

What is hypochlorous acid?

Hypochlorous acid (HOCl) is the strongest oxidizing and antimicrobial agent generated when chlorine gas dissolves in water. It has been used since World War I as a powerful non-toxic disinfectant and sanitizer. It is proven to be much more effective than bleach as a biocide, fungicide, and viricide. Hypochlorous is safe for foliar applications and is approved by the USDA as a leave-on synthetic substance for organic crops.

- ◆ **Near-neutral pH (5-7) won't impact water balance**
- ◆ **Very low total dissolved solids**
- ◆ **Does not clog lines, strong biofilm eliminator**
- ◆ **Made with four simple ingredients: water, salt, vinegar and electricity**
- ◆ **Safe for direct bare root contact, foliar application, pre- and post-harvest treatment**



Organic-friendly



Manufacture on-site



No certifications needed



Line Clearing

Removes biofilm and mineral buildup from water lines without harming the plants or the equipment. Recommended dosing: 2-4 ppm constant flow or 500 ppm flush



Propagation

Improve strike rates and germination by soaking seeds or dipping cuttings in hypochlorous acid before propagation. Recommended dosing: 2 ppm soak, 10 ppm dip



Root Zone Optimizer

Add hypochlorous acid to RDWC and NFT systems to keep the root zone clear from pathogens and biofilm buildup. Recommended dosing: 2 ppm in a circulating system



Growing Media Rinse

Soak or rinse growing media in hypochlorous acid before use to kill any residual pathogens and reduce risk of disease spread. Recommended dosing: 200 ppm soak and rinse



Prevent Algae Growth

Keep algae blooms under control, particularly during periods of high heat. Recommended dosing: 2 ppm constant flow or 500 ppm flush

Interested in making your own hypochlorous acid?

Get in touch! Visit our website to shop our line of hypochlorous acid generators at www.hyposource.com. Email us at support@hyposource.com or send us a text at +1 520-329-2635.



Kill Claims for Hypochlorous Acid

Pathogen	Kill Claim
Powdery Mildew	Reduced mildew by >40% when applied via electrostatic sprayer twice a week at 2 ppm
Phytophthora infestans, cactorum	Inactivated in 1.5 minutes at 3 ppm
Pythium aphanidermatum	Inactivated in 30 seconds at 2 ppm
Fusarium oxysporum	Inactivated in 6 minutes at 10 ppm
Rhizoctonia solani	Inactivated in 6 minutes at 12 ppm
Pythiaceae varieties	Inactivated in 6 minutes at 12 ppm
Downy Mildew	Controlled to below 5% incidence in 1.9 minute foliar spray once daily at 50 ppm
Botrytis cinerea	Inactivated in 6 minutes at 50 ppm

Quick Facts about Chlorine

- Chlorine is converted to chloramine when nitrogen is present. Always test your FAC / ORP after adding a nitrogen-based fertilizer to your system and top up on hypochlorous acid if needed.
- Ideal ORP range for a system dosed with hypochlorous acid is 500-600
- Low doses of chlorine will not harm plants, but it's always smart to do a susceptibility test on a few plants first!
- 2-4 ppm is the safe range for continual contact of chlorine with plants
- Applications of >10 ppm to bare roots or leaves should be followed with a rinse or flush