

**GROWTH TECHNOLOGY LTD****SAFETY DATA SHEET**

According to 1907/2006/EC, article 31 (REACH)

**IONIC****1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING**

PRODUCT NAME	IONIC - Single Pack Nutrient Solution for Hydroponics
SYNONYMS, TRADE NAMES	Ionic Grow Ionic Bloom Ionic HW Grow (for Hard Water areas) Ionic HW Bloom (for Hard Water areas)
SUPPLIER	Growth Technology Ltd. Unit 66, Taunton Trading Estate Taunton TA2 6RX United Kingdom Phone +44 1823 325291 Fax +44 1823 325487 info@growthtechnology.com
EMERGENCY TELEPHONE	+44 1823 325291 (office hours only)

**2 HAZARDS IDENTIFICATION**

Ionic is a concentrated solution of mineral nutrients for plants in hydroponic growing systems. It contains less than 5% w/v nitric acid.

May cause irritation of eye and skin due to the presence of nitric acid and low pH.

**CLASSIFICATION**

Nitric acid is classified as an oxidising and corrosive strong acid, but is in this product only present in a diluted form.

**3 COMPOSITION/INFORMATION ON INGREDIENTS**

Name	EC-No	CAS-No	Content	Classification
nitric acid	231-714-2	7697-37-2	<5%	
mineral salts				
trace elements (mostly as chelates)				
water			circa 95%	

The Full Text for all R-Phrases are Displayed in Section 16

**COMPOSITION COMMENTS**

The Data shown are in accordance with the latest EC Directives

**DISCLAIMER**

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#### 4 FIRST-AID MEASURES

##### INGESTION

If the person affected is conscious, have them drink large quantities of water. Never give anything by mouth to an unconscious person.

If vomiting seek immediate medical assistance.

##### SKIN CONTACT

Remove contaminated clothing and wash skin with plenty of running water.

##### EYE CONTACT

Rinse immediately eye with plenty of low pressure water for at least 15 minutes.

Remove any contact lenses.

#### 5 FIRE-FIGHTING MEASURES

##### EXTINGUISHING MEDIA

The product is non combustible.

To extinguish fire use water spray, dry chemical, carbon dioxide, or chemical foam.

##### SPECIAL FIRE FIGHTING PROCEDURES

None.

##### UNUSUAL FIRE & EXPLOSION HAZARDS

None.

##### SPECIFIC HAZARDS

None.

##### PROTECTIVE MEASURES IN FIRE

Wear full protective clothing and MSHA/NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

#### 6 ACCIDENTAL RELEASE MEASURES

##### PERSONAL PRECAUTIONS

See section 8.

##### ENVIRONMENTAL PRECAUTIONS

Take precautionary measures against discharges into the environment, since solutions of plant nutrients can be damaging to the environment in their concentrated form, for instance by polluting streams and water courses.

##### SPILL CLEAN UP METHODS

Sweep up or absorb spilled material.

#### 7 HANDLING AND STORAGE

##### USAGE PRECAUTIONS

Avoid contact with eyes or skin.

Wash thoroughly after handling and before eating, drinking or smoking.

##### STORAGE PRECAUTIONS

None.

## 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### PROTECTIVE EQUIPMENT

Protective gloves and safety goggles

### RESPIRATORY EQUIPMENT

Not applicable

### HAND PROTECTION

Protective gloves should be used if there is the risk of direct contact or splash.

### EYE PROTECTION

Wear approved safety goggles.

### HYGIENE MEASURES

Wash at the end of each work shift and before eating, drinking, smoking or using the toilet.

### SKIN PROTECTION

Wear protective clothing in case of danger of contact.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE                      aqueous and odourless liquid

COLOUR                              brown

BOILING POINT                      about 100 degrees Celcius

SPECIFIC GRAVITY                      approximately 1

pH - VALUE                              2.9

CONDUCTIVITY                              300mS/cm

## 10 STABILITY AND REACTIVITY

### STABILITY

Stable under normal temperature conditions and recommended use.

### MATERIALS TO AVOID

None

### HAZARDOUS DECOMPOSITION PRODUCTS

None

## 11 TOXICOLOGICAL INFORMATION

### GENERAL

None

### INGESTION

May cause irritation of the digestive track.

### SKIN CONTACT

May cause irritation.

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EYE CONTACT  
May cause irritation.

## 12 ECOLOGICAL INFORMATION

### ECOTOXICITY

Take precautionary measures against discharges into the environment, since solutions of plant nutrients can be damaging to the environment in their concentrated form. for instance by polluting streams and water courses.

### WATER HAZARD CLASSIFICATION

None.

## 13 DISPOSAL CONSIDERATIONS

### GENERAL INFORMATION

Place into a suitable closed container for disposal.

### DISPOSAL METHODS

Dispose of in accordance with local and national regulations.

## 14 TRANSPORT INFORMATION

### GENERAL

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID)

## 15 REGULATORY INFORMATION

LABELLING none

CONTAINS nitric acid

SAFETY PHRASES S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice  
S36/37 Wear suitable protective clothing and gloves  
S45 In case of accident or if you feel unwell seek medical advice immediately (show the label where possible)

### UK REGULATORY REFERENCES

Chemicals (Hazard Information & Packaging) Regulations. The Control of Substances Hazardous to Health Regulations 1988. Health and Safety at Work Act 1974.

### ENVIRONMENTAL LISTING

Control of Pollution Act 1974.

### EU DIRECTIVES

System of specific information relating to Dangerous Preparations. 2001/58/EC. Dangerous Preparations Directive 1999/45/EC.

### STATUTORY INSTRUMENTS

Notification of New Substances Regulations (NONS) 1993. The Export and Import of Dangerous Chemicals Regulations 2005 number 928.

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REVISION DATE: 14/02/2008

APPROVED CODE OF PRACTICE

Classification and Labelling of Substances and Preparations Dangerous for Supply (EU 2001/59/EC). Safety Data Sheets for Substances and Preparations (REACH)

GUIDANCE NOTES

Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. CHIP for everyone HSG(108).

NATIONAL REGULATIONS

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. No. 1689.

Workplace Exposure Limits 2005 (EH40).

The Carriage of Dangerous Goods and use of transportable pressure equipment regulations 2004.

Control of Substances hazardous to health regulations 2002 (as amended).

**16 OTHER INFORMATION**

ISSUED BY                      HS&E Manager

REVISION DATE:              14/02/2008

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