SAFETY DATA SHEET

Shogun Hydro Bloom SW Part B

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name

Shogun Hydro Bloom SW Part B

Unique formula identifier (UFI)

KS10-Y05U-A005-XGN9

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the substance or mixture

None known.

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

Aqualabs Ltd
Unit 3A
Parkway One
Parkway Drive
S9 4WU Sheffield
United Kingdom
+44 (0) 114 244 3592

Contact person

Simon Spinks

E-mail

simon.spinks@aqualabs-uk.com

Revision

15/10/2024

SDS Version

1.0

1.4. Emergency telephone number

Healthcare professionals: Dial 0344 892 0111 to reach The National Poisons Information Service (NPIS) (24 hour service)
General public:
England - Dial 111 to reach NHS 111 (24 hour service)
Scotland - Dial 112 to reach NHS 24 (24 hour service)
Wales - Dial 111 or 0845 4647 to reach NHS Direct (24 hour service)
See section 4 “First aid measures”.

SECTION 2: Hazards identification

Classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

2.1. Classification of the substance or mixture

Skin Sens. 1; H317, May cause an allergic skin reaction.

2.2. Label elements

Hazard pictogram(s)

Signal word

Warning

Hazard statement(s)
May cause an allergic skin reaction. (H317)

Precautionary statement(s)
General
If medical advice is needed, have product container or label at hand. (P101)
Keep out of reach of children. (P102)

Prevention
Avoid breathing mist/vapour. (P261)
Wear protective gloves/protective clothing/eye protection/face protection. (P280)

Response
IF ON SKIN: Wash with plenty of water and soap. (P302+P352)
If skin irritation or rash occurs: Get medical advice/attention. (P333+P313)
Take off contaminated clothing and wash it before reuse. (P362+P364)

Storage
-

Disposal
Dispose of contents/container in accordance with local regulation (P501)

Hazardous substances
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

Additional labelling
UFI: KS10-Y05U-A005-XGN9

2.3. Other hazards
Additional warnings
This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification. This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2023/707.

SECTION 3: Composition/information on ingredients

3.1. Substances
Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Potassium nitrate	CAS No.: 7757-79-1 EC No.: 231-818-8 UK-REACH: 01-2119488224-35 Index No.:	5-10%	Ox. Sol. 3, H272	
Potassium dihydrogenorthophosphate	CAS No.: 7778-77-0 EC No.: 231-913-4 UK-REACH: Index No.:	5-10%		
bronopol (INN);2-bromo-2-nitropropane-1,3-diol	CAS No.: 52-51-7 EC No.: 200-143-0 UK-REACH: 01-2119980938-15-XXXX Index No.: 603-085-00-8	<0.1%	Acute Tox. 4, H302 (ATE: 324.00 mg/kg) Acute Tox. 4, H312 (ATE: 1600.00 mg/kg) Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400 (M=10)	
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	CAS No.: 55965-84-9 EC No.: 611-341-5 UK-REACH: 01-2120764691-48 Index No.: 613-167-00-5	<0.01%	EUH071 Acute Tox. 3, H301 (ATE: 66.00 mg/kg) Acute Tox. 2, H310 (ATE: 141.00 mg/kg) Skin Corr. 1C, H314 (SCL: 0.60 %) Skin Irrit. 2, H315 (SCL: 0.06 %)	

Skin Sens. 1A, H317 (SCL: 0.0015 %)
Eye Dam. 1, H318 (SCL: 0.60 %)
Eye Irrit. 2, H319 (SCL: 0.06 %)
Acute Tox. 2, H330
Aquatic Acute 1, H400 (M=100)
Aquatic Chronic 1, H410 (M=100)

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

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SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

IF ON SKIN: Wash with plenty of water and soap.
Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners.
If skin irritation occurs: Get medical advice/attention.

Eye contact

If in eyes: Flush eyes with water or saline water (20-30 °C) for at least 5 minutes. Remove contact lenses. Seek medical assistance and continue flushing during transport.

Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.
In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

Burns

Not applicable.

4.2. Most important symptoms and effects, both acute and delayed

Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact.
Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

4.3. Indication of any immediate medical attention and special treatment needed

If skin irritation or rash occurs: Get medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Not applicable.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.
If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:
Nitrogen oxides (NO_x)

Some metal oxides

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances.
Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.
Keep unauthorized persons away from the spill

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.
Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 “Disposal considerations” on handling of waste.
See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Smoking, drinking and consumption of food is not allowed in the work area.
See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material

Keep only in original packaging.

Storage conditions

Dry, cool and well ventilated

Incompatible materials

Reducing agents
Strong bases
Strong acids
Strong oxidizing agents

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No substances are listed in the national list of substances with an occupational exposure limit.

