



# Ionic Hydro Hard Water Grow

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830  
Issue date: 30/04/2020 Supersedes: 24/01/2017 Version: 2.1

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

#### 1.1. Product identifier

Product form : Mixture  
Product name : Ionic Hydro Hard Water Grow  
Type of product : Fertilisers  
Product group : Trade product

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

##### 1.2.1. Relevant identified uses

Intended for general public  
Main use category : Consumer use  
Use of the substance/mixture : Fertilisers

##### 1.2.2. Uses advised against

Restrictions on use : Not applicable

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

##### Manufacturer

Growth Technology Limited  
Great Western Way  
TA2 6BX Taunton - UK  
T +44 (0)1823 325291  
[info@growthtechnology.com](mailto:info@growthtechnology.com) - [www.growthtechnology.com](http://www.growthtechnology.com)

#### 1.4. Emergency telephone number

Emergency number : +44 (0)1823 325291  
office hours only:  
Monday - Friday  
0800 - 1700 (GMT/UTC)

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	
United Kingdom	National Poisons Information Service (Cardiff Centre) Gwenwyn Ward, Llandough Hospital	Penarth CF64 2XX Cardiff	0344 892 0111	
United Kingdom	National Poisons Information Service Edinburgh Royal Infirmary of Edinburgh	Little France Crescent EH16 4SA Edinburgh	0344 892 0111	
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+44 20 7188 7188	
United Kingdom	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre, Wolfson Unit	Claremont Place Newcastle-upon-Tyne NE1 4LP Newcastle	0344 892 0111	
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA Belfast	0344 892 0111	

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### SECTION 2: Hazards identification

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

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 1 H314

Serious eye damage/eye irritation, Category 1 H318

Full text of H statements : see section 16

##### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)

:



GHS05

Signal word (CLP)

: Danger

Hazardous ingredients

: nitric acid ... %

Hazard statements (CLP)

: H314 - Causes severe skin burns and eye damage.

Precautionary statements (CLP)

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

P102 - Keep out of reach of children.

P280 - Wear protective clothing, eye protection, face protection.

P301+P330+P331+P310 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

Immediately call a POISON CENTER or doctor.

P303+P361+P353+P310 - IF ON SKIN (or hair): Take off immediately all contaminated

clothing. Rinse skin with water/shower.. Immediately call a POISON CENTER or doctor.

P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

P321 - Specific treatment (see supplemental first aid instruction on this label).

P405 - Store locked up.

P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

#### 2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

Bioaccumulation is not expected to occur

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Calcium nitrate	(CAS-No.) 10124-37-5 (EC-No.) 233-332-1 (REACH-no) 01-2119495093-35	≥ 1 - <3	Ox. Sol. 3, H272 Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
Ammonium nitrate	(CAS-No.) 6484-52-2 (EC-No.) 229-347-8 (REACH-no) 01-2119490981-27	≥1 - <2	Ox. Sol. 3, H272 Eye Irrit. 2, H319

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nitric acid ... % substance with a Community workplace exposure limit	(CAS-No.) 7697-37-2 (EC-No.) 231-714-2 (EC Index-No.) 007-004-00-1 (REACH-no) 01-2119487297-23	< 1	Ox. Liq. 2, H272 Skin Corr. 1A, H314
Sodium molybdate	(CAS-No.) 10102-40-6 (EC-No.) 231-551-7 (REACH-no) 01-2119489495-21	<0.005	Not classified

### Specific concentration limits:

Name	Product identifier	Specific concentration limits
Ammonium nitrate	(CAS-No.) 6484-52-2 (EC-No.) 229-347-8 (REACH-no) 01-2119490981-27	( 80 <C ≤ 100) Eye Irrit. 2, H319
nitric acid ... %	(CAS-No.) 7697-37-2 (EC-No.) 231-714-2 (EC Index-No.) 007-004-00-1 (REACH-no) 01-2119487297-23	( 5 ≤C < 20) Skin Corr. 1B, H314 ( 20 ≤C ≤ 100) Skin Corr. 1A, H314 ( 65 ≤C < 99) Ox. Liq. 3, H272 ( 99 ≤C ≤ 100) Ox. Liq. 2, H272

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: First aid personnel should wear appropriate protective equipment during any rescue.
First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration if necessary. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact	: Take off immediately all contaminated clothing and wash it before reuse. Rinse skin with water/shower. Seek immediate medical advice.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical advice.
First-aid measures after ingestion	: Do NOT induce vomiting. Rinse mouth. Seek immediate medical advice.

