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#### Section 1: Identification of the substance/mixture and the company/undertaking. 1.

#### 1.1 Product identifier.

| Product name: | Bromine Tablets                                    |
|---------------|--|
| Product code: | 20 86 558 050 – Swimmer Bromine Tablets 5kg        |
|               | 20 86 558 010 – Essentials Spa Bromine Tablets 1kg |

#### Relevant identified uses of the substance or mixture and uses advised against. 1.2 For disinfection of pool and spa water

#### Details of the supplier of the safety data sheet. 1.3

| Emergency phone number: | 01271 378 100 (office hours)                                 |
|-------------------------|--|
| Web address:            | www.goldenc.com  |
| Email:                  | swimmer@goldenc.com  |
| Responsible person:     | Jamie Adams  |
| Phone number:           | 01271 378 100  |
|                         | Devon. EX31 3UA  |
| Address of supplier:    | Fishleigh Road, Roundswell Commercial Park West, Barnstaple, |
| Name of supplier:       | Golden Coast Ltd   |
|                         |  |

#### 1.4 **Emergency phone number:**

#### 2. Section 2: Hazards identification.

#### 2.1 Classification of the substance or mixture.

| Classification according to Regulation (EC) No 1272/2008 |                                     |  |
|--|-------------------------------------|--|
| Hazard Class   | Hazard Statements                   |  |
| Acute Tox.4*   | H302                                |  |
| Skin Corr.1B   | H314                                |  |
| Sin Sens.1   | H317                                |  |
| Eye Dam.1  | H318                                |  |
| Aquatic Acute 1  | H400                                |  |
| EUH031   |                                     |  |
| For the full text of the L                               | I statements montioned in this sect |  |

For the full text of the H statements mentioned in this section see Section 16

### Most important adverse effects

| Human Health:                    | See section 11 for toxicological information |
|----------------------------------|--|
| Physical & Chemical Hazards:     | See section 9 for physiochemical information |
| Potential environmental effects: | See section 12 for environmental information |

#### 2.2 Label elements.

Labelling according to Regulation (EC) 1272/2008



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| Hazard pictograms:        | GHS03: Oxidising  |
|---------------------------|---|
|                           | GHS05: Corrosion  |
|                           | GHS07: Warning  |
|                           | GHS09: Environmental  |
| Signal word:              | Danger  |
| Hazard Statements:        | H272: May intensify fire; oxidiser  |
|                           | H302: May cause respiratory irritation  |
|                           | H314: Causes severe skin burns and eye damage   |
|                           | H317: May cause an allergic reaction  |
|                           | H318: Causes serious eye damage   |
|                           | H400: Very toxic to aquatic life  |
|                           | EUH031: Contact with acid liberates toxic gas   |
|                           | EUH026: Warning! Do not use together with other products. May release                 |
|                           | dangerous gases (chlorine).   |
| Precautionary statements: | P101: If medical advice is needed, have product container or label at hand            |
|                           | P102: Keep out of the reach of children   |
|                           | P103: Read label before use   |
|                           | P210: Keep away from heat – No smoking  |
|                           | P221: Take any precaution to avoid mixing with combustibles.                          |
|                           | 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.   |
|                           | P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove   |
|                           | contact lenses, if present and easy to do so. Continue rinsing.                       |
|                           | P310: Immediately call a POISON CENTER or doctor/ physician                           |
|                           | P405: Store locked up.  |
|                           | P501: Dispose of contents/container to waste in accordance with national regulations. |
|                           |   |

Hazardous components which must be listed on the label

Bromochloro-5,5-dimethylimidazolidine-2,4-dione

## 2.3 Other hazards.

Use biocides safely. Always read the label and product information before use. Marine pollutant



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| 1 4 9 6 6 6 1 5 |                             |



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# 3. Section 3: Composition/information on ingredients.

| 3.1 | Substances.   |           |      |   |
|-----|---------------|-----------|------|---|
|     | Chemical Name |           | Bror | nochloro-5,5-dimethylimidazolidine-2,4-dione                    |
|     | CAS No        | EC No     | %    | Hazard Statements   |
|     | 32718-18-6    | 251-171-5 | 98%  | Acute Tox. 4 ;H302: Skin Corr. 1B; H314: Skin Sens.1; H317: Eye |
|     |               |           |      | Dam.1; H318: Aquatic Acute 1; H400: H272: EUH031                |

