

What is Clearitas?

Clearitas is a chemical that cleans water pipes. It is a halogen based technology, that is used as a companion to primary disinfection, is able to attack and break down the components of biofouling, disassemble organic laden deposits and keep systems free from excessive chlorine demand (see figure 1). Use it to controllably remediate potable water distribution systems, HVAC/cooling tower systems, food and beverage systems, hospital and facility plumbing, hydroponics and even poultry and dairy water lines. Clearitas is an add-on, no changes to existing treatment are required, only a chemical pump is required to begin treatment.

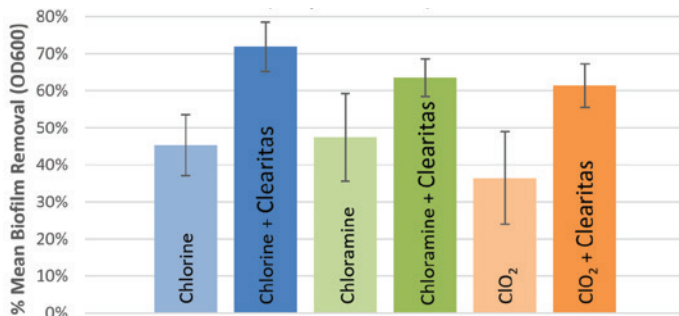


Figure 1 - Biofilm removal comparison (Staph aureus)

What are the benefits of Clearitas?

In water distribution systems you can expect:

- Increased disinfectant residual deeper into the system
- Reduced nitrification
- Reduced disinfection byproducts (DBPs)

How does Clearitas work?

As shown in figure 2, Clearitas works by removing organic material that protects attached bacteria from traditional oxidizing disinfectants.

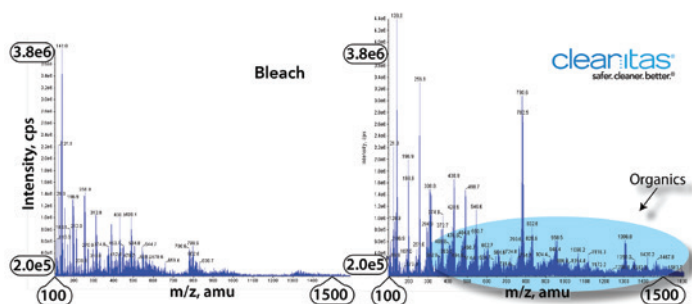


Figure 2 - Scan of eluent from soaked deposits.

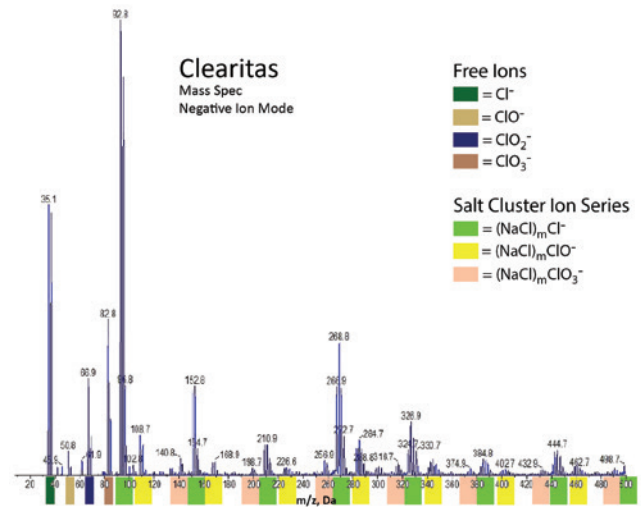


Figure 3 - Composition of Clearitas

What's in Clearitas?

Clearitas is composed of oxygenated salt cluster ions which preferentially react with and disrupt larger organic molecules. The mass spectrograph in figure 3 shows the presence of these cluster ions in the product.

How safe is Clearitas?

Clearitas is certified for use in public water supplies (NSF Std. 60). Clearitas operates slowly over time so temporarily interrupted injection or mild overdoses do not have catastrophic consequences. Clearitas has a shelf life of greater than one year under normal storage conditions.

Will Clearitas work with my existing water treatment?

Clearitas works well alongside all common water treatment chemicals including disinfectants such as gas chlorine, sodium hypochlorite (bleach), chloramine, chlorine dioxide as well as non-oxidizing treatment additives such as poly- and ortho- phosphates, fluoride treatments, and others.

What about regulation?

Because Clearitas meets all regulatory requirements, it can be approved in all states and has already been approved in most states. Clearitas does not represent a change in disinfection. Clearitas is an invaluable tool for solving biofilm and bioactive deposit related water quality problems.

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