SAFETY DATA SHEET

SDS

CHLORINE CONCENTRATE 10 Kg

Infosafe No.: LQ4HQ Issued Date: 10/06/2015 Issued by: WATERCO LIMITED

1. IDENTIFICATION

GHS Product Identifier CHLORINE CONCENTRATE 10 Kg

Product Code

Company Name WATERCO LIMITED

Address 36 South Street Rydalmere NSW 2116 Australia

Telephone/Fax Number Tel: 61 2 9898 8600

Emergency phone number

Australia 1800 638 556 land line for transport by air and sea +61 438 465960/ New Zealand 0800 154 666 land line for transport by air and sea +64 962 390 85

Recommended use of the chemical and restrictions on use

Control of algae and bacteria in swimming pools.

Other Names

Name	Product Code
CHLORINE CONCENTRATE 4 Kg	34204
CHLORINE CONCENTRATE 20 Kg	34220
SPA & POOL CHLORINE 500 g	342005
SPA & POOL CHLORINE 1 Kg	342100

2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia

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

GHS Classification: Acute toxicity - Oral category 4 Eye damage/irritation 2A Hazardous to the aquatic environment - acute hazard category 1 Hazardous to the aquatic environment - long term hazard category 1

http://www.csinfosafe.com/CSIAU/SDS/SDSView.aspx?SubstanceCode=LQ4HQ04&AppType=1&key=250LQ4HQ04

STOT single exposure category 3 - respiratory tract irritation

Signal Word (s)

WARNING

Hazard Statement (s)

H302 Harmful if swallowed.

- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Pictogram (s)

Exclamation mark, Environment



Precautionary statement – Prevention

- P261 Avoid breathing dust/fume/gas.
- P264 Wash contaminated skin thoroughly after handling
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement - Response

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P330 Rinse mouth.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P391 Collect spillage.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

Precautionary statement - Storage

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Precautionary statement – Disposal

P501 Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Name	CAS	Proportion
Sodium Dichloroisocyanurate dihydrate	51580-86-0	100 %

4. FIRST-AID MEASURES

Inhalation

If inhaled, remove affected person from contaminated area. Apply artificial respiration if not breathing. Seek medical attention.

Ingestion

Do not induce vomiting. Wash out mouth thoroughly with water. Seek immediate medical attention.

Skin

Wash affected area thoroughly with soap and water. If symptoms develop seek medical attention.

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Eye contact

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. Seek medical attention.

First Aid Facilities

Eyewash, safety shower and normal washroom facilities.

Advice to Doctor

Treat symptomatically.

Other Information

For advice in an emergency, contact a Poisons Information Centre or a doctor at once. (131 126)

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water.

Hazards from Combustion Products

Under fire conditions this product may emit toxic and/or irritating fumes and gases including nitrogen trichloride, chlorine, nitrous oxide, cyanogens chloride, carbon monoxide, hydrated salts, hypochlorous acid plus cyanurate (bleach solution).

Specific Hazards Arising From The Chemical

The product is not combustible.

Hazchem Code

2Z

Precautions in connection with Fire

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe location. Water spray may be used to cool down heat-exposed containers.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Increase ventilation. Evacuate all unprotected personnel. Wear sufficient respiratory protection and full protective clothing to prevent exposure. Sweep up material avoiding dust generation or dampen spilled material with water to avoid airborne dust, then transfer material to a suitable container. Wash surfaces well with soap and water. Seal all wastes in labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid inhalation of dust, and skin or eye contact. Use only in a well ventilated area. Keep containers sealed when not in use. Prevent the build up of dust in the work atmosphere. Maintain high standards of personal hygiene i.e. Washing hands prior to eating, drinking, smoking or using toilet facilities.

Conditions for safe storage, including any incompatabilities

Store in a cool, dry, well-ventilated area, out of direct sunlight and moisture. Store in suitable, labelled containers. Keep containers tightly closed. Store away from incompatible materials. Ensure that storage conditions comply with applicable local and national regulations.

Recommended Materials

Use corrosion-resistant structural materials and lighting and ventilation systems in the storage area.

Unsuitable Materials

Wood and other organic/combustible materials should not be used on floors, structural materials and ventilation systems in the storage area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values

http://www.csinfosafe.com/CSIAU/SDS/SDSView.aspx?SubstanceCode=LQ4HQ04&AppType=1&key=250LQ4HQ04

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No exposure standards have been established for this material. However, the available exposure limits for ingredients are listed below:

Dust not otherwise specified TWA: 10 mg/m³

Chlorine TWA: 1 ppm, 3 mg/m³ NOTICES: Peak limitation

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

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.

Biological Limit Values

No biological limits allocated.

Appropriate Engineering Controls

This substance is hazardous and should be used with a local exhaust ventilation system, drawing solid/dust away from workers' breathing zone.

Respiratory Protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable dust/particulate filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye Protection

Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

Hand Protection

Wear gloves of impervious material. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Body Protection

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Crystalline solid Colour White Odour Slight chlorine Odour is due to chlorine released when NaDCC breaks down. Melting Point 240-250°C (decomposes) Boiling Point Not applicable Solubility in Water > 22.7 g/100ml (25°C) - soluble

Solubility in Organic Solvents

Not available **Specific Gravity** Not available pH 5.8 - 7.0 (1% solution) Vapour Pressure Not available Vapour Density (Air=1) Not available **Evaporation Rate** Not available **Odour Threshold** Not available Viscosity Not available Volatile Component Not available Partition Coefficient: n-octanol/water Not available **Flash Point** Not available Flammability Non-combustible solid Auto-Ignition Temperature Not available **Explosion Limit - Upper** Not available **Explosion Limit - Lower**

Not available

10. STABILITY AND REACTIVITY

Chemical Stability Stable under normal conditions of storage and handling.