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

Symptoms/effects after inhalation	: Inhalation of liquid or overexposure to vapours may cause coughing.
Symptoms/effects after skin contact	: Causes severe burns.
Symptoms/effects after eye contact	: Causes serious eye damage.
Symptoms/effects after ingestion	: Ingestion may cause nausea and vomiting.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Use extinguishing agent suitable for surrounding fire. Dry chemical, CO <sub>2</sub> , or water spray or regular foam.
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### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire	: Combustion products may include the following: carbon oxides (CO, CO <sub>2</sub> ) (carbon monoxide, carbon dioxide) nitrogen oxides (NO, NO <sub>2</sub> etc.).
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### 5.3. Advice for firefighters

Firefighting instructions	: Do not allow run-off from fire-fighting to enter drains or water courses.
Protection during firefighting	: Self-contained breathing apparatus. Complete protective clothing.

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### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Store locked up. Keep out of reach of children. Do not handle until all safety precautions have been read and understood.

##### 6.1.1. For non-emergency personnel

Protective equipment : Concerning personal protective equipment to use, see section 8.

Emergency procedures : Do not get in eyes, on skin, or on clothing. Do not breathe spray. Evacuate area. Ventilate area.

##### 6.1.2. For emergency responders

Protective equipment : Concerning personal protective equipment to use, see section 8.

Emergency procedures : Do not get in eyes, on skin, or on clothing. Do not breathe spray. Evacuate unnecessary personnel. Ventilate area.

#### 6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

#### 6.3. Methods and material for containment and cleaning up

For containment : Cover spill with non combustible material, e.g.: sand, earth, vermiculite. Stop leak without risks if possible. Contain large spillage with sand or earth. Do not touch or walk on the spilled product.

Methods for cleaning up : Take up liquid spill into absorbent material. Shovel or sweep up and put in a closed container for disposal. Clean contaminated surfaces with an excess of water.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

SECTION 8. SECTION 11. SECTION 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

Precautions for safe handling : Do not get in eyes, on skin, or on clothing. Do not breathe spray, mist. Do not eat, drink or smoke when using this product. Wear protective clothing, eye protection, face protection.

Hygiene measures : Take off immediately all contaminated clothing and wash it before reuse. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

#### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Store locked up. Keep out of reach of children. Store in a well-ventilated place. Keep container tightly closed.

Storage conditions : Keep only in original container. Keep cool. Protect from sunlight. Protect from frost.

Incompatible products : Strong bases.

Storage temperature : 6 – 30 °C to prevent product crystallisation (at low temperatures) and product spoilage (at high temperatures)

#### 7.3. Specific end use(s)

Fertilisers.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### Sodium molybdate (10102-40-6)

##### United Kingdom - Occupational Exposure Limits

Local name	Molybdenum compounds (as Mo) - soluble compounds
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WEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
WEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Regulatory reference	EH40/2005 (Fourth Edition, 2020). HSE.

### nitric acid ... % (7697-37-2)

#### EU - Occupational Exposure Limits

Local name	Nitric acid
IOELV STEL (mg/m <sup>3</sup> )	2.6 mg/m <sup>3</sup>
IOELV STEL (ppm)	1 ppm
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC

#### United Kingdom - Occupational Exposure Limits

Local name	Nitric acid
WEL STEL (mg/m <sup>3</sup> )	2.6 mg/m <sup>3</sup>
WEL STEL (ppm)	1 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

### Calcium nitrate (10124-37-5)

#### DNEL/DMEL (Workers)

Long-term - systemic effects, dermal	13.9 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	24.5 mg/m <sup>3</sup>

#### DNEL/DMEL (General population)

Long-term - systemic effects, oral	8.33 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	6.3 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	8.33 mg/kg bodyweight/day

#### PNEC (Water)

PNEC aqua (freshwater)	0.45 mg/l
PNEC aqua (marine water)	0.045 mg/l
PNEC aqua (intermittent, freshwater)	4.5 mg/l

