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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 FW Grow (for Hard Water areas)~~
~~Ionic FW Bloom (for Hard Water areas)~~

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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

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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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).

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|-----------------------------|
| 16 OTHER INFORMATION |
|-----------------------------|

ISSUED BY HS&E Manager

REVISION DATE: 14/02/2008

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