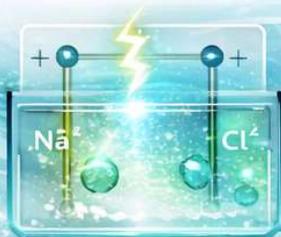




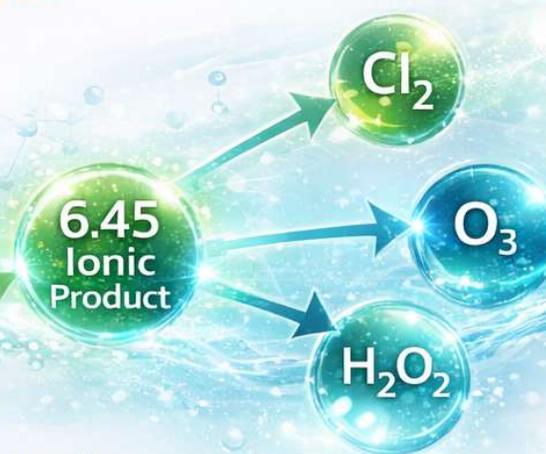
Non-Pesticide Invasive Species Biological Control for Water

Core Mechanism

- 6.45 Ionic Product delivery
- Electrochemistry-generated ROS
- Water-based treatment medium



NaCl electrochemistry



Using water to clean water

Why chlorOrgano is the fit for water treatment

- chlorOrgano uses the water to treat itself.
- **Ionic Product**, dissolved gases, highly charged mass transfer, dual polarity, and precise delivery as either direct on-demand feed or a pumped in finished medium.
- Water treatment may require the strongest concentrate that can be manufactured, stored, and transported safely
- chlorOrgano is especially relevant where compatibility and sensitivity matter the most.