# 4. Section 4: First aid measures.

| 4.1 | Description of first aid measures.                      |  |
|-----|---|--|
|     | General Advice:   | Take off all contaminated clothing immediately   |
|     | If Inhaled:   | Supply fresh air and to be sure call for a doctor.   |
|     |   | In case of unconsciousness place patient stably in side position for transportation.   |
|     |   | If breathing stops, provide artificial respiration   |
|     | In case of skin contact:                                | At first remove dust mechanically. Drench the skin with plenty of water.<br>Remove contaminated clothing and wash be reuse. If large areas of the skin<br>is damaged or if irritation persists seek medical attention. |
|     | In case of eye contact:                                 | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Protect unharmed eye. Call a doctor immediately.   |
|     | If swallowed:   | Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT Induce vomiting. Call a physician immediately.  |
| 4.2 | Most important symptoms and effects, bo                 | th acute and delayed.  |
|     | Symptoms and effects:                                   | See section 11 for more detailed information   |
| 4.3 | Indication of any immediate medical atter<br>Treatment: | ition and special treatment needed.<br>Symptomatic treatments (decontamination, vital functions).  |
|     |   | -,,  |

5. Section 5: Firefighting measures.

# 5.1 Extinguishing media. Suitable extinguishing media: Wat Unsuitable extinguishing media: ABC

Water Spray, Foam ABC Powder

## 5.2 Special hazards arising from the substance or mixture.

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|     | Specific hazards during firefighting:                    | In case of fire, the following can be released:<br>Hydrogen chloride (HCI) Nitrogen oxides (NOx)         |
|-----|--|--|
| 5.3 | Advice for firefighters.<br>Special protective equipment | Do no inhale explosion gases or combustion gases.<br>Wear fully protective suit.                         |
|     | Further information:                                     | Cool endangered receptacles with water spray<br>Collect contaminated fire extinguishing water separately |

# 6. Section 6: Accidental release measures.

| 6.1 | Personal precautions, protective equipment and emergency procedures. |   |  |
|-----|--|---|--|
|     | Personal Precautions:  | Use personal protective equipment. Keep people away from and upwind of spill. Provide adequate ventilation. Avoid raising dust. |  |
| 6.2 | Environmental precautions.   |   |  |
|     | Environmental precautions:   | Avoid release to the environment  |  |
|     |  | Do not allow to enter public sewers or watercourses.  |  |
|     |  | Inform appropriate authorities in case of seepage into water course or  |  |
|     |  | sewage system.  |  |
| 6.3 | Methods and material for containment a                               | nd cleaning up.   |  |
|     | Cleaning up:   | Collect as much as possible in clean container for re-use or disposal.  |  |
|     |  | Dispose of contaminated material as waste according to item 13  |  |
| 6.4 | Reference to other sections.   |   |  |
|     |  | See section 7 for information on safe handling  |  |
|     |  | See section 8 for information on personal protection equipment  |  |
|     |  | See section 13 for disposal information.  |  |
|     |  |   |  |

## 7. Section 7: Handling and storage.

| 7.1 | <b>Precautions for safe handling.</b><br>Advice on safe handling: | Strong oxidising agent. DO NOT MIX WITH OTHER CHEMICALS. Mix only with water. Never add water to product. Always add product to water. Use clean dry dispensing equipment. Avoid contact with skin and eyes.   |
|-----|---|--|
|     | Hygiene measures:   | Keep away from food, drink and animal feeding stuffs. Smoking, eating and<br>drinking should be prohibited in the application area. Wash hands before<br>breaks and at the end of the work day. Take off all contaminated clothing<br>immediately. Provide adequate ventilation. |





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| 7.2   | Conditions for safe storage, including any incompatibilities. |  |  |  |
|---|---|--|--|--|
|   | Storage:  | Keep this product in original, sealed container when not in use. Store in a cool, dry, well ventilated area. |  |  |
| Fire and explosion: Substance/product is available. |   | Substance/product is oxidizing when dry. Keep respiratory protective device available.                       |  |  |
|   | Further information:  | Do not seal receptacle gas tight. Store only in original containers.   |  |  |
|   | Storage temperature:  | 5°C up to 35°C   |  |  |
|   | Common storage:   | Do not store together with reducing agents, heavy-metal compounds, acids                                     |  |  |
|   |   | and alkalis. Store away from flammable substances.   |  |  |
| 7.3   | Specific end use(s)   |  |  |  |
|   | Specific use(s):  | No information is available.   |  |  |

