

# SAFETY DATA SHEET

## SPA BROMINE TABLETS 10KG

Infosafe No.: LQ4HI  
 Issued Date: 10/06/2015  
 Issued by: WATERCO LIMITED

### 1. IDENTIFICATION

#### GHS Product Identifier

SPA BROMINE TABLETS 10KG

#### Product Code

3490110

#### 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

Disinfectant/decontaminant for spas and heated pools, cooling towers, irrigation lines & cut flower holder water.

#### Other Names

Name	Product Code
SPA BROMINE TABLETS 1KG	349061
SPA BROMINE TABLETS 2KG	349062

### 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 (3rd) Classification:

Acute toxicity - Dermal category 4

Acute toxicity - Inhalation category 4

Acute toxicity - Oral category 4

Eye damage/irritation 1

Oxidizing solids category 2

Skin corrosion/irritation category 1C

#### Signal Word (s)

**DANGER****Hazard Statement (s)**

H272 May intensify fire; oxidizer.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H332 Harmful if inhaled.

**Precautionary Statement (s)**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

**Pictogram (s)**

Exclamation mark, Corrosion, Flame over circle

**Precautionary statement – Prevention**

P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

P220 Keep/Store away from clothing/combustible materials.

P221 Take any precaution to avoid mixing with combustibles.

P260 Do not breathe mist/vapours/spray.

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.

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

**Precautionary statement – Response****GENERAL**

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

**INHALATION**

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

P310 Immediately call a POISON CENTER or doctor/physician.

P330 Rinse mouth.

**INGESTION**

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P310 Immediately call a POISON CENTER or doctor/physician.

**EYE**

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.

**SKIN**

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P310 Immediately call a POISON CENTER or doctor/physician.

P363 Wash contaminated clothing before reuse.

**OTHER**

P370+P378 In case of fire: Use water for extinction.

**Precautionary statement – Storage**

P405 Store locked up.

**Precautionary statement – Disposal**

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

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Ingredients**

Name	CAS	Proportion
Bromochloro- 5, 5- dimethyl hydantoin	126- 06- 7	90- 100 %
Ingredients determined not to be hazardous		Balance

**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**

Remove all contaminated clothing immediately. Wash gently and thoroughly with water and non-abrasive soap for 15 minutes. Ensure contaminated clothing is washed before re-use or discard. Seek immediate medical attention.

**Eye contact**

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Seek immediate 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**

Use water.

**Unsuitable Extinguishing Media**

Do not use ammonium phosphate extinguisher near water and product.

**Hazards from Combustion Products**

Under fire conditions this product may emit toxic and/or irritating fumes, gases and vapours including toxic hydrogen bromide and bromine. Will smoulder in large fires, fuelled by other materials, with emission of dense black smoke for a long time.

**Specific Hazards Arising From The Chemical**

A strong oxidising agent. Contact with combustible material may cause fire. Non-combustible, but will support the combustion of other materials.

**Hazchem Code**

1Y

**Precautions in connection with Fire**

Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) and full protective clothing to prevent exposure to vapours, fumes or products of combustion. 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

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### Precautions for Safe Handling

Corrosive solids. Attacks skin and eyes. Causes burns. Avoid breathing in dust. Wear suitable protective clothing, gloves and eye/face protection when mixing and using. Use in designated areas with adequate ventilation. Keep containers tightly closed. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands after handling, and before eating, drinking, smoking or using the toilet facilities.

### Conditions for safe storage, including any incompatibilities

Corrosive. Store in a cool dry well-ventilated area. Store away from oxidising agents and bases/acids. Keep containers closed when not in use, securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Store in original packages as approved by manufacturer. Ensure that storage conditions comply with applicable local and national regulations. Refer to AS 4326-2008 The storage and handling of oxidizing agents and AS 3780-2008 The storage and handling of corrosive substances.

### Storage Temperatures

20-32°C

### Unsuitable Materials

Paint, petroleum, other combustible organic materials, organic and inorganic oxidizers, ammonia, urea or similar nitrogen containing compounds, strong reducing agents & calcium hypochlorite.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### Occupational exposure limit values

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

Chlorine

TWA: 1 ppm, 3 mg/m<sup>3</sup>

Notes: Peak Limitation

Dust not otherwise specified

TWA: 10 mg/m<sup>3</sup>

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.

STEL (Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

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 vapours away from workers' breathing zone. If the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn.

### 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. Reference should be made to Australian/New Zealand 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 full face shield should be used. 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. 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

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**Appearance**

Solid tablet

**Colour**

White

**Odour**

Faint halogenous odour

**Melting Point**

163-164°C

**Boiling Point**

Not applicable

**Solubility in Water**

Not available

**Solubility in Organic Solvents**

Not available

**Specific Gravity**

1.8-2

**pH**

3.4 - 3.6 (0.1% solution) (25°C)

**Vapour Pressure**

Not applicable

**Vapour Density (Air=1)**

Not applicable

**Evaporation Rate**

Not applicable

**Odour Threshold**

Not available

**Viscosity**

Not available

**Partition Coefficient: n-octanol/water**

Not available

**Flash Point**

Not applicable

**Flammability**

Oxidiser. Non-combustible, however in fire situations oxygen may be liberated and increase the intensity of the fire.