chlorOrgano

NAOC · ORGANOCHLORINE



Unmatched
Safety



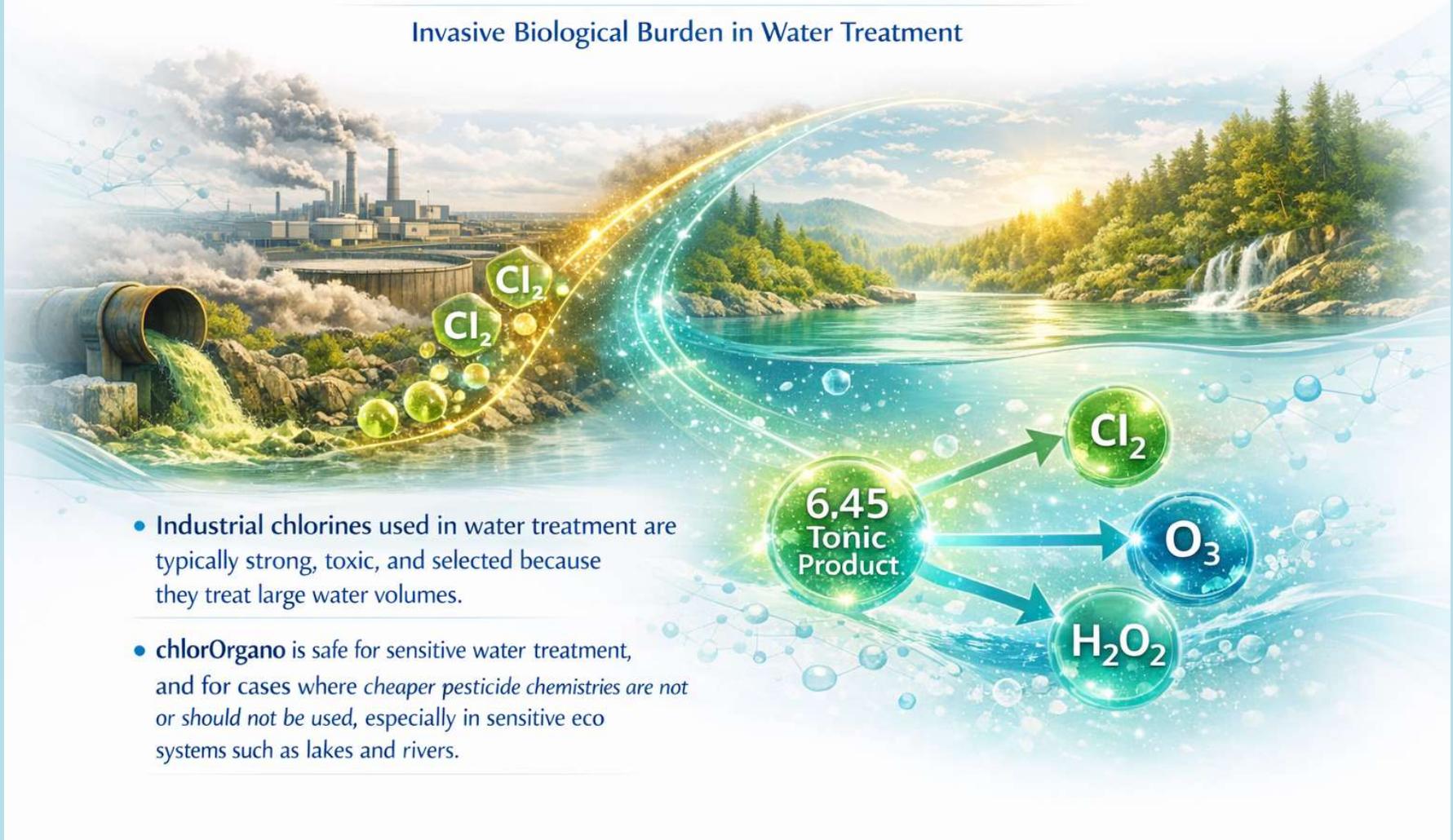
Biocompatible
Solution



Advanced
