SAFETY DATA SHEET

Shogun Hydro Grow SW Part A

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

1.1. Product identifier

Trade name

Shogun Hydro Grow SW Part A

Unique formula identifier (UFI)

5H10-F03N-D00P-YFW3

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

Eye Dam. 1; H318, Causes serious eye damage.

2.2. Label elements

Hazard pictogram(s)

Signal word

Danger

Hazard statement(s)

Causes serious eye damage. (H318)

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

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

Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)
Immediately call a POISON CENTER/doctor. (P310)

Storage

-

Disposal

-

Hazardous substances

Nitric acid, ammonium calcium salt

Additional labelling

UFI: 5H10-F03N-D00P-YFW3

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
Nitric acid, ammonium calcium salt	CAS No.: 15245-12-2 EC No.: 239-289-5 UK-REACH: 01-2119493947-16 Index No.:	15-25%	Acute Tox. 4, H302 Eye Dam. 1, H318	[3]
Ammonium nitrate	CAS No.: 6484-52-2 EC No.: 229-347-8 UK-REACH: Index No.:	1-3%	Ox. Sol. 3, H272 Eye Irrit. 2, H319	[3]

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

Other information

[3] According to UK REACH, Annex XVII, the substance is subject to restrictions.

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

Upon irritation: rinse with water. In the event of continued irritation, seek medical assistance.

Eye contact

If in eyes: Flush eyes with plenty of water or salt water (20-30 °C) for at least 30 minutes and continue until irritation stops. Remove contact lenses. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately 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

Headache, Methaemoglobinaemia (Ammonium nitrate)
The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.

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

IF exposed or concerned:
Get immediate 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)
Ammonia (NH3)

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. In the event of leakage to the surroundings, contact local environmental authorities.

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

Avoid direct contact with the product.
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 oxidizing agents
Strong acids
Strong bases

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

Nitric acid, ammonium calcium salt

Duration:	Route of exposure:	DNEL:
Short term – Systemic effects	Oral	10 mg/kg bw/day

PNEC

Ammonium nitrate

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

Nitric acid, ammonium calcium salt

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

See the exposure scenario appended to the safety data sheet. Ensure that the operational conditions and risk management measures in the relevant exposure scenario are complied with.

Exposure limits

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

Appropriate technical measures

Ensure that eyewash stations and safety showers are located within easy reach.
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.			

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
1.6

Density (g/cm^3)
1.141

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 oxidizing agents
Strong acids
Strong bases
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	Nitric acid, ammonium calcium salt
Test method:	OECD 423
Species:	Rat
Route of exposure:	Oral
Test:	LC50
Result:	500 mg/kg

Product/substance	Nitric acid, ammonium calcium salt
Test method:	OECD 402
Species:	Rat
Route of exposure:	Dermal
Test:	LC50
Result:	2000 mg/kg

Product/substance	Ammonium nitrate
Test method:	OECD 401
Species:	Rat
Route of exposure:	Oral
Test:	LC50
Result:	2950 mg/kg

Product/substance	Ammonium nitrate
Test method:	OECD 402
Species:	Rat
Route of exposure:	Dermal
Test:	LD50
Result:	>5,000 mg/kg

Skin corrosion/irritation

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

Serious eye damage/irritation

Product/substance	Nitric acid, ammonium calcium salt
Test method:	OECD 405
Species:	Rabbit
Description:	Causes serious eye damage.
Duration:	72 hours

Product/substance	Ammonium nitrate
Test method:	OECD 405
Species:	Rabbit
Description:	Irritant

Causes serious eye damage.

Respiratory sensitisation

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

Skin sensitisation

Product/substance	Ammonium nitrate
Test method:	OECD 429
Species:	Mouse
Description:	Not sensitising.
Result:	No adverse effect observed (not sensitising)

Germ cell mutagenicity

Product/substance	Ammonium nitrate
Test method:	OECD 473
Conclusion:	No adverse effect observed

Product/substance	Ammonium nitrate
Test method:	OECD 474
Conclusion:	No adverse effect observed

Product/substance	Ammonium nitrate
Test method:	OECD 475
Conclusion:	No adverse effect observed

Product/substance	Ammonium nitrate
Test method:	OECD 471
Conclusion:	No adverse effect observed

Carcinogenicity

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

Reproductive toxicity

Product/substance	Ammonium nitrate
Test method:	OECD 422
Species:	Rat
Duration:	28 days
Test:	NOAEL
Result:	>1500 mg/kg bw/day

Conclusion: No adverse effect observed

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
The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.

