



IntraHydrocare

Safe cleaning and disinfection



IntraHydrocare

Cleans and disinfects water systems in **horticulture**

Intracare

Good, effective and safe-in-use
cleaning and disinfection





Intra Hydrocare

The Purest Water

Water is an essential nutrient for healthy crops. To ensure your vegetable and ornamental crops produce optimal results, the water must be free of harmful bacteria and fungi. The circulation of water; high temperatures in the greenhouse and slowly flowing water in the pipes can cause explosive growth of bacteria and fungi. The result can be water that acts as a source of infection by pathogens such as *Agrobacterium*, *Clavibacter*, *Pseudomonas*, *Erwinia*, *Pythium*, *Phytophthora*, *Fusarium* and others. Intra Hydrocare eliminates these pathogens in the water before they have a chance to damage the crops.

New challenges are facing the horticultural sector due to on-going amendments in legislation relating to water management. Obligatory water circulation and a reduction in the emissions of residues from crop protection products are just two examples. The active substance in Intra Hydrocare, hydrogen peroxide, is one of the most powerful oxidizers that is able to degrade pesticide residues.

In this way, Intra Hydrocare makes a valuable and important contribution to achieving these aims.



Global

Worldwide regulations demand growers to work with safer and effective products which are officially registered by the authorities.

Research

Intracare has its own highly advanced laboratory with a dedicated microbiology department. At this lab, water samples taken in practical situations are tested for the presence of bacteria and fungi. The water quality is analysed in detail. In addition to microbiological analysis, mobile measuring devices are used in situ - at greenhouse level - to monitor the hygiene status of the water. This enables the team at Intracare to provide customised advice for each individual company.

Dosage Intra Hydrocare:

- Water treatment, 40 ppm Hydrocare.
- Greenhouse disinfection, 1-3% Hydrocare.
- Cultivation benches and other equipment, 1-3%.



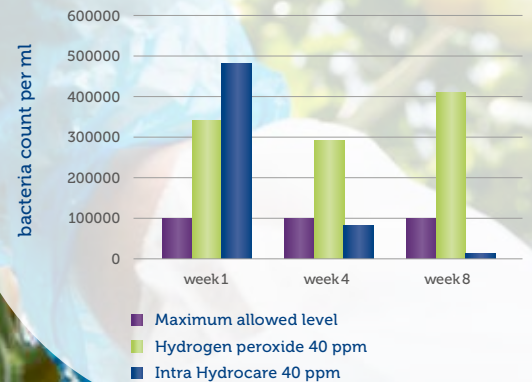
Registration

Intra Hydrocare is a registered biocide for product categories PT2, PT3, PT4 and PT5

For the horticultural sector, Intra Hydrocare has specific registration for the disinfection of water and irrigation systems, empty greenhouses, warehouses, storage units, cultivation benches, materials, tools and equipment.



Effectivity of Intra Hydrocare on bacteria in tomato irrigation water



Bacteria

Pathogenic bacteria like *Agrobacterium*, *Clavibacter* and *Pseudomonas* can easily spread themselves in an irrigation system. Intra Hydrocare prevents that these pathogenic micro-organisms can survive in the system.



Fungi

Fungi produce spores which can affect the crop within a short time. Intra Hydrocare is able to prevent spreading of spores in the irrigation system.

The technology behind Intra Hydrocare is based on tactical interaction between pure hydrogen peroxide and stabilizing chelated silver ions. It is to this powerful combination that Intra Hydrocare owes its multifunctionality, and all the advantages it involves.

Disinfecting without cleaning has little effect

A layer of soiling, mainly composed of organic material, forms in the pipes of drip systems, sprinklers and other irrigation systems. This mass is also referred to as a biofilm. This biofilm acts as a nutrient source for bacteria and moulds and therefore encourages the growth of these pathogens. As well as eliminating these pathogens, removing the biofilm from the irrigation system is vital. The biofilm mass can also block and obstruct the working of the irrigation system, resulting in an uneven watering pattern per plant and reducing crop uniformity.

Intra Hydrocare lays the foundations for a completely clean irrigation system in which pathogens are effectively eliminated from the water. Intra Hydrocare consists of 50% hydrogen peroxide combined with chelated silver. The synergistic effect of these components ensures complete cleaning of the irrigation system and disinfects the water at the same time. Hydrocare effervesces and produces tiny bubbles of oxygen in the system that eliminate the biofilm in the irrigation system completely. The nozzles and sprinklers are kept free of blockages so the water distribution pattern is uniform for each plant and harmful bacteria and moulds are destroyed before they have a chance to damage the crop. And your crops are irrigated with water of the purest quality.



Chlorine-free water treatment



Products that contain chlorine are developed with a focus on disinfection, but have little or no impact on the formation of biofilm. In addition, using chlorine results in an accumulation of sodium. Recirculation of water increases the sodium concentration and causes salinisation, which has an adverse effect on the crops. Intra Hydrocare does not contain chlorine. Following a reaction in water, the hydrogen peroxide in Intra Hydrocare forms water and oxygen - two natural products.



Intra Hydrocare: Intra Hydrocare: Healthy crop starts with clean water

Intracare is located in Veghel, The Netherlands and exports its products and expertise all over the world. Intracare is an industry leader when it comes to cleaning and disinfection solutions for a broad range of watering and irrigation systems. In 2013, Intracare was nominated for the Sprout Challenger & FD Gazelle Award. This put Intracare on the map as one of the most innovative and fastest growing enterprises in the Netherlands.