# 8. Section 8: Exposure controls/personal protection.

| 8.1 | Control parameters.             |  |   |
|-----|---------------------------------|--|---|
|     | Regulatory List:                | EH40 (8 hour TWA)                      | EH40(15 min TWA)  |
|     | Value:                          | 1.5 mg/m³                              | 2.9 mg/m <sup>3</sup>   |
| 8.2 | Exposure controls.              |  |   |
|     | Engineering measures            | Fume cupboard required v               | vhen vapours/aerosol are generated  |
|     | Personal protective equipment   |  |   |
|     | Respiratory protection:         | -                                      | r wear suitable respiratory device.<br>r low pollution use respiratory filter device. In case |
|     |                                 | of intensive or longer expo<br>device. | osure use self-contained respiratory protective   |
|     | Hand protection:                | Protective Gloves                      |   |
|     |                                 | The glove material has to b            | e impermeable to the product/the substance/   |
|     |                                 | preparation.                           |   |
|     |                                 | Material: Nitrile rubber, NE           | 3R  |
|     |                                 | Thickness: ≥0.6mm                      |   |
|     |                                 | Breakthrough: ≥8 h                     |   |
|     | Eye protection:                 | Tightly fitting safety goggle          | ·S.   |
|     | Skin and body protection:       | Plastic apron, sleeves, boo            | ts-if handling large quantities.  |
|     | Environmental exposure controls |  |   |
|     | General advice:                 | General room ventilation p             | olus local exhaust should be used to maintain   |
|     |                                 | exposure below TLV. Eyew               | ash and emergency shower facilities   |
|     |                                 | recommended. Remove ar                 | nd wash contaminated clothing before reuse.   |



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Local authorities should be advised if significant spillages cannot be contained.

## 9. Section 9: Physical and chemical properties.

### 9.1 Information on basic physical and chemical properties.

|     | ······································ |   |
|-----|--|---|
|     | Form:                                  | Solid   |
|     | Colour:                                | Yellowish   |
|     | Odour:                                 | Characteristic                                    |
|     | Odour Threshold:                       | No information                                    |
|     | pH @ 20°C:                             | (1 g/l) at 20°C: 3.5                              |
|     | Melting point:                         | 158-162°C   |
|     | Boiling point/boiling range:           | Not determined                                    |
|     | Flash point:                           | Not applicable                                    |
|     | Flammability (solid, gas)              | Contact with combustible material may cause fire. |
|     | Danger of explosion:                   | Product does not present an explosion hazard      |
|     | Density @ 20°C:                        | 1.8 – 2.0 g/cm <sup>3</sup>                       |
|     | Water solubility:                      | Soluble   |
|     | Organic Solvents:                      | 0.00%   |
|     | VOC (EC):                              | 0.00%   |
|     | Solids content:                        | 100%  |
|     | Oxidising properties:                  | Oxidizer- may intensify fire                      |
| 9.2 | Other Information                      |   |

No further information

| 10.  | Section 10: Stability and reactivity.                       |   |  |
|------|---|---|--|
| 10.1 | <b>Reactivity.</b><br>Reactivity:                           | Stable under recommended transport and storage conditions.  |  |
| 10.2 | Chemical stability.<br>Chemical stability:                  | No information available  |  |
| 10.3 | Possibility of hazardous reactions.<br>Hazardous reactions: | Contact with acids releases toxic gases.  |  |
| 10.4 | <b>Conditions to avoid.</b><br>Conditions to avoid:         | Damp or slightly wet conditions may slowly liberate hazardous gases. (will gradually degenerate to Nitrogen Trichloride). |  |
| 10.5 | Incompatible materials.<br>Materials to avoid:              | Avoid contact with Acids, metal, metal oxides, alloys, inflammable substances.  |  |
| 10.6 | Hazardous decomposition products.<br>Haz. Decomp. products: | Hydrogen chloride (HCI), Chlorine, Hydrochloric Acid and Bromine  |  |



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#### Section 11: Toxicological information. 11.

#### 11.1 Information on toxicological effects.

**Component:** Bromochloro-5-5, diethylimidazolidine-2,4-dione

| Bromochloro-5 | CAS No: 32718-18-6 |      |       |       |  |
|---------------|--------------------|------|-------|-------|--|
| Route         | Species            | Test | Value | Units |  |
| Oral          | Rat                | LD50 | 578   | Mg/kg |  |

| Primary irritant effect: |  |
|--------------------------|--|
| On the skin:             | Caustic effect on skin and mucous membranes                                |
| On the eyes:             | Strong caustic effect  |
| Sensitization:           | May cause sensitizing by skin contact                                      |
| Carcinogenic:            | There is not evidence that this substance had any carcinogenic properties. |
| Mutagenic:               | No information available.  |
| Teratogenicity:          | No information available.  |
| Further information:     | No further information available.  |

