

MATERIAL SAFETY DATA SHEETS

PRODUCT: LITHIUM HYPOCHLORITE

Sold As: Shock & Swim, Lithium Hypochlorite

Date of Issue: 19 July 2003

STATEMENT OF HAZARDOUS NATURE

Classified as hazardous according to criteria of WorkSafe Australia

COMPANY DETAILS

Company: International Quadratics Pty Ltd
Address: 13 Nelson Avenue Padstow NSW 2211
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PRODUCT IDENTIFICATION

Other Names: Lithium Hypochlorite
UN Number: 1479*
DG Class: 5.1*
Packing Group: 11
Hazchem Code: 1Y*
Poisons Schedule: None
Use: Swimming Pool Sanitiser

* For the purposes of transportation by road and rail, quantities of **less than 1kg** have been identified as **non-dangerous goods** by the Australian Work Cover Authority. Bulk quantities are classified as per the above schedule and are dealt with in the subsection on Storage and Handling.

PHYSICAL DESCRIPTION AND PROPERTIES

Appearance: White granular solid, chlorine odour
Melting Point: 135°C
Vapour Pressure: Not available
Specific Gravity: 0.9 – 1.0
Solubility: 430g/L in water at 27°C

Reactivity: Product is stable under normal conditions. Product will give off toxic gases of chlorine on contact with acids. Product reacts with easily oxidisable material, including many pool chemicals in the concentrated form. Reacts with ammonia, urea and related nitrogen compounds, and inorganic reducing agents.

COMPOSITION

<u>Chemical Entity</u>	<u>Proportion by Weight</u>	<u>CAS RegistryNo.</u>
Lithium Hypochlorite, 35% Available Chlorine	27-30%	13840-33-0
Lithium Chloride	4%	7447-41-8
Lithium Carbonate	2%	554-13-2
Lithium Chlorate	2%	36355-96-1
Lithium Hydroxide	1 %	1310-65-2
Inert Materials (including Water)	balance	7732-18-5

HEALTH HAZARD INFORMATION

Effects from Acute Exposure

Swallowed: May cause burns to the mouth, throat and stomach resulting in vomiting, diarrhoea and abdominal pain.

Eyes: Risk of serious damage to the eyes which could result in permanent injury.

Skin: This product is corrosive to the skin.

Inhaled: Inhalation of dust can cause irritation or burns to the nose, throat and mucous membranes. Fine dust reaching the lungs is toxic. However the physical nature of the product (granules is such that dust particle of respirable sizes are not likely to be encountered.

Effects from Exposure: This product has no known chronic effects.

FIRST AID

Ingestion: If conscious, drink large quantities of water immediately. **DO NOT** induce vomiting. Seek immediate medical attention or Poisons Information Centre phone **13 11 26** Australia wide. **NEVER** attempt to give anything by mouth to an unconscious person.

Eyes: If in eyes, hold eyes open, flood with water for at least 15 minutes and see a Doctor immediately.

Skin: If skin contact occurs, remove contaminated clothing immediately and wash skin with plenty of cold water. Wash contaminated clothing before re-use. If irritation occurs contact a doctor.

Inhalation: Remove victim from exposure. If breathing laboured and patient cyanotic (blue), ensure airways are clear and have a qualified person give oxygen through a face mask. If breathing has stopped apply artificial respiration at once. In the event of cardiac arrest, apply external cardiac massage. Seek urgent medical attention.

FIRST AID FACILITIES

Eye wash and safety shower in area of use

PRECAUTIONS FOR USE

EXPOSURE STANDARDS

No permissible exposure limits have been established for this product by the National Occupation Health and Safety Commission (WorkSafe Australia). However, it is recommended that a short-term exposure limit (STEL) of 2mg/m³ be observed.

ENGINEERING CONTROLS

Use adequate ventilation. Avoid generating and inhaling dust.

PERSONAL PROTECTION

Avoid skin and eye contact. Wear overalls, chemical goggles, full-face shield, impervious gloves, rubber boots and rubber apron when working with large volumes. Use with adequate ventilation. If inhalation risk exists, wear an approved respirator. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and protective equipment before re-using.

FLAMMABILITY

This product is combustible. Avoid conditions of extreme heat, contamination with moisture, solvents, acids, glycerine, turpentine, organic greases, glycols and other organic material.

STORAGE AND HANDLING

Only when lithium hypochlorite mixtures exceed 39% available chlorine does the UN Code 1471 apply. However, as bulk quantities of this product are regarded as a Class 5.1 Oxidising Solid (Packing Group 11, EPG Code 5A1) by the Australian Code for the Transport of Dangerous Goods by Road or Rail (Eight Edition), the UN Code 1479 (Oxidising Solid N.O.S.) may be deemed applicable. Bio-Lab Australia P/L therefore advises that the storage and handling of the product be treated according to the relevant Dangerous Goods guidelines for the UN Code.

SPILLS AND DISPOSAL

Wear protective equipment to prevent skin and eye contamination and inhalation of dust. Sweep, scoop, or vacuum all spilled material and contaminated material and place in clean dry containers for disposal. Complete clean-up on a dry basis. For disposal, refer to the State Land waste Management Authority.

FIRE AND/OR EXPLOSION HAZARD

May be combustible when in contact with oxidisable materials.

Extinguishing Medium:	Use appropriate media for surrounding fire.
Fire Fighting Instruction:	Fire Fighters or others exposed to products of combustion should wear full protective clothing including self-contained breathing apparatus. Thoroughly decontaminate clothing after use.
Hazardous Combustion:	Oxygen and toxic chlorine gases may be released When heated or when in contact with strong acids.

CONTACT INFORMATION

CONTACT: GENERAL MANAGER: (02) 9790 4200

DISCLAIMER

All information given in this data sheet and by the company's technical staff is compiled from the information currently available to the company. The company accepts no responsibility whatsoever for its accuracy, or for any results which may be obtained by customers. Any customer who relies upon any advice or information given in this data sheet by the company or by its technical staff does so entirely at its own risk, and the company will not be liable for any loss or damage thereby suffered notwithstanding any want of care on the part of the company or its staff in compiling or giving the advice or information.