

## Sani-System

## Frequently Asked Questions (FAQs)

Amended 4/28/06

#### 1 - Why should I use Sani-System instead of bleach or hydrogen peroxide?

Bleach and peroxide are oxidizing compounds that degrade equipment over time. Resins, membranes, rubberized parts and other plastