C

Molecular Weight: N/A

Vapour Density (Air=1): N/A

Freezing Point: No data

10. STABILITY AND REACTIVITY

Reactivity: Will not polymerise. Chlorine is an oxidising agent and will react with metal containers and rubber.

Chemical Stability: Stable under normal temperatures and pressures. Chlorine concentration will decrease with time.

Conditions to Avoid: Contact with strong acids, amines, ammonia, ammonium salts, reducing agents, metals, formic acid, methanol, formic acid, and phenylacetonitrile. Contact with metals such as aluminium, tin, zinc and alloys containing these metals cause formation of flammable hydrogen gas.

Incompatible materials and possible hazardous reactions: Reacts with alkalies (bases) to form phosphate salts and is corrosive (especially when hot) to many metals and alloys. Slowly liberates explosive hydrogen gas when reacting with stainless steel.

Hazardous Decomposition Products: Hydrogen chloride, chlorine, irritating and toxic fumes and gases, sodium oxide.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Information on routes of exposure: Contact, Inhalation and Oral.

Symptoms related to exposure

Eye: May cause irreversible eye injury. Contact with liquid is corrosive to the eyes and causes severe burns.

Skin: Contact with liquid is corrosive and causes severe burns and ulceration.

Ingestion: Causes severe pain, nausea, vomiting, diarrhoea, and shock. May cause haemorrhaging of the digestive tract. May cause corrosion and permanent tissue destruction of the oesophagus and digestive tract. May be harmful if swallowed.

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Inhalation: Irritation may lead to chemical pneumonitis and pulmonary oedema. Causes severe irritation of upper respiratory tract with coughing, burns, breathing difficulty, and possible coma.

Chronic: Prolonged inhalation may cause respiratory tract inflammation and lung damage. Prolonged or repeated skin contact may cause dermatitis. Prolonged or repeated eye contact may cause conjunctivitis

Numerical measures of toxicity

No data for product. However the following data is for the ingredients.

Sodium Hypochlorite: LD50/LC50: CAS# 7681-52-9: Oral, mouse: LD50 = 5800 mg/kg. CAS# 7782-50-5: Inhalation, mouse: LC50 =137 ppm/1H; Inhalation, rat: LC50 =293 ppm/1H. Carcinogenicity: Sodium hypochlorite - Not listed by ACGIH, NIOSH, NTP, or OSHA. IARC Cat 3. Chlorine - ACGIH: A4 - Not Classifiable as a Human Carcinogen

Acute toxicity: Sodium Hydroxide: Oral-Rabbit, adult LDLo: 500 mg/kg. IPR-MUS LD50 40 mg kg-1 Irritation data: Eye (Monkey) 1%/24h severe. Skin (Rabbit) 500 mg/24h severe Eye (Rabbit) 1% severe.

Immediate, delayed and chronic health effects from exposure

Skin corrosion/irritation: product will cause burns to skin

Serious eye damage/irritation: product will cause serious eye damage

Respiratory or skin sensitisation: Not sensitising.

Germ cell mutagenicity: no data

Reproductive toxicity: no data

Aspiration hazard: Not an aspiration hazard

Carcinogenicity: No data.

Mutagenicity: No data

Specific target organ toxicity (stot) – single exposure: No data

Specific target organ toxicity (stot) – repeated exposure: No data

Exposure Levels: no data

Interactive effects: none known

Data limitations: none known

12. ECOLOGICAL INFORMATION

Ecotoxicity: No information for the product. Ingredients: Sodium hypochlorite: Ecotoxicity: LC50 (48 hr) rainbow trout: 0.07 mg/l [Nikunen, E. Ecotoxicol. Environ. Saf. 1985, 9, 84-91]. LC50 (96 hr) fathead minnow: 5.9 mg/l [Curtis, M. W. et al J. Hydrol. 1981,51,359

Sodium Hydroxide: Toxicity to fish: LC50 - Fish - 100 ppm - 48 h – Fatal.

Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia - 100 ppm - 24 h - Fatal

Persistence and degradability: Large quantities of chlorine will affect sewage treatment plants.

Bioaccumulative potential: No data

Mobility in soil: No data

Other adverse effects: None known

13. DISPOSAL CONSIDERATIONS**Safe handling and disposal methods:**

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to an approved waste facility. State and local disposal regulations may differ from federal disposal regulations. Do not flush to sewer.

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Disposal of any contaminated packaging: Dispose of container and unused contents in accordance with federal, state and local requirements. Neutralise to pH 6-9 before disposal.

Environmental regulations: No data

14. TRANSPORT INFORMATION

Australian DG Classification for Road and Rail: UN 1760, Shipping Name: Corrosive Liquid N.O.S. (Sodium Hydroxide); Class: 8, Sub Risk: None, Packaging Group: II

IMDG Code: UN Number: 1760, Shipping Name: Corrosive Liquid NOS (Sodium Hydroxide); Class: 8, Sub Risk: None, Packaging Group: II; EmS: F-A, S-B; Stowage and Segregation: Category B, clear of living quarters

Environmental hazards: Not a marine pollutant

Special precautions during transport: No data

Hazchem Code: 2X

15. REGULATORY INFORMATION

Australian Inventory of Chemical Substances: All ingredients are listed in the AICS

SUSMP Poison Labelling: Schedule: S6. **SAFETY DIRECTIONS:** Corrosive. May produce severe burns.

Attacks skin and eyes. Avoid contact with skin and eyes. Avoid breathing vapour or spray mist. Ensure adequate ventilation when using. Wear eye protection when mixing or using.

Wear protective gloves when mixing or using. Do not mix with hot water. **FIRST AID**

INSTRUCTIONS: For advice, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor (at once). If swallowed, do NOT induce vomiting. 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. If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water

16. OTHER INFORMATION

Releases harmful chlorine vapour if mixed with acid.

The above information is accurate to the best of the knowledge available to us. However since data safety standards and government regulations are subject to change and the conditions of handling and use, or misuse are beyond our control we make no warranty, whether express or implied, with respect to the completeness or continuing accuracy of the information contained herein and disclaims all liability for reliance thereon. Users should satisfy themselves that they have all current data relevant to their particular use

End of SDS