#### PNEC (STP)

PNEC sewage treatment plant	18 mg/l
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### Ammonium nitrate (6484-52-2)

#### DNEL/DMEL (Workers)

Long-term - systemic effects, dermal	5.12 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	36 mg/m <sup>3</sup>

#### DNEL/DMEL (General population)

Long-term - systemic effects, oral	2.56 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	8.9 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	2.56 mg/kg bodyweight/day

#### PNEC (STP)

PNEC sewage treatment plant	18 mg/l
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<b>Sodium molybdate (10102-40-6)</b>	
<b>DNEL/DMEL (Workers)</b>	
Long-term - systemic effects, inhalation	23.97 mg/m <sup>3</sup>
<b>DNEL/DMEL (General population)</b>	
Long-term - systemic effects, oral	7.3 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	7.15 mg/m <sup>3</sup>
<b>PNEC (Water)</b>	
PNEC aqua (freshwater)	27.25 mg/l
PNEC aqua (marine water)	4.08 mg/l
<b>PNEC (Sediment)</b>	
PNEC sediment (freshwater)	48500 mg/kg dwt
PNEC sediment (marine water)	4250 mg/kg dwt
<b>PNEC (Soil)</b>	
PNEC soil	20.39 mg/kg dwt
<b>PNEC (STP)</b>	
PNEC sewage treatment plant	46.57 mg/l

<b>nitric acid ... % (7697-37-2)</b>	
<b>DNEL/DMEL (Workers)</b>	
Acute - local effects, inhalation	2.6 mg/m <sup>3</sup>
Long-term - local effects, inhalation	1.3 mg/m <sup>3</sup>
<b>DNEL/DMEL (General population)</b>	
Acute - local effects, inhalation	1.3 mg/m <sup>3</sup>
Long-term - local effects, inhalation	0.65 mg/m <sup>3</sup>

## 8.2. Exposure controls

### Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

### Personal protective equipment:

Wear recommended personal protective equipment.

<b>Materials for protective clothing:</b>
acid-resistant protective clothing

<b>Hand protection:</b>
Chemical resistant gloves (according to European standard EN 374 or equivalent). Neoprene or nitrile rubber gloves. Butyl-rubber protective gloves. Minimum recommended thickness: 0.2mm. Breakthrough time for weak inorganic acids: short term exposure/ splash contact: minimum 30 minutes. Long term exposure/ full contact: >8 hours recommended. Never select a glove with a breakthrough time of <15 minutes. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer

<b>Eye protection:</b>
Safety glasses with side shields. EN 166

<b>Skin and body protection:</b>
If skin contact or contamination of clothing is possible, protective clothing should be worn

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### Respiratory protection:

No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation

### Thermal hazard protection:

Not required for normal conditions of use.

### Environmental exposure controls:

Avoid release to the environment.

### Other information:

Do not eat, drink or smoke when using this product.

## SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Appearance	: Clear to slightly hazy liquid.
Colour	: Pale yellow.
Odour	: faint specific odour.
Odour threshold	: Not applicable as product has barely detectable odour
pH	: < 2
Relative evaporation rate (butylacetate=1)	: Evaporation rate not determined as product is non volatile
Melting point	: Not applicable (aqueous liquid)
Freezing point	: ≈ 0 °C
Boiling point	: ≈ 100 °C
Flash point	: Not applicable (aqueous non combustible product)
Auto-ignition temperature	: Not applicable (aqueous non combustible product)
Decomposition temperature	: Not determined for product as chemical composition does not present hazard. Decomposition temperature Calcium nitrate: ~500°C. Ammonium nitrate: ~230°C
Flammability (solid, gas)	: Not applicable (aqueous liquid)
Vapour pressure	: Not determined, product is non volatile and therefore not expected to pose a hazard.
Vapour pressure at 50 °C	: Not determined, product is non volatile and therefore not expected to pose a hazard.
Relative vapour density at 20 °C	: Not determined, product is non volatile at 20°C and therefore not expected to pose a hazard.
Relative density	: 1.126
Density	: 1126 kg/m <sup>3</sup>
Solubility	: Miscible (in all proportions) with : water.
Partition coefficient n-octanol/water (Log Pow)	: Not determined as product is inorganic
Partition coefficient n-octanol/water (Log Kow)	: Not determined as product is inorganic
Viscosity, kinematic	: No data available
Viscosity, dynamic	: Not determined as product has low viscosity and this property is not considered relevant for usage or hazard potential of product
Explosive properties	: Not expected to be a fire/explosion hazard under normal conditions of use.
Oxidising properties	: Does not meet the criteria for classification as oxidising.
Explosive limits	: Not determined as not considered to pose an explosion hazard under normal conditions of usage or storage

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions of use.