Concentrates

Problem Framing in Water Treatment

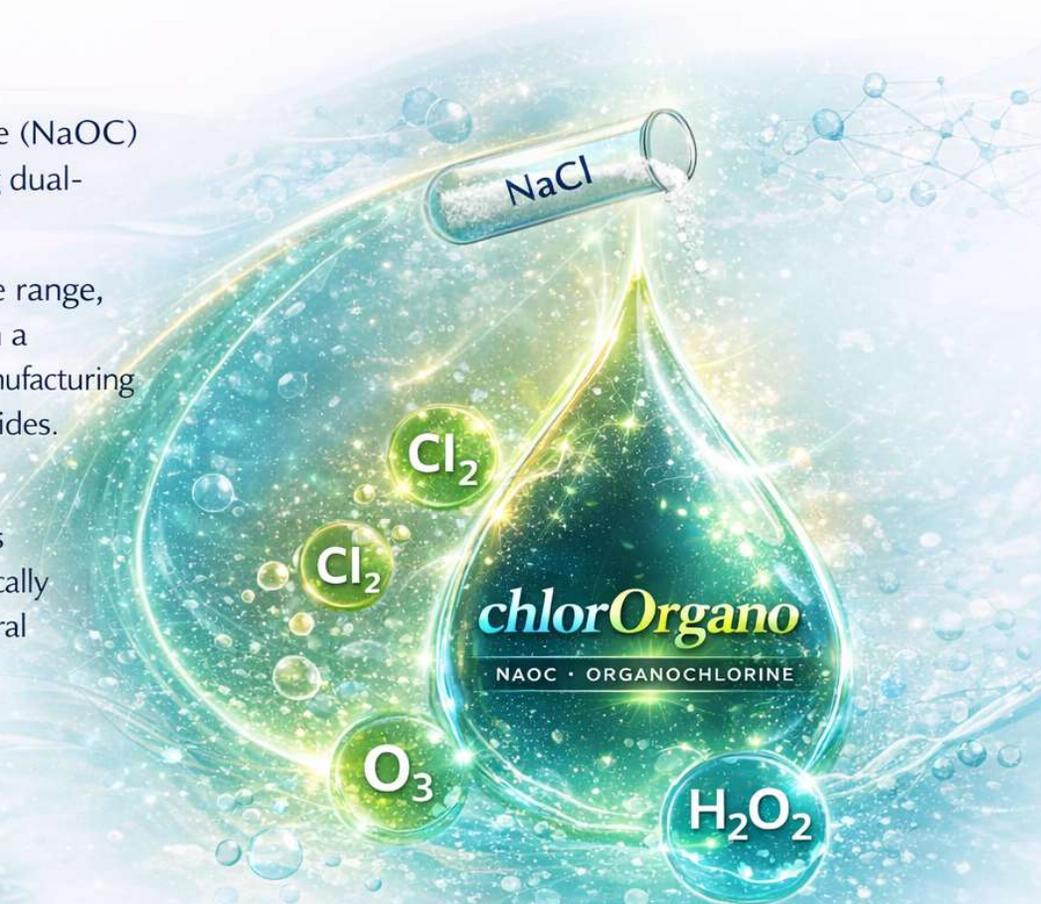
Invasive Biological Burden in Water Treatment



