

OPTIMUM and EUROPONIC are well-established twin pack nutrients. OPTIMUM has been on the market for over fifteen years but its formulation has been continually modified and improved in the light of new information and growing experience.

OPTIMUM is also available in special HW formulations designed for use with hard water.

OPTIMUM is highly recommended for all hydroponic applications.

Some RockWool growers will prefer the media-specific formulation offered by the EUROPONIC product.

OPTIMUM EUROPONIC

Twin pack nutrients for hydroponic cultivation

Precisely formulated twin-pack nutrients based on many years of commercial horticultural experience

The full twin-pack range

OPTIMUM Grow For the vegetative stage of growth. To be used in all hydroponic systems, including passive hydroponics with Perlite etc.

OPTIMUM Bloom For the flowering stage of growth. To be used in all hydroponic systems.

OPTIMUM Grow HW To be used for all hydroponic applications in hard water areas.

OPTIMUM Bloom HW As with OPTIMUM Grow HW.

EUROPONIC Grow For the vegetative stage of growth. Specifically formulated for cultivation in RockWool slabs.

EUROPONIC Bloom For the flowering stage of growth. Specifically formulated for cultivation in RockWool slabs.

IONIC Boost Add the crucial extra elements to maximise flowering and yield. Can be used with all twin pack nutrients as well as IONIC and other nutrients of good quality.

EUROPONIC

A twin-pack liquid nutrient solution based originally on RockWool guidelines from Holland and elsewhere and refined by fifteen years practical experience in commercial hydroponics.

This solution is highly recommended for all hydroponic systems using RockWool slabs.



OPTIMUM

A twin-pack liquid nutrient solution based originally on our own professional NFT formulations and refined by fifteen years practical experience in commercial hydroponics.

This solution is highly recommended for all hydroponic systems, especially NFT, Flood and Drain and Aeroponics. It is also highly suitable for passive applications using inert media such as Perlite.

Growth Technology twin-pack nutrient solutions

- Nutrients formulated specifically for hydroponic cultivation. The formulations are based on long commercial experience but have been extensively revised and refined over the years.
- Manufactured from the purest and most soluble mineral salts. Complete in every elemental detail and balanced for maximum plant performance.
- OPTIMUM is available in standard and hard water options – in either case precisely tailored to the water supply.
- Available in GROW and BLOOM options. These variations are based upon the nutritional requirements of green plants at each stage of the growth cycle. The GROW formulation is designed to maximise potential for vigorous vegetative growth while the BLOOM nutrient is loaded with the crucial elements that support heavy flowering.

Full detailed instructions are supplied with every pack. Replacement instructions can be accessed from our website at www.growthtechnology.com or just give us a call.

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Growth Technology



Specifications

	OPTIMUM GROW	OPTIMUM BLOOM	EUROPONIC GROW	EUROPONIC BLOOM
Normal dilution rate	1 : 125 (2 litre pack makes up to 250 litres of working solution.)			
k / N	1.25	1.77	1.3	1.7
T.D.S. (mg/litre)	2663.35	2349.73	1656.81	1796.36
Target conductivity (EC)	2.00 mS/cm	2.00 mS/cm	2.00 mS/cm	2.00 mS/cm
N : P : K	5 : 2 : 7	4 : 3 : 8	4 : 1 : 5	4 : 3 : 12
Target pH	5.8–6.3	5.8–6.3	5.5–6.0	5.5–6.0



Hard Water

Growers in hard water areas should use the special OPTIMUM HW formulation. The Hard Water product has a distinctive HW label on the bottle.

OPTIMUM Hard Water solution is more acidic. This is achieved by careful selection of the component mineral salts. A more acidic solution will neutralise bicarbonates on its own. This will reduce the amount of acid needed to control the pH and thus reduce the chance of phosphate accumulation. OPTIMUM Hard Water solution is also specially formulated to take account of the minerals, such as calcium, that are usually present in hard water. By lowering these elements in the nutrient solution it is possible to ensure that the final solution is as close as possible to ideal levels of the major elements. This will reduce the problems associated with hard water and allow the grower to maintain the tank for longer periods between changes.

All twin pack solutions are available in the following sizes: 2 litres 10 litres 40 litres

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 OPTIMUM or EUROPONIC BLOOM but it can also be used very effectively with any good quality nutrient solution of the BLOOM variety.



Hydroponic Applications

Application	Suggested Nutrient	pH Range	EC	Notes
PERLITE and other inert media	OPTIMUM GROW or BLOOM	5.5–6.2	1.8–2.5 mS/cm	Flush regularly. Check pH and EC in reservoirs daily.
FLOOD & DRAIN	OPTIMUM GROW or BLOOM	5.5–6.2	1.8–2.5 mS/cm	Check and correct the pH and EC daily.
NFT	OPTIMUM GROW or BLOOM	5.5–6.2	1.8–3.0 mS/cm	Check and correct the pH and EC daily.
<i>All the above in hard water areas</i>	OPTIMUM HW GROW or BLOOM	5.5–6.2	1.8–2.5 mS/cm	Check and correct the pH and EC daily.
ROCKWOOL Passive	OPTIMUM or EUROPONIC GROW or BLOOM	5.5–6.0	1.5 mS/cm	Flush regularly. Monitor the drain water.
ROCKWOOL Re-circulate	OPTIMUM or EUROPONIC GROW or BLOOM	5.5–5.8	1.5 mS/cm	Check and correct the pH and EC daily. Extract samples from the slab to monitor EC.

