Page 1 of 9 Creation Date: 30 June 2008



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Revision Date: 05 July 2018

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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Page 2 of 9

of 9 Creation Date: 30 June 2008



Revision Date: 05 July 2018

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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



Page 3 of 9	Creation Date: 30 June 2008
1 4 9 6 6 6 1 5	



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Revision Date: 05 July 2018

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. Remove contaminated clothing and wash be reuse. If large areas of the skin 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 Treatment:	ition and special treatment needed. 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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Page 4 of 9	Creation Date: 30 June 2008
1 aBc 1 of 5	



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Revision Date: 05 July 2018

	Specific hazards during firefighting:	In case of fire, the following can be released: Hydrogen chloride (HCI) Nitrogen oxides (NOx)
5.3	Advice for firefighters. Special protective equipment	Do no inhale explosion gases or combustion gases. Wear fully protective suit.
	Further information:	Cool endangered receptacles with water spray 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	Precautions for safe handling. 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 drinking should be prohibited in the application area. Wash hands before breaks and at the end of the work day. Take off all contaminated clothing immediately. Provide adequate ventilation.





Page 5 of 9 Creation Date: 30 June 2008



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Revision Date: 05 July 2018

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 ³
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. r low pollution use respiratory filter device. In case
		of intensive or longer expo 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.



Creation Date: 30 June 2008

Page 6 of 9



Revision Date: 05 July 2018

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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 ³
	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	Reactivity. Reactivity:	Stable under recommended transport and storage conditions.	
10.2	Chemical stability. Chemical stability:	No information available	
10.3	Possibility of hazardous reactions. Hazardous reactions:	Contact with acids releases toxic gases.	
10.4	Conditions to avoid. Conditions to avoid:	Damp or slightly wet conditions may slowly liberate hazardous gases. (will gradually degenerate to Nitrogen Trichloride).	
10.5	Incompatible materials. Materials to avoid:	Avoid contact with Acids, metal, metal oxides, alloys, inflammable substances.	
10.6	Hazardous decomposition products. Haz. Decomp. products:	Hydrogen chloride (HCI), Chlorine, Hydrochloric Acid and Bromine	



Page 7 of 9 Creation Date: 30 June 2008



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Revision Date: 05 July 2018

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



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Page 8 of 9 Creation Date: 30 June 2008

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Revision Date: 05 July 2018

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. $_{\mbox{N/A}}$



Page 9 of 9 Creation Date: 30 June 2008



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Revision Date: 05 July 2018

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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