- Industrial chlorines used in water treatment are typically strong, toxic, and selected because they treat large water volumes.
- chlorOrgano is safe for sensitive water treatment, and for cases where *cheaper pesticide chemistries* are not or should not be used, especially in sensitive eco systems such as lakes and rivers.

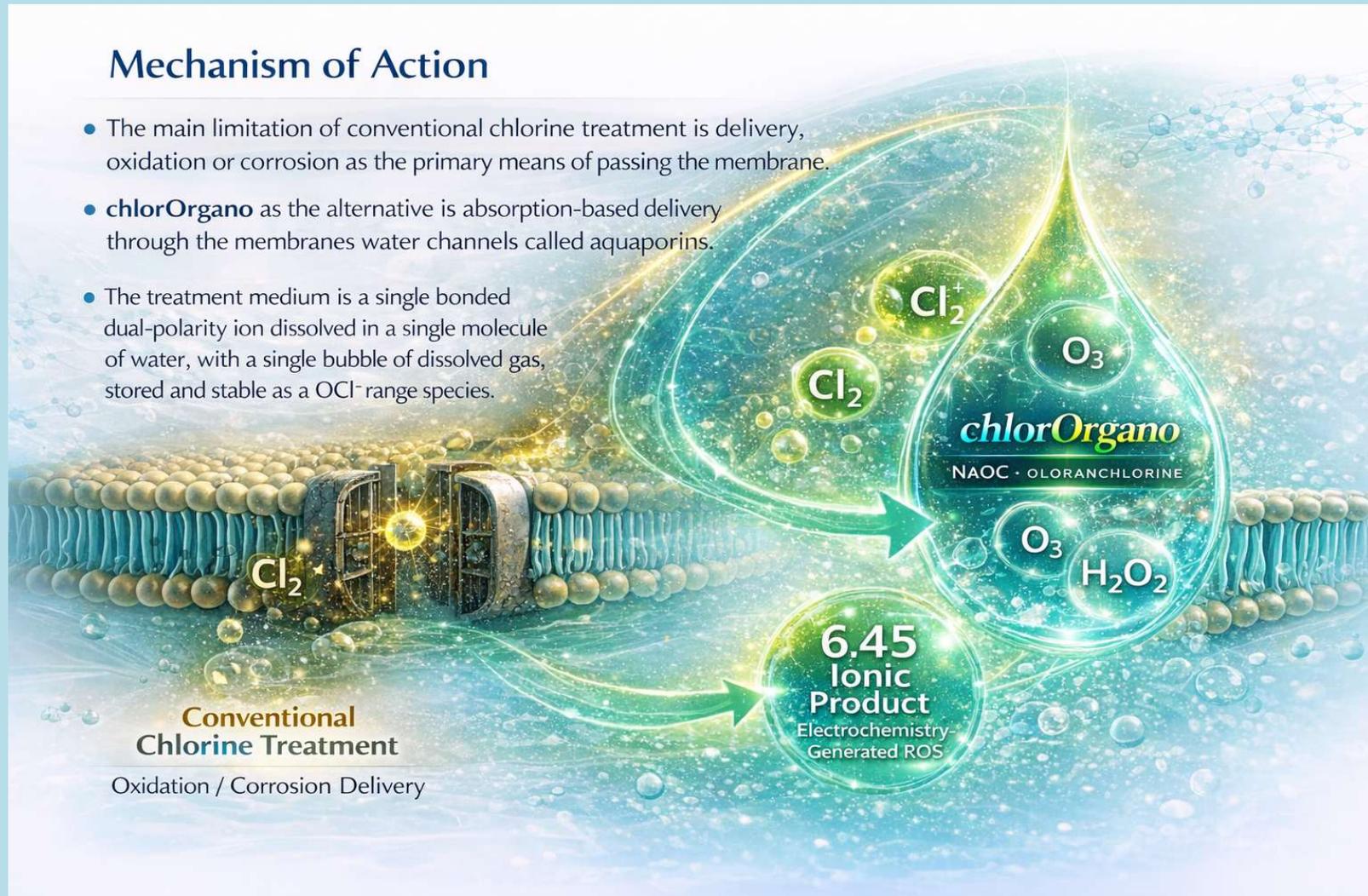
What is chlorOrgano?