#### 12. Section 12: Ecological information.

### 12.1 Toxicity.

### Acute toxicity

**Component:** Bromochloro-5-5, diethylimidazolidine-2,4-dione CAS No: 32718-18-6

|  | Test | Species            | Value | Units | Time   |  |
|--|------|--------------------|-------|-------|--------|--|
|  | EC50 | Onchorhynus mykiss | 0.65  | Mg/l  | 96 hrs |  |
|  | LC50 | Daphnia Magna      | 0.87  | Mg/l  | 48 hrs |  |

#### 122 Persistence and degradability

| 12.2 | Persistence and degradability.      |   |
|------|-------------------------------------|---|
|      | Persistence                         | No data available   |
|      | Biodegradability                    | The product is decomposed by hydrolysis in water or moist air.            |
| 12.3 | Bioaccumulation potential.          |   |
|      | Bioaccumlative potential            | Due to the distribution coefficient n-octanol/water an accumulation in    |
|      |                                     | organisms is not expected.  |
| 12.4 | Mobility in soil.                   |   |
|      | Mobility in soil                    | No information available  |
| 12.5 | Results of PBT and vPvB assessment. |   |
|      | PBT and PvB assessment:             | Not applicable  |
| 12.6 | Other adverse effects.              |   |
|      | Remarks:                            | Water hazard class 2 (German regulation)(Self assessment): hazardous for  |
|      |                                     | water. Do not allow product to reach ground water, water course or sewage |
|      |                                     |   |



| 0           | -    | a     | -   |     |
|-------------|------|-------|-----|-----|
|             | (70) | older | ٦Co | ost |
| $\mathbf{}$ |      |       | 100 |     |

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system.

Danger to drinking water if even small quantities leak into the ground.

## 13. Section 13: Disposal considerations.

| 13.1 | Waste treatment methods. | Disposal together with normal waste is not allowed. Special disposal is required  |  |  |  |  |
|------|--------------------------|---|--|--|--|--|
|      | Product:                 | Disposal together with normal waste is not allowed. Special disposal is required according to local regulations. Do not let product enter drains. Contact waste                             |  |  |  |  |
|      |                          | disposal services.  |  |  |  |  |
|      | Contaminated packaging:  | Empty contaminated packaging thoroughly. They can be re-cycled after thorough and proper cleaning. Packaging that cannot be cleaned is to be disposed of in the same manner as the product. |  |  |  |  |

## 14. Section 14: Transport information.

# 14.1 UN number.

3085

## 14.2 UN proper shipping name.

3085 OXIDIZING SOLID, CORROSIVE, N.O.S. (Bromochlorl-5,5-dimethyl idine-2,4dione) ENVIRONMENTALLY HAZARDOUS

### 14.3 Transport hazard class(es).

| Class:               | 5.1         |
|----------------------|-------------|
| Classification code: | OC2         |
| Hazard label:        | 5.1 + 8     |
| Transport Category:  | 3           |
| Tunnel Code:         | Е           |
| EMS Number:          | F-A,S-Q     |
| Symbol:              | Fish & Tree |
| LQ:                  | 1 kg        |
| Packing group.       |             |

- 14.4 Packing group.
  - II

## 14.5 Environmental hazards.

| Environmentally hazardous: | Yes |
|----------------------------|-----|
| Marine Pollutant:          | Yes |

## **14.6** Special precautions for user. Not applicable

# 14.7 Transport in bulk according to annex II of MARPOL 73/78 and the IBC code. $_{\mbox{N/A}}$



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## 15. Section 15: Regulatory information.

**15.1** Safety, health and environmental regulations/legislation specific for the substance or mixture. Employment restrictions concerning juveniles must be observed Employment restrictions concerning pregnant and lactating women must be observed

### 15.2 Chemical safety assessment.

A Chemical Safety Assessment has not been carried out

## 16. Section 16: Other information.

Full text of H-Statements referred to under sections 2 and 3
H272: May intensify fire; oxidizer
H302: May cause respiratory irritation
H314: Causes severe skin burns and eye damage
H317: May cause an allergic skin reaction
H318: Causes serious eye damage
H400: Very toxic to aquatic life
EUH031: Contact with acid liberates toxic gas
Warning! Do not use together with other products. May release dangerous gases (chlorine)
Further information
Restricted to professional users. Attention – Avoid exposure – obtain special instructions before use.

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Further information relating to the pictograms, phrases, statements or acronyms contained within this Safety Data Sheet is available for download. Please refer to www.goldenc.com/resources/data-sheets