DNEL

No data available.

PNEC

Potassium nitrate

Route of exposure:	Duration of Exposure:	PNEC:
Sewage treatment plant		18 mg/L

8.2. Exposure controls

Apply general control to prevent unnecessary exposure

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of vapours.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

Measures to avoid environmental exposure

No specific requirements.

Individual protection measures, such as personal protective equipment

Generally

Use only UKCA marked protective equipment.

Respiratory Equipment

Type	Class	Colour	Standards
Respiratory protection is not needed in the event of adequate ventilation.			
Respiratory protection is not needed in the event of adequate ventilation.			

Skin protection

Recommended	Type/Category	Standards	
Dedicated work clothing should be worn. Wear a protective suit in the event of prolonged periods of work with the product.	-	-	

Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Gloves	-	-	EN374	

Eye protection

Type	Standards	
Safety glasses	EN ISO 16321-1	

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

No relevant or available data due to the nature of the product.

Odour / Odour threshold

No relevant or available data due to the nature of the product.

pH

3.4

Density (g/cm^3)

1.122

Kinematic viscosity

No relevant or available data due to the nature of the product.

Particle characteristics

Does not apply to liquids.

Phase changes

Melting point/Freezing point (°C)

No relevant or available data due to the nature of the product.

Softening point/range (°C)

Does not apply to liquids.

Boiling point (°C)

No relevant or available data due to the nature of the product.

Vapour pressure

No relevant or available data due to the nature of the product.

Relative vapour density

No relevant or available data due to the nature of the product.

Decomposition temperature (°C)

No relevant or available data due to the nature of the product.

Data on fire and explosion hazards

Flash point (°C)

No relevant or available data due to the nature of the product.

Flammability (°C)

No relevant or available data due to the nature of the product.

Auto-ignition temperature (°C)

No relevant or available data due to the nature of the product.

Lower and upper explosion limit (% v/v)

No relevant or available data due to the nature of the product.

Solubility

Solubility in water

No relevant or available data due to the nature of the product.

n-octanol/water coefficient (LogKow)

No relevant or available data due to the nature of the product.

Solubility in fat (g/L)

No relevant or available data due to the nature of the product.

9.2. Other information

Oxidizing properties

No relevant or available data due to the nature of the product.

Other physical and chemical parameters

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 “Handling and storage”.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Extremes of temperature

10.5. Incompatible materials

Reducing agents
Strong bases
Strong acids
Strong oxidizing agents

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 as retained and amended in UK law

Acute toxicity

Product/substance	Potassium nitrate
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	2000 mg/kg

Product/substance	Potassium nitrate
Species:	Rat
Route of exposure:	Dermal
Test:	LD50
Result:	> 5,000 mg/kg

Skin corrosion/irritation

Product/substance	Potassium nitrate
Test method:	OECD 404
Species:	Rabbit
Result:	No adverse effect observed (Not irritating)

Serious eye damage/irritation

Based on available data, the classification criteria are not met.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Skin sensitisation

Product/substance	bronopol (INN);2-bromo-2-nitropropane-1,3-diol
Test method:	OECD 429
Species:	Mouse
Description:	Not sensitising.
Result:	No adverse effect observed (not sensitising)

Product/substance	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)
Test method:	OECD 406
Species:	Guinea pig
Description:	sensitising - S 171 (b)
Result:	Adverse effect observed (sensitising)

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

Long term effects

None known.

Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information

None known.

SECTION 12: Ecological information

12.1. Toxicity

Product/substance	Potassium nitrate
Test method:	OECD 203

Species:	Fish
Compartment:	Freshwater
Duration:	96 hours
Test:	LC50
Result:	> 100 mg/L

Product/substance	Potassium nitrate
Species:	Daphnia
Compartment:	Freshwater
Duration:	48 hours
Test:	EC50
Result:	490 mg/L

Product/substance	Potassium nitrate
Species:	Algae
Compartment:	Marine water
Duration:	10 days
Result:	> 1.700 mg/L

Product/substance	bronopol (INN);2-bromo-2-nitropropane-1,3-diol
Test method:	OECD 201
Species:	Algae
Duration:	72 hours
Test:	EC50
Result:	0.068 mg/L

Product/substance	bronopol (INN);2-bromo-2-nitropropane-1,3-diol
Test method:	OECD 202
Species:	Daphnia
Duration:	48 hours
Test:	EC50
Result:	1.04 mg/L

Product/substance	bronopol (INN);2-bromo-2-nitropropane-1,3-diol
Test method:	OECD 203
Species:	Fish, Lepomis macrochirus
Duration:	96 hours
Test:	LC50
Result:	11 mg/L

