

	Propagation	Grow	Bloom									
Nutrients:												
Formulex	Seedlings and clones. 5ml/litre – pH 6.0.											
IONIC Soil Grow		Plants in vegetative growth. 5 ml/litre – pH 5.8–6.0.	(NB: Continue with GROW nutrients for first week of flowering)									
IONIC Soil Bloom						Plants in flowering stage of growth. 7 ml/litre – pH 5.8–6.0.						
IONIC Boost									Last 4 weeks of flowering. 1 ml/litre – twice weekly.			
Additives:												
Liquid Silicon		Add to nutrients weekly at 5 ml / 10 litres – correct pH to 5.8–6.0.										
Growth Enhancers:												
SuperDrive	Add to nutrients throughout life of crop. Add weekly or with tank change. 1 ml/litre.											
GreenMyst Humic	Pre-treat soil, 5 ml/litre.	5 ml/litre – apply weekly.										
Nitrozyme	Mist young plants regularly. 5 ml/litre.	Add to nutrient weekly, 5 ml per 10 L.										
GreenFuse ROOT	Seedlings and clones. 1 ml/litre to roots.											
GreenFuse GROW		Vegetative plants. 1 ml/litre to nutrient.										
GreenFuse BLOOM					Flowering plants. 1 ml/litre – add to nutrient.							
Lighting:	Eighteen hours					Twelve hours						

	Propagation	Grow	Bloom									
Nutrients:												
Formulex	Seedlings and clones. 5ml/litre – pH 6.0, EC 1.5.											
IONIC Coco Grow		Plants in vegetative growth. 5 ml/litre – pH 5.8–6.0.	(NB: Continue with GROW nutrients for first week of flowering)									
IONIC Coco Bloom						Plants in flowering stage of growth. 7 ml/litre – pH 5.8–6.0.						
IONIC Boost									Last 4 weeks of flowering. 1 ml/litre – twice weekly.			
Additives:												
Liquid Silicon		Add to nutrients weekly at 5 ml / 10 litres – correct pH to 5.8–6.0.										
Growth Enhancers:												
SuperDrive	Add to nutrients throughout life of crop. Add weekly or with tank change. 1 ml/litre.											
GreenMyst Humic	Pre-treat coco, 5 ml/litre.	5 ml/litre – apply weekly.										
Nitrozyme	Mist young plants regularly. 5 ml/litre.	Add to nutrient weekly, 5 ml per 10 L.										
GreenFuse ROOT	Seedlings and clones. 1 ml/litre, apply to roots.											
GreenFuse GROW		Vegetative plants. 1 ml/litre to nutrient.										
GreenFuse BLOOM					Flowering plants. 1 ml/litre – add to nutrient.							
Lighting:	Eighteen hours					Twelve hours						

	Propagation	Grow	Bloom									
Nutrients:												
Formulex	Seedlings and clones. 5ml/litre – pH 6.0.											
IONIC Grow		Plants in vegetative growth. 7 ml/litre – pH 5.8–6.0.	(NB: Continue with GROW nutrients for first week of flowering)									
IONIC Bloom						Plants in flowering stage of growth. 7 ml/litre – pH 5.8–6.0.						
IONIC Boost								Last 5 weeks of flowering. 1 ml/litre.				
Additives:												
Liquid Oxygen		Add to tank regularly throughout crop life. Use daily if possible. 5 ml / 10 litres.										
Liquid Silicon		Add to tank weekly throughout crop life. 5 ml / 10 litres.										
Growth Enhancers:												
SuperDrive	Add to nutrients throughout life of crop. Add weekly or with tank change. 1 ml/litre.											
Nitrozyme	Mist young plants regularly. 5 ml/litre.											
GreenFuse ROOT	Seedlings and clones. 1 ml/litre.											
GreenFuse GROW		Vegetative plants – add weekly, 1 ml/litre.										
GreenFuse BLOOM					Flowering plants – add to tank weekly. 1 ml/litre.							
Lighting:	Eighteen hours					Twelve hours						

IONIC

IONIC – The Ultimate Solution

A Single Pack Nutrient Solution for use in Hydroponic, Soil and Coco cultivation.

IONIC is available in three distinct formulations:

IONIC GROW supplies the needs of the plant during the vegetative stage of its growth cycle.

IONIC BLOOM is dedicated to the fruiting and flowering stage of plant growth.

IONIC BOOST is designed to maximise yields in the final stages of growth.

The IONIC Advantage

- Full professional formulations with absolutely no compromise.
- Single pack for accuracy and ease of use.
- Stabilised pH for lowest maintenance and best results.
- Full range of formulations – to cover every need.
- Dedicated HW formulations – for ease of use in hard water

	Application	Ideal pH	Ideal EC
IONIC GROW Vegetative Growth	Hydroponics – active and passive – including NFT – Flood & Drain. Aeroponics – Rockwool and Perlite	5.5–6.2	1.8–2.2 mS/cm
IONIC GROW HW Vegetative Growth	As above in hard water areas.	5.5–6.2	1.8–2.2 mS/cm
IONIC BLOOM Flowering	The flowering cycle in hydroponic systems – as above.	5.5–6.2	1.8–2.2 mS/cm
IONIC BLOOM HW Flowering	As above in hard water areas.	5.5–6.2	1.8–2.2 mS/cm
IONIC Soil GROW Vegetative Growth	For all plants in soil – indoors or outside. Use with any type of soil – natural or artificial.	6.0–6.8	1.0–1.8 mS/cm
IONIC Soil BLOOM Flowering	The flowering cycle – plants in soil.	6.0–6.8	1.0–1.8 mS/cm
IONIC Coco GROW Vegetative Growth	For all plants in coco. Suitable for coco in slabs or in loose form. Ideal for systems such as AutoPot and IGS.	5.8–6.2	1.5–2.0 mS/cm
IONIC Coco BLOOM Flowering	The flowering cycle – plants in coco – as above.	5.8–6.2	1.5– 2.0 mS/cm
IONIC BOOST Flowering	Flowering supplement for enhanced yields and fragrance. Use in all systems.		
IONIC UV	Replenishing solution to be used in conjunction with UV sterilisers.		