Reactivity and Stability

Reacts with incompatible materials. React non-violently with water.

Conditions to Avoid Dust accumulation. Extremes of temperature and direct sunlight

Incompatible materials Organic material, reducing agents, nitrogen containing compounds, acids, bases.

Hazardous Decomposition Products

Under fire conditions this product may emit toxic and/or irritating fumes such as nitrogen trichloride, chlorine, nitrous oxide, cyanogens chloride, carbon monoxide, hydrated salts, hypochlorous acid plus cyanurate (bleach solution).

Possibility of hazardous reactions

Organic material(including all flammable and combustible materials) increase risk of fire and explosion. Reducing agents (readily oxidisable materials) may react violently. Nitrogen containing compounds (e.g. Ammonia, ammonium salts, urea) may form hazardous nitrogen trichloride. Acids (especially hydrochloric acid), reaction generates chlorine gas. Bases (for example, soda as solution) may form nitrogen trichloride.

11. TOXICOLOGICAL INFORMATION

Toxicology Information

The available toxicity data for material given below.

Acute Toxicity - Oral

LD50 (Rat): 1420 mg/kg

Ingestion

Harmful if swallowed. Ingestion of this product may cause irritation to the mouth, throat, oesophagus and stomach with symptoms of nausea, abdominal discomfort, vomiting and diarrhoea.

Inhalation

May cause respiratory irritation. Inhalation of product dust/vapours can cause irritation of the nose, throat and respiratory system. Chronic exposure by inhalation may aggravate pre-existing upper respiratory and lung disorders such as bronchitis, emphysema and asthma. Onset and progression are related to dust concentrations and duration of exposure.

Skin

May be irritating to skin. The symptoms may include redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis.

Eye

Causes serious eye irritation. On eye contact this product will cause tearing, stinging, blurred vision, and redness.

Respiratory sensitisation

Not expected to be a respiratory sensitiser.

Skin Sensitisation

Not expected to be a skin sensitiser.

Germ cell mutagenicity

Not considered to be a mutagenic hazard.

Carcinogenicity

Not considered to be a carcinogenic hazard.

Reproductive Toxicity Not considered to be toxic to reproduction.

STOT-single exposure May cause respiratory irritation.

STOT-repeated exposure

Not expected to cause toxicity to a specific target organ.

Aspiration Hazard

Not expected to be an aspiration hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity Very toxic to aquatic life with long lasting effects. Persistence and degradability Not available Mobility Not available Bioaccumulative Potential Not available Environmental Protection

Do not discharge this material into waterways, drains and sewers.

13. DISPOSAL CONSIDERATIONS

Disposal considerations

Dispose of waste according to applicable local and national regulations. Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes including emptied containers are controlled wastes and should be disposed of in accordance with all applicable local and national regulations.

14. TRANSPORT INFORMATION

Transport Information

Road and Rail Transport: This material is classified as Dangerous Goods Class 9 Miscellaneous Dangerous Goods Class 9: Miscellaneous substances Dangerous Goods are incompatible in a placard load with any of the following: Class 1: Explosives (when the class 9 substance is a fire risk substance) Division 5.1: Oxidising substances (when the class 9 substance is a fire risk substance) and Division 5.2: Organic peroxides (when the class 9 substance is a fire risk substance) Note: Special Provision AU01: Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in: packagings that do not incorporate a receptacle exceeding 500 kg(L); or **IBCs** Marine Transport (IMO/IMDG): Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea. UN No.: 3077 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (SODIUM DICHLOROISOCYANURATE) MARINE POLLUTANT DG Class: 9 Packaging Group: III EMS No.: F-A, S-F Special provisions: 274, 335, 966, 967, 969 Air Transport (ICAO/IATA): Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air. UN No: 3077 Proper Shipping Name: : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (SODIUM DICHLOROISOCYANURATE) Class: 9 Packing Group: III Label: Miscellaneous Packaging Instructions (passenger & cargo): 956 Packaging Instructions (cargo only): 956 Special provisions: A97, A158, A179, A197 **U.N. Number** 3077 UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (SODIUM DICHLOROISOCYANURATE) Transport hazard class(es)

SDS

9 Packing Group III Hazchem Code 2Z EPG Number 9C1 IERG Number 47 IMDG Marine pollutant Yes

15. REGULATORY INFORMATION

SDS

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Poisons Schedule

S6

Australia (AICS)

All components of this product are listed on the Inventory or exempted.

16. OTHER INFORMATION

Date of preparation or last revision of SDS

SDS Created: June 2015

References

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice Standard for the Uniform Scheduling of Medicines and Poisons. Australian Code for the Transport of Dangerous Goods by Road & Rail. Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals. Workplace exposure standards for airborne contaminants, Safe work Australia. American Conference of Industrial Hygienists (ACGIH) Globally Harmonised System of classification and labelling of chemicals.

Contact Person/Point

Emergency contact: Australia 1800 638 556 landline +61 438 465 960 New Zealand 0800 154 666 landline +64 962 390 85

END OF SDS

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