Product/substance	bronopol (INN);2-bromo-2-nitropropane-1,3-diol
Test method:	OECD 211
Species:	Daphnia
Duration:	21 days
Test:	NOEC
Result:	0.06 mg/L

Product/substance	bronopol (INN);2-bromo-2-nitropropane-1,3-diol
Test method:	OECD 201
Species:	Fish, Oncorhynchus mykiss
Duration:	28 days
Test:	NOEC
Result:	0.0025 mg/L

Product/substance	bronopol (INN);2-bromo-2-nitropropane-1,3-diol
Test method:	OECD 201
Species:	Algae
Duration:	72 hours
Test:	NOEC
Result:	0.0025 mg/L

Product/substance	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)
Test method:	OECD 201
Species:	Algae, Pseudokirchneriella subcapitata
Duration:	72 hours

Test:	EC50
Result:	0.048 mg/L

Product/substance	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)
Test method:	OECD 202
Species:	Daphnia
Duration:	48 hours
Test:	EC50
Result:	0.1 mg/L

Product/substance	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)
Test method:	OECD 203
Species:	Fish, Oncorhynchus mykiss
Duration:	96 hours
Test:	LC50
Result:	0.22 mg/L

Product/substance	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)
Test method:	OECD 201
Species:	Algae, Skeletonema costatum
Duration:	48 hours
Test:	EC50
Result:	0.0052 mg/L

Product/substance	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)
Test method:	OECD 211
Species:	Daphnia
Duration:	21 days
Test:	NOEC
Result:	0.004 mg/L

Product/substance	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)
Test method:	OECD 215
Species:	Fish, Oncorhynchus mykiss
Duration:	28 days
Test:	NOEC
Result:	0.098 mg/L

Product/substance	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)
Test method:	OECD 201
Species:	Algae, Pseudokirchneriella subcapitata
Duration:	72 hours
Test:	NOEC
Result:	0.0012 mg/L

Product/substance	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)
Test method:	OECD 209
Compartment:	Activated Sludge Plant
Duration:	3 hours
Test:	EC50
Result:	7.92 mg/L

Product/substance	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)
Test method:	OECD 209
Compartment:	Activated Sludge Plant
Duration:	3 hours
Test:	EC20
Result:	0.97 mg/L

12.2. Persistence and degradability

Product/substance	Potassium nitrate
Conclusion:	Readily biodegradable

Product/substance	bronopol (INN);2-bromo-2-nitropropane-1,3-diol
Compartment:	Activated Sludge Plant

Duration:	3 hours
Result:	>70 %
Conclusion:	Not biodegradable
Test:	OECD 301 B

12.3. Bioaccumulative potential
Based on available data, the classification criteria are not met.

12.4. Mobility in soil
No data available.

12.5. Results of PBT and vPvB assessment
This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Endocrine disrupting properties
This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects
None known.

SECTION 13: Disposal considerations

Waste treatment methods
Product is not covered by regulations on dangerous waste.
Dispose of contents/container to an approved waste disposal plant.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

EWC code
Not applicable.

Specific labelling

Contaminated packing
Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

* Packing group

** Environmental hazards

Additional information
Not dangerous goods according to ADR, IATA and IMDG.

14.6. Special precautions for user
Not applicable.

14.7. Maritime transport in bulk according to IMO instruments
No data available.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Restrictions for application
People under the age of 18 shall not be exposed to this product.

Demands for specific education
No specific requirements.

Control of Major Accident Hazards (COMAH) - Categories / dangerous substances
Potassium nitrate

Regulation on explosives precursors

Potassium nitrate (Annex II)

Additional information

Not applicable.

Sources

The Management of Health and Safety at Work Regulations 1999.
Control of Major Accident Hazards (COMAH) Regulations 2015.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.
Council Regulation (EC) No 2019/1148 on explosives precursors as retained and amended in UK law.
Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.
Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

EUH071, Corrosive to the respiratory tract.
H272, May intensify fire; oxidiser.
H301, Toxic if swallowed.
H302, Harmful if swallowed.
H310, Fatal in contact with skin.
H312, Harmful in contact with skin.
H314, Causes severe skin burns and eye damage.
H315, Causes skin irritation.
H317, May cause an allergic skin reaction.
H318, Causes serious eye damage.
H319, Causes serious eye irritation.
H330, Fatal if inhaled.
H335, May cause respiratory irritation.
H400, Very toxic to aquatic life.
H410, Very toxic to aquatic life with long lasting effects.

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CE = Conformité Européenne (European conformity)
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial chemical Substances
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EuPCS = European Product Categorisation System
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
GWP = Global warming potential
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

The safety data sheet is validated by

NHP

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.
The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.
It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.
Country-language: GB-en