Making up IONIC nutrients

For all IONIC formulations:

1. Calculate total tank volume.
2. Add IONIC at 7 ml/litre (e.g. for a 10 litre tank add 70 ml).
3. Stir thoroughly.
4. Check conductivity of the solution.
(1.8–2.5 mS / 18–25 CF / 1400–1600 ppm.)
5. Check pH of solution. Ideal range 5.5–6.2.
6. If required add Growth Technology pH UP or pH DOWN.

IONIC BOOST

BOOST is a nutrient supplement designed to be used in the final few weeks before harvest. BOOST allows the grower easy control of the extra phosphorus and potassium that can lead to bumper yields. BOOST is an ideal addition to any of the IONIC BLOOM formulations but it can also be used very effectively with any good quality nutrient solution of the BLOOM variety

Making up IONIC BOOST

1. Make up IONIC BLOOM / IONIC BLOOM HW.
2. Stir tank thoroughly.
3. Add IONIC BOOST to tank at the rate of 1 ml/litre.
4. Stir again then check and correct the pH.
5. Use nutrient in the normal way. IONIC BOOST can be added to the tank on a weekly basis for the final six weeks before harvest.



Tank Changes – the sequence.

1. Empty old tank – rinse thoroughly and fill with fresh water.
2. Add the appropriate IONIC nutrient solution – usually at around 7 ml per litre. Mix thoroughly.
3. Maintain agitation throughout the entire process. Use pump if possible, or keep stirring.
4. Check EC – add more nutrient if necessary – mixing well until EC is at desired level (usually 1.5–2 mS).
5. If using BOOST – add now at 1 ml per litre in the tank. Mix well.
6. If using Liquid Silicon – add now at 5 ml per 10 litres of tank volume.
7. Check and correct the pH (ideal range 5.8–6.2). Use pH DOWN to lower pH. If pH needs raising then Liquid Silicon is the best option.
8. Add Liquid Oxygen at the recommended rate and make a final check of pH before allowing nutrient to circulate to plants.
9. If GreenFuse (or any other organic additive) is being used, it should be added now. It may be a good idea to reduce the application of Liquid Oxygen to 50% of the recommended rate if using GreenFuse.



The Additives

Liquid Oxygen makes an amazing difference to the success of hydroponic systems. It oxygenates and cleanses the nutrient solution, enhancing growth rates and protecting against disease. Measure dosage carefully and dilute in a litre of clean water before adding to the tank.

In normal operation: Add Liquid Oxygen at a rate of 5 ml per 10 litres. It should be added daily, if possible. Alternatively it can be dosed at 1 ml per litre on alternate days.

Control of root disease: Clean out and refill tank. Add Liquid Oxygen at the rate of 2 ml per litre and dose daily at that rate until healthy white roots reappear.

Between crops: Remove all roots and debris and wipe down all trays and tanks. Fill tank with clean water and add Liquid Oxygen at the rate of 10 ml per litre. Circulate through the system for 24 hours then flush system with fresh water before replanting.

Please ask your retailer for the full Liquid Oxygen instruction sheet or download it from www.growthtechnology.com.



Liquid Silicon adds the elusive element silicon to the hydroponic tank. It will increase growth rates and produce larger, more vigorous plants. It can also help protect plants against mildew and sucking pests. Measure dosage carefully and dilute in a litre of clean water before adding to the tank.

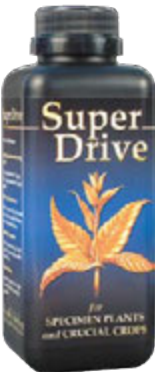
1. Make up nutrient in the normal way but do not adjust pH.
2. Add Liquid Silicon at the rate of 5 ml per 10 litres. Mix thoroughly.
3. Check and correct pH using Growth Technology pH DOWN.

In soft water areas this dosage can be doubled to good effect, but if water is already hard it may cause pH to be too high.

Please ask your retailer for the full Liquid Silicon instruction sheet or download it from www.growthtechnology.com.



The Growth Enhancers



Super Drive is a plant tonic, containing vitamins and essential nutrients from natural sources. It will enhance plant performance through every stage of growth. It can be added to water used for soaking RockWool, soil or coco before plants are added or cuttings are taken.

Dosage: Add to water or nutrient solutions at 1 ml per litre and apply to roots or leaves.

Nitrozyme is a concentrated extract from sea plants. It has amazing

effects on plant growth. It can be watered into the root zone or added to nutrient tanks. It also makes an incredible foliar spray.

Dosage: Add to water at 5 ml per litre. Water into roots or spray over foliage.

Please ask your retailer for the full Nitrozyme instruction sheet or download it from www.growthtechnology.com.



GreenFuse is a laboratory preparation of pure biological extracts. It works by feeding and stimulating the micro-organisms that live in the root zone of all plants. This enables the plants to take up more nutrients and thus supercharges growth rates.

GreenFuse is available in three types:

GreenFuse Root is for seedlings, cuttings and young plants – use throughout the propagation process.

GreenFuse Grow is for plants in their vegetative stage and should be used until flowers or fruit are starting to form.

GreenFuse Bloom should be used throughout the flowering or fruiting stage of growth.

Dosage: 1 ml per litre. It can be watered into soil and coco on a weekly basis or it can be added to nutrient solutions.

