

Frequently Asked Questions for Decontaminating High Purity Water Systems Selective Micro Clean from Selective Micro Technologies

What is Selective Micro Clean?

- Selective Micro Clean is greater than 99% pure solution of chlorine dioxide in water. Selective Micro Clean is produced by a patented micro-reactor sachet, which is designed to generate a specific amount of chlorine dioxide when water is added. Selective Micro[®] incorporates the micro-reactor into simple-to-use end products.

What is Selective Micro Clean used for?

- Selective Micro Clean can be used for regular maintenance, cleaning and decontamination of water systems to remove organic matter from fluid lines and reservoirs.

Why use Selective Micro Clean over alternative treatments?

- Selective Micro Clean is a fast-working, effective, non-corrosive and extremely quick-rinsing alternative to other decontamination agents on the market today. Chlorine dioxide has less than ½ the oxidation potential of ozone, and is 36% lower than bleach. But, because chlorine dioxide can gain 5 electrons, it has a higher oxidation capacity than bleach, ozone, or peroxide.

In other words, chlorine dioxide has more capacity to remove organic matter. In addition, because it is more selective to key organics, it is less corrosive to system components prone to oxidation. Finally, because Selective Micro Clean is actually a gas in water, it will rapidly rinse from the system leaving no residue, typically with less than one volume of rinse water. Selective Micro Clean will pass through an RO membrane to decontaminate both the feed and permeate sides!

Has chlorine dioxide been used before?

- Chlorine dioxide has been recognized as an effective biocide for decades, and is used in a range of hygiene-related applications worldwide. Municipal water systems have used chlorine dioxide to treat drinking water for over 50 years.

Is there a test for concentration and flush up of Selective Micro Clean?

- Chlorine dioxide is easily detectable. For quick on-site verification, Selective Micro offers test strips that quickly and accurately detect concentration and flush up.

Why couldn't I use Chlorine Dioxide before?

- Introduced in 1999, Selective Micro Clean is produced from patented technology that generates on-site greater than 99% pure chlorine dioxide. Prior to Selective Micro Clean, complicated, expensive mechanical generators or relatively impure “stabilized” solutions were the only ways to make chlorine dioxide. The expense of complex capital equipment and the corrosiveness of the lower quality “stabilized” solutions prohibited the development of many professional and consumer point-of-use applications.

How do I use Selective Micro Clean?

- Introduce Selective Micro Clean into the system, soak and flush. It all comes down to concentration and contact time. With typical use concentrations of 50 ppm and contact time of 20 minutes, Selective Micro Clean will decontaminate fluid lines and reservoirs in less than one hour. Selective Micro Clean products come in the form of a self-contained pouch or a sachet. Simply add water to the pouch to generate a specific volume and concentration or add a sachet directly to your volume of water onboard the analyzer.

How often do I need to use Selective Micro Clean?

- Regular treatment is important because fouling of lines occurs naturally after any decontamination procedure. A regular maintenance schedule will help prevent unscheduled downtime due to contamination. Companies using Selective Micro Clean have seen significant reductions in the frequency of unscheduled downtime visits due to contamination, and some companies have increased the time between scheduled decontamination visits.

What is the shelf life of Selective Micro Clean?

- In the unopened package, Selective Micro' products have a shelf life of two years. Once the product is activated, use Selective Micro's solution within 15 days. Store activated solution according to instructions on label (cool place, out of direct sunlight, apart from food).

Will Selective Micro Clean damage my equipment?

- Compatibility testing at 5 ppm and 100 ppm has demonstrated that Selective Micro's products are compatible with most metals and plastics and should not damage operative equipment reservoirs or water lines. At typical use concentrations, Selective Micro does not have detrimental effects on most materials, excluding some elastomers. Compatibility of specific materials should be tested prior to extended contact. More information regarding compatibility can be found at selectivemicro.com.

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