- **chlorOrgano** is a sodium organochlorine (NaOC) manufactured from single-salt NaCl using dual-polarity electrochemistry.
- **chlorOrgano** is not in the HOCl pesticide range, chlorOrgano is in the OCl⁻ range although a distinct chlorine species with a different manufacturing route and delivery behavior than OCl⁻ pesticides.
- **chlorOrgano** is manufactured using NaCl single salt electrolyte. Typical of OCl⁻ ranges mediums, chlorOrgano stores electrochemically generated ROS gases in a stable electro-neutral stabilized water-based medium.



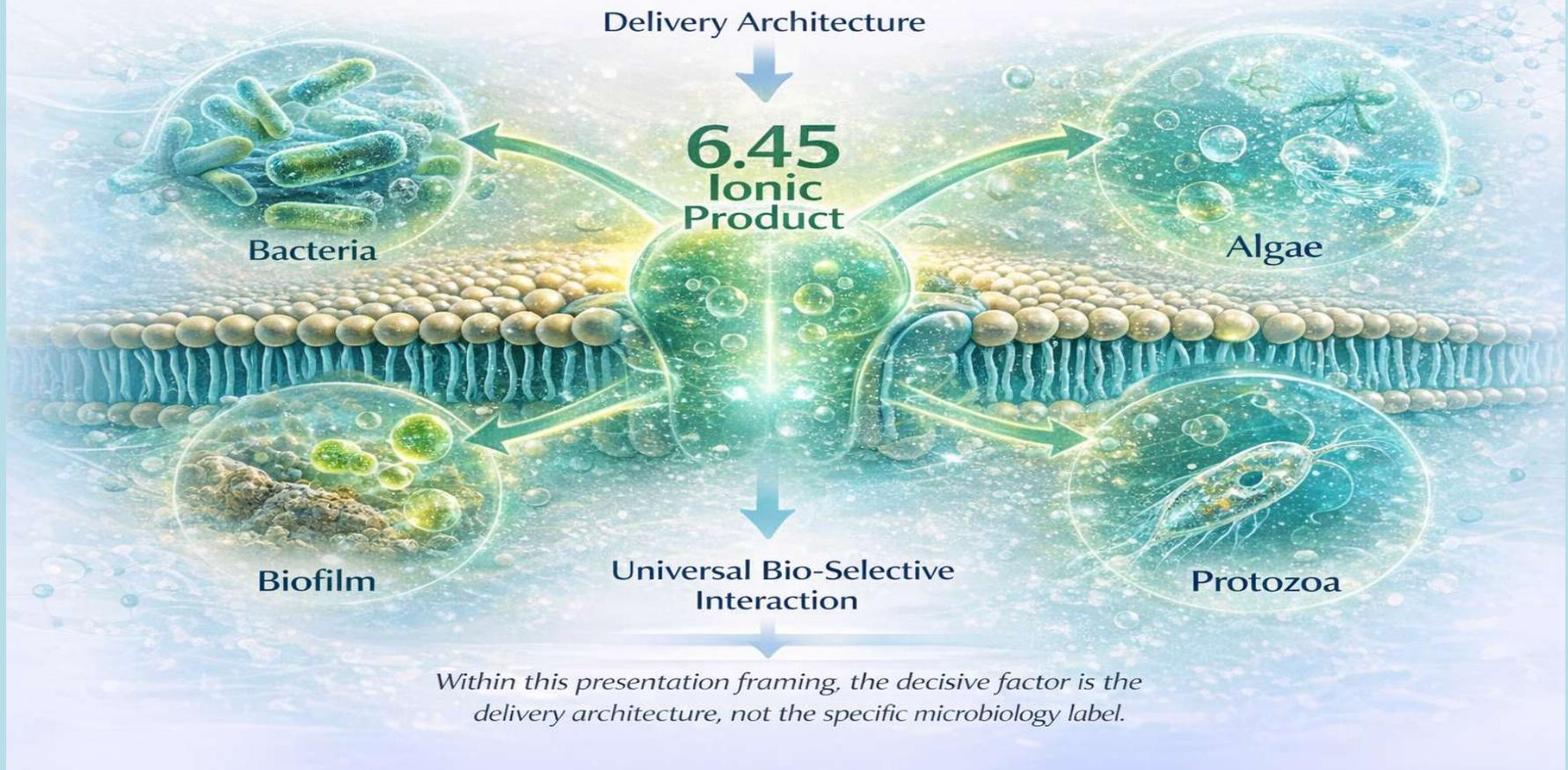
Mechanism of Action

- The main limitation of conventional chlorine treatment is delivery, oxidation or corrosion as the primary means of passing the membrane.
- **chlorOrgano** as the alternative is absorption-based delivery through the membranes water channels called aquaporins.
- The treatment medium is a single bonded dual-polarity ion dissolved in a single molecule of water, with a single bubble of dissolved gas, stored and stable as a OCl⁻ range species.



The main system is powered by 6.45 Ionic Product delivery of electrochemistry-generated ROS.

Why the microbiology type is framed as secondary



chlorOrgano as bio-selective / bio-available electrochemically activated ROS is a synthetic duplicate of natural ROS produced by water, NaCl, and organics in a non-toxic environment. The objective is to pass the membrane by way of an aquaporin, without damaging the cells membrane wall, so that the chlorine species can effectively work more efficiently and with more safety through the ionic delivery

Key Electrochemical Parameters

- pH dependent on Cl_2 concentration range
- Ionic Product: 6.45 IP
- Ion Size: 0.0001 micron
- Generated and stabilized species: electrochemistry-produced ROS from NaCl only
- Standard measurable examples for water treatment concentrates: total chlorine and H_2O_2



