

**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**

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

#### **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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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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