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### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Store between 6°C and 30°C to prevent product crystallisation (at low temperatures) and product spoilage (at high temperatures). Keep out of direct sunlight.

### 10.5. Incompatible materials

Strong bases.

### 10.6. Hazardous decomposition products

No hazardous decomposition products known at room temperature. Combustion products may include the following: carbon oxides (CO, CO<sub>2</sub>) (carbon monoxide, carbon dioxide) nitrogen oxides (NO, NO<sub>2</sub> etc.).

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

#### Calcium nitrate (10124-37-5)

LD50 oral rat	300 – 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method), Guideline: EU Method B.1 tris (Acute Oral Toxicity - Acute Toxic Class Method), Guideline: EPA OPPTS 870.1100 (Acute Oral Toxicity), Guideline: other:Japanese Ministry of Agriculture, Forestry and Fisheries (JMAFF), 12 Nousan, Notification No 8147, November 2000, including the most recent partial revisions
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

#### Ammonium nitrate (6484-52-2)

LD50 oral rat	2950 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

#### Sodium molybdate (10102-40-6)

LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal	> 2000 mg/kg bodyweight
LC50 inhalation rat (mg/l)	> 1.93 mg/l/4h

#### nitric acid ... % (7697-37-2)

LC50 inhalation rat (mg/l)	≈ 2.65 mg/l
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Skin corrosion/irritation : Causes severe skin burns.  
pH: < 2

Additional information : Does not meet classification criteria for Class 8 dangerous goods for transport according to calculation method in Figure 2.2.8.1.6.3 - ADR Regulation (2019)

Serious eye damage/irritation : Causes serious eye damage.  
pH: < 2

Respiratory or skin sensitisation : Not classified.

Germ cell mutagenicity : Not classified



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Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

### Calcium nitrate (10124-37-5)

NOAEL (oral, rat, 90 days)	≥ 1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents), Guideline: EU Method B.7 (Repeated Dose (28 Days) Toxicity (Oral))
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### Sodium molybdate (10102-40-6)

NOAEC (inhalation, rat, dust/mist/fume, 90 days)	> 0.1 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
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### nitric acid ... % (7697-37-2)

NOAEL (oral, rat, 90 days)	1500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
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NOAEC (inhalation, rat, gas, 90 days)	2.15 ppm Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study), Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study)
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Aspiration hazard : Not classified

## SECTION 12: Ecological information

### 12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

Not rapidly degradable

### Calcium nitrate (10124-37-5)

LC50 fish 1	1378 mg/l Test organisms (species): <i>Poecilia reticulata</i>
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EC50 Daphnia 1	490 mg/l Test organisms (species): <i>Daphnia magna</i>
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ErC50 (algae)	> 1700 mg/l EC50/10d
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### Ammonium nitrate (6484-52-2)

EC50 Daphnia 1	490 mg/l Test organisms (species): <i>Daphnia magna</i>
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### Sodium molybdate (10102-40-6)

LC50 fish 1	≈ 609.1 mg/l
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EC50 Daphnia 1	≈ 131 ml/l
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EC50 72h algae (1)	≈ 333.1 mg/l
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NOEC chronic fish	> 121 mg/l 84d
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NOEC chronic crustacea	≈ 79 mg/l 30d
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### 12.2. Persistence and degradability

#### Ionic Hydro Hard Water Grow

Persistence and degradability	Expected to be biodegradable.
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#### Calcium nitrate (10124-37-5)

Persistence and degradability	Readily biodegradable.
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#### Sodium molybdate (10102-40-6)

Persistence and degradability	Readily biodegradable.
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#### nitric acid ... % (7697-37-2)

Persistence and degradability	Readily biodegradable.
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### 12.3. Bioaccumulative potential