**Auto-Ignition Temperature**

Not applicable

**Flammable Limits - Lower**

Not applicable

**Flammable Limits - Upper**

Not applicable

**Oxidising Properties**

Oxidiser

## 10. STABILITY AND REACTIVITY

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### Reactivity

Refer to Sec 10: Possibility of hazardous reactions.

### Chemical Stability

Stable under normal conditions of storage and handling.

### Conditions to Avoid

Dust accumulation. Extremes of temperature and direct sunlight. Moisture. Contact with combustible materials. Do not mix with anything other than water.

### Incompatible materials

Paint, petroleum, other combustible organic materials, organic and inorganic oxidizers, ammonia, urea or similar nitrogen containing compounds, strong reducing agents & calcium hypochlorite. Do not mix with anything other than water.

### Hazardous Decomposition Products

Thermal decomposition may result in the release of toxic and/or irritating fumes, gases and vapours including hydrogen bromide and bromine fumes at >160°C.

### Possibility of hazardous reactions

Will react with incompatible materials.

### Hazardous Polymerization

Will not occur.

## 11. TOXICOLOGICAL INFORMATION

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### Toxicology Information

The available toxicity data for material given below.

#### Acute Toxicity - Oral

LD50 (Rat): 929 mg/kg

#### Acute Toxicity - Inhalation

LD50 (Rat): 1.1mg/L/4h

#### Ingestion

Harmful if swallowed. Ingestion of this product will cause nausea, vomiting, abdominal pain and chemical burns to the mouth, throat and stomach.

#### Inhalation

Harmful if inhaled. Inhalation will result in respiratory irritation and possible harmful corrosive effects including lesions of the nasal septum, pulmonary edema, pneumonitis and emphysema.

#### Skin

Harmful in contact with skin. Product can be absorbed through skin with resultant harmful systemic effects. Causes burns. Corrosive to the skin. Skin contact can cause redness, itching, irritation, severe pain and chemical burns with resultant tissue destruction.

#### Eye

Causes eye damage. Eye contact will cause stinging, blurring, tearing, severe pain and possible burns, necrosis, permanent damage and blindness.

#### 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

Not expected to cause toxicity to a specific target organ.

**STOT-repeated exposure**

Not expected to cause toxicity to a specific target organ by repeated exposure.

**Aspiration Hazard**

Not expected to be an aspiration hazard.

**Other Information**

Primary skin irritation index 6.1 (corrosive to skin and eyes).

Contact with diluted solution (<0.1%) is non-irritating to skin and eyes.

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## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

No ecological data available for this material.

**Persistence and degradability**

Not available

**Mobility**

Not available

**Bioaccumulative Potential**

Not available

**Environmental Protection**

Do not allow product to enter drains, waterways or sewers.

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## 13. DISPOSAL CONSIDERATIONS

**Disposal considerations**

The disposal of the spilled or waste material must be done in accordance with applicable local and national regulations.

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## 14. TRANSPORT INFORMATION

**Transport Information**

Road and Rail:

This material is classified as Dangerous Goods Division 5.1 Oxidising substances according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).

Division 5.1 Dangerous Goods are incompatible in a placard load with any of the following:

- Class 1, Explosives
- Division 2.1, Flammable Gases
- Division 2.3, Toxic Gases
- Class 3, Flammable Liquids
- Division 4.1, Flammable Solids
- Division 4.2, Spontaneously Combustible Substances
- Division 4.3, Dangerous When Wet Substances
- Some Division 5.1 Oxidising substances ( Refer Table 9.2)
- Division 5.2, Organic Peroxides
- Class 6, Toxic and Infectious Substances, if the Class 6 substance is a fire risk substance
- Class 7, Radioactive Substances
- Class 8, Corrosive Substances
- Class 9, Miscellaneous Dangerous Goods, if the Class 9 substance is a fire risk substance
- Fire risk substances
- Combustible liquids

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.: 1479

Proper Shipping Name: OXIDIZING SOLID, N.O.S. (Bromochloro-5,5-dimethyl hydantoin)

Class: 5.1

Packaging Group: II

EMS No.: F-A, S-Q

Special Provisions: 274, 900

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.: 1479

Proper Shipping Name: OXIDIZING SOLID, N.O.S. (Bromochloro-5,5-dimethyl hydantoin)

Class: 5.1

Packaging Group: II

Label: Oxidizer

Packaging Instructions (passenger & cargo): 558

Packaging Instructions (cargo only): 562

Special Provisions: A3, A803

**U.N. Number**

1479

**UN proper shipping name**

OXIDIZING SOLID, N.O.S.(Bromochloro-5,5-dimethyl hydantoin)

**Transport hazard class(es)**

5.1

**Packing Group**

II

**Hazchem Code**

1Y

**Packaging Method**

3.8.5.1

**EPG Number**

5B1

**IERG Number**

31

**IMDG Marine pollutant**

No

## 15. REGULATORY INFORMATION

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**Regulatory information**

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**

S5

**Australia (AICS)**

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

## 16. OTHER INFORMATION

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**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

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## END OF SDS

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