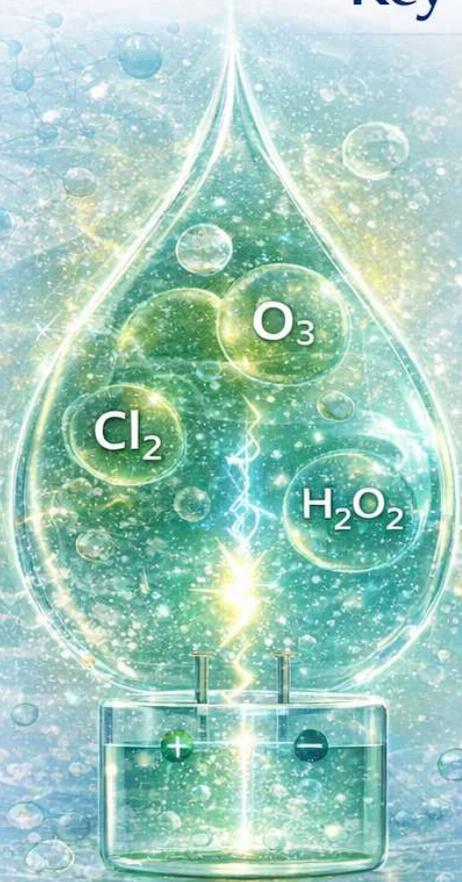
Example manufacturing ranges

Ready to Use
200 ppm at 7.6 pH

Concentration
stable and storable
for over 2 years

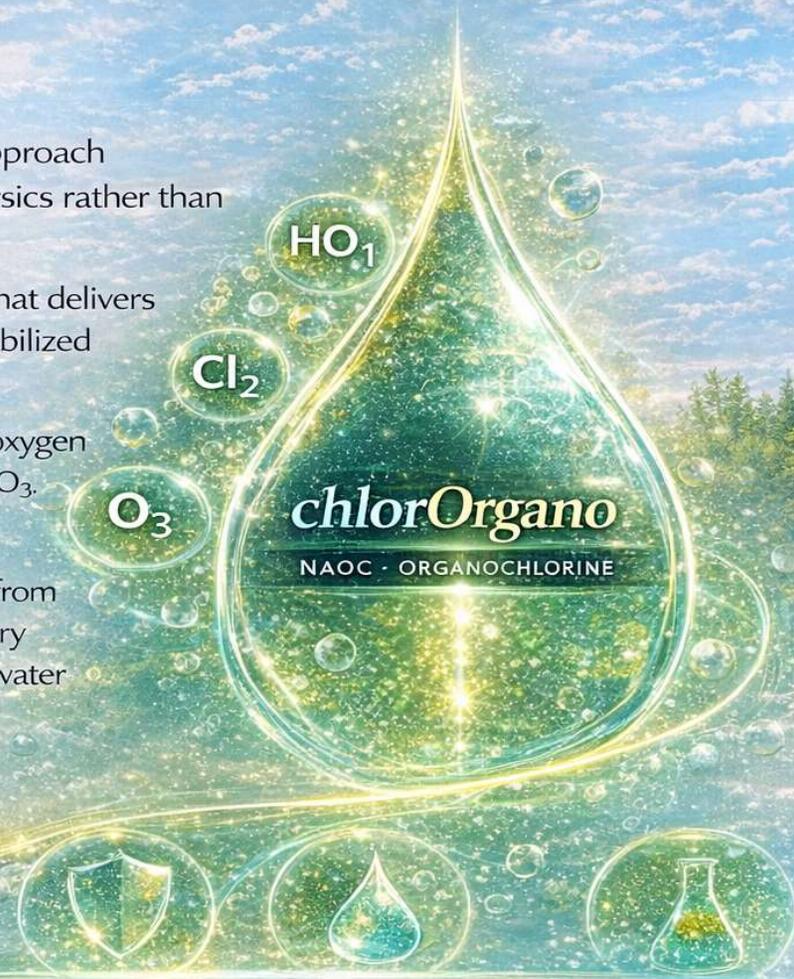
Concentrates
2000 ppm at 9.8
pH & Greater

Concentrates to 12.0 pH
from larger industrial
production units



Conclusion

- **chlorOrgano** is presented as a water-treatment approach for invasive biological control based on delivery physics rather than a microbiology-specific storyline.
- The central claim is a 6.45 Ionic Product platform that delivers electrochemically generated ROS from NaCl in a stabilized water medium.
- The specialized medium can store multiple reactive oxygen species together in the same medium such as HO₁, Cl₂, O₃, and H₂O₂
- The technical argument is that effective control comes from dual polarity, multiple reactive dissolved-gas storage, very small highly charged single ion size, with membrane water channel level delivery.
- Emphasis on safety to eco sensitive environments with a non pesticide medium.



Delivery Physics for Eco-Safe Water Treatment



By Paul E. Seaver PBSWC Inc.

Thanks for checking chlorOrgano