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	Nitric acid, ammonium calcium salt
Species:	Fish
Compartment:	Freshwater
Duration:	48 hours
Test:	LC50
Result:	447 mg/L

Product/substance	Nitric acid, ammonium calcium salt
Test method:	OECD 202
Species:	Daphnia
Compartment:	Freshwater
Duration:	48 hours
Test:	EC50
Result:	>100 mg/L

Product/substance	Nitric acid, ammonium calcium salt
Test method:	OECD 201
Species:	Algae
Compartment:	Freshwater
Duration:	72 hours
Test:	LC50
Result:	>100 mg/L

Product/substance	Nitric acid, ammonium calcium salt
Test method:	OECD 209
Compartment:	Activated Sludge Plant
Duration:	3 hours
Test:	EC50
Result:	>1,000 mg/L

Product/substance	Ammonium nitrate
Species:	Fish
Compartment:	Freshwater
Duration:	48 hours
Test:	LC50
Result:	447 mg/L

Product/substance	Ammonium nitrate
Species:	Daphnia
Compartment:	Freshwater
Duration:	48 hours
Test:	EC50

Result: 490 mg/L

Product/substance: Ammonium nitrate
Species: Algae
Compartment: Marine water
Duration: 10 days
Test: EC50

12.2. Persistence and degradability

Product/substance: Nitric acid, ammonium calcium salt
Conclusion: Readily biodegradable

Product/substance: Ammonium nitrate
Conclusion: Readily biodegradable

12.3. Bioaccumulative potential

Product/substance: Nitric acid, ammonium calcium salt
Conclusion: Bioaccumulation is not expected

Product/substance: Ammonium nitrate
Conclusion: No potential for bioaccumulation

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

Product/substance: Nitric acid, ammonium calcium salt
Conclusion: No adverse effect observed

12.7. Other adverse effects

None known.

SECTION 13: Disposal considerations

Waste treatment methods

Product is covered by the regulations on hazardous waste.
HP 4 - Irritant (skin irritation and eye damage)
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

No special.

Demands for specific education

No specific requirements.

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

Ammonium nitrate

Regulation on explosives precursors

Nitric acid, ammonium calcium salt (Annex II)
Ammonium nitrate (Annex I)

UK-REACH, Annex XVII

Nitric acid, ammonium calcium salt is subject to restrictions, UK-REACH annex XVII (entry 65).
Ammonium nitrate is subject to restrictions, UK-REACH annex XVII (entry 58).

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

H272, May intensify fire; oxidiser.
H302, Harmful if swallowed.
H318, Causes serious eye damage.
H319, Causes serious eye irritation.

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

Section 1 – Title

Short title of the exposure Scenario	Yara - Nitric acid, ammonium calcium salt - Consumer
Identified use name:	Consumer USE in cosmetic products. Consumer USE as part of specialist products. Consumer USE of fertilisers. Consumer USE in construction materials.
Substance supplied to that use in form of:	In a mixture
List of use descriptors	
Environmental Release Category:	ERC08a, ERC08b, ERC08c, ERC08d, ERC08e, ERC08f
Market sector by type of chemical product:	PC04, PC09a, PC12, PC37, PC39, PC 0: Other: UCN P15100, H15100, PC 0: Other: UCN K35000
Subsequent service life relevant for that use:	No.

Section 2 – Exposure controls

Contributing scenario controlling environmental exposure for: All

This product is not classified according to EU legislation., As no environmental hazard was identified, no environmental-related exposure assessment and risk characterization was performed.

Contributing scenario controlling consumer exposure for:

Product characteristics:	Inorganic salt.
Concentration of substance in mixture or article:	<= 100.000 %
Physical state:	Solid, Liquid
Dust:	Solid, low dustiness
Frequency and duration of use:	Use duration (h/d): <= 8
Other given operational conditions affecting consumers exposure:	Hand held spraying, Ensure spraying away from persons.
Area of use:	Indoor or outdoor use Room volume Ventilation size: Rate per hour

Conditions and measures related to personal protection and hygiene

Advice on general occupational hygiene:	Avoid direct eye contact with product, also via contamination on hands.
Personal protection:	Do not eat, drink or smoke when using this product., Wash hands thoroughly after handling., Avoid contact with eyes, Recommended, Wear protective gloves and eye protection., Wear safety glasses with side protection in accordance with EN166.

Section 3 – Exposure estimation and reference to its source

Exposure estimation and reference to its source - Consumer:

Exposure assessment (human):	Qualitative approach used to conclude safe use.
Exposure estimation and reference to its source:	Inhalation exposure is considered to be not relevant. Oral exposure is not expected to occur.

Section 4 – Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Environment:	Not applicable
Health:	Comply with the safety instructions, Risk management Measures are based on qualitative risk characterisation.

Abbreviations and acronyms

Environmental Release Category:	ERC08a - Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) ERC08b - Widespread use of reactive processing aid (no inclusion into or onto article, indoor) ERC08c - Widespread use leading to inclusion into/onto article (indoor) ERC08d - Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) ERC08e - Widespread use of reactive processing aid (no inclusion into or onto article, outdoor) ERC08f - Widespread use leading to inclusion into/onto article (outdoor)
Market sector by type of chemical product:	PC04 - Anti-freeze and de-icing products PC09a - Coatings and paints, thinners, paint removers PC12 - Fertilizers PC37 - Water treatment chemicals PC39 - Cosmetics, personal care products PC 0: Other: UCN P15100 - Accelerators H15100 - Curing Agents - Concrete hardeners PC 0: Other: UCN K35000 - Construction materials (building materials)