



hpn^ow
purification made simple

Safe, Affordable, Eco-Friendly Solutions Help Reduce Costs and Increase Yields

Our **HPGen™** on-site units produce **UltraPure Peroxide™** at the point of use, using only water, air and electricity as input, and directly at the low and safe concentration required. Our market offerings are based on technological breakthroughs in direct electrochemical synthesis of hydrogen peroxide developed by our team over the course of the last 7 years.

HPGen UltraPure Peroxide™ offers growers a strong ROI through a reduced use of chemicals, reduced logistical and handling costs, and increased supply reliability and occupational safety. The safe, **UltraPure Peroxide™** produced by our **HPGen™** systems breaks down after use to pure water and oxygen, leaving no unwanted residuals behind.

Participating in **Horizon 2020**, Europe's Largest Research & Innovation Programme



The Horizon 2020 SME programme has helped HPNow develop and bring to market our irrigation water treatment solution under Horizon 2020's 'Stimulating the innovation potential of SMEs for sustainable and competitive agriculture, forestry, agri-food and bio-based sectors' area of interest. **#H2020**

A successful project outcome will substantially contribute to the following challenges:

- Safer and healthier food through reduction in the use of toxic chemical agents.
- Increased crop-yields, and reduced losses, through reliable and homogenous irrigation, improved plant health.
- Improved resource efficiency through facilitation of use of efficient irrigation.
- Sustainable, more environmentally friendly agricultural and food industries.
- Reduced farm occupational hazards.

Contact Us Today for More Information About the Patented **HPGen UltraPure Peroxide™** System

Your Local Distributor

Imported exclusively into the UK by:
PENNY UK
TECHNICAL WHOLESALE IRRIGATION
www.pennyukltd.com

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REAL SCIENCE. REAL RESULTS!

hpgen™ is the World's First Patented **UltraPure Peroxide™** Processing Unit That Growers Use On Their Own Site

PATHOGENS • ALGAE • BIO-SLIME



hpgen™

**On-Site and
On-Demand
Electrochemical
Generator Using
Only Water, Air
And Electricity**



Cleaner Drippers Produce More Uniform Irrigation, Improving Your Yields

Unlike when using chlorine dioxide, which is extremely hazardous to staff and crops and is very heavily regulated, **HPGen UltraPure Peroxide™** keeps drippers clean (without damaging diaphragms), maintains a stable flow rate and your irrigation uniform. This helps reduce the overall system maintenance required.

A clean system and a stable flow rate help ensure your crops get the water and fertiliser they need. Provide your crop with optimal growing conditions, resulting in yield increases and better quality produce.



Without hpgen™

With hpgen™

HPGen UltraPure Peroxide™ for Irrigation Water Treatment

- ✓ Produces 99.99% pure, safe H₂O₂ at a concentration of 1500 parts per million (0.15%)
- ✓ Can be stored for up to 6 weeks
- ✓ Highly effective against clogging, bio-slime and pathogens
- ✓ No protective clothing needed. The strength is one twentieth of pharmacy mouthwash!
- ✓ Works across a wide pH window
- ✓ Has no effect on your acid dosing
- ✓ No dripper or irrigation system damage
- ✓ No consumables – only water, electric & air
- ✓ Increased oxygenation for optimum root development and strength
- ✓ Reduces system maintenance, increases yield and quality!



HPGen UltraPure Peroxide™ Helps Protect Your Crop Against Pests and Disease and Oxygenates Your Growing Media

Better irrigation uniformity and higher water oxygenation improves plant nutrition and helps boost its natural ability to fight disease, maximising your production.

The **HPGen UltraPure Peroxide™** solution requires no stabilisers or other additives and breaks down to pure water and oxygen following use, leaving no unwanted traces behind.



Healthier Roots



Healthier Plants

UK Soft Fruit Grower Invests in Cleaner Water and Increase Their Future Water Security

- Issues included significant organic activity in reservoir water and bio-slime in pipes, which often leads to irregular irrigation output and blocked drippers.
- To cover all of their farm, which has a daily peak usage of 1600m³, required 2 x HP-A1500 units and a series of IBCs. HPNow supply a simple to use calculator to confirm the units required for your particular system.
- A central **HPGen UltraPure Peroxide™** unit was installed in an existing shed with a 230v supply, mains water and access to the internet. From this central point, the IBCs are transported to the different pump houses.
- Each of the 22 irrigation pumps and feed systems has been supplied with a separate Tefen E300 electronic injection system.
- The ppm of the **HPGen UltraPure Peroxide™** is checked using a simple test paper with colour coding, which indicates the amount present.
- With remote access, maintenance and control is simple and immediate.