#### Ionic Hydro Hard Water Grow

Partition coefficient n-octanol/water (Log Pow)	Not determined as product is inorganic
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Partition coefficient n-octanol/water (Log Kow)	Not determined as product is inorganic
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Bioaccumulative potential	Bioaccumulation is not expected to occur.
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#### Calcium nitrate (10124-37-5)

Bioaccumulative potential	Low bioaccumulation potential.
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#### Ammonium nitrate (6484-52-2)

Bioaccumulative potential	Low bioaccumulation potential.
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#### Sodium molybdate (10102-40-6)

Bioaccumulative potential	Low bioaccumulation potential.
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#### nitric acid ... % (7697-37-2)

Bioaccumulative potential	Low bioaccumulation potential.
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### 12.4. Mobility in soil

#### Ionic Hydro Hard Water Grow

Ecology - soil	Expected to be highly mobile in soil.
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#### Calcium nitrate (10124-37-5)

Ecology - soil	Expected to be highly mobile in soil.
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#### Sodium molybdate (10102-40-6)

Ecology - soil	No data available.
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#### nitric acid ... % (7697-37-2)

Ecology - soil	Expected to be highly mobile in soil.
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### 12.5. Results of PBT and vPvB assessment

#### Ionic Hydro Hard Water Grow

Bioaccumulation is not expected to occur

#### Component

Calcium nitrate (10124-37-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Ammonium nitrate (6484-52-2)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
nitric acid ... % (7697-37-2)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Prevent entry to sewers and public waters.
Product/Packaging disposal recommendations	: a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.
Ecology - waste materials	: Avoid release to the environment.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.2. UN proper shipping name</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

### 14.6. Special precautions for user

Special transport precautions	: Does not meet classification criteria for Class 8 dangerous goods for transport according to calculation method in Figure 2.2.8.1.6.3 - ADR Regulation (2019)
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#### Overland transport

Not applicable

#### Transport by sea

Not applicable

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### Air transport

Not applicable

### Inland waterway transport

Not applicable

### Rail transport

Not applicable

## 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

#### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

A chemical safety assessment according to (EC) regulation 1907/2006 (REACH) has not been carried out for this product

#### For the following substances of this mixture a chemical safety assessment has been carried out

Sodium molybdate  
Calcium nitrate  
Ammonium nitrate  
nitric acid ... %

## SECTION 16: Other information

### Indication of changes:

Section	Changed item	Change	Comments
1.3	Website	Added	
1.4	Poison centres	Added	
2	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Update	Classification before update: Not classified. After update: Skin corrosion category 1: H314
2.3	PBT/vPvB text	Added	
3	Composition/information on ingredients	Update	
3	Specific concentration limits (CLP)	Added	
4	First-aid measures general	Update	
5.1	Suitable extinguishing media	Update	
5.2	Hazardous decomposition products	Update	
6	Containment as appropriate	Update	

# Ionic Hydro Hard Water Grow

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

7	Storage conditions	Update	
8.1	Exposure limits	Component data	
8.2	Appropriate personal protective equipment	Update	
9	Additional information		
10	Hazardous decomposition products	Added	
11	Component data	Added	
12.	Component data	Added	
13	Additional information		
14	Additional information	Explanation	
15	Component data	Added	

Abbreviations and acronyms:	
SDS	Safety Data Sheet
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
DNEL	Derived-No Effect Level
PNEC	Predicted No-Effect Concentration
CAS-No.	Chemical Abstract Service number
EC-No.	European Community number
EN	European Standard
OEL	Occupational Exposure Limit
ATE	Acute Toxicity Estimate
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
EC50	Median effective concentration
DMEL	Derived Minimal Effect level
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
vPvB	Very Persistent and Very Bioaccumulative
IOELV	Indicative Occupational Exposure Limit Value

# Ionic Hydro Hard Water Grow

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Other information : Classification based on test data demonstrating extreme pH of mixture (<2) and in absence of any other data. Classification in accordance with Regulation (EC) No 1272/2008 Section 3.2.3.1.2.

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Ox. Liq. 2	Oxidising Liquids, Category 2
Ox. Liq. 3	Oxidising Liquids, Category 3
Ox. Sol. 3	Oxidising Solids, Category 3
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Skin Corr. 1	H314	On basis of test data
Eye Dam. 1	H318	On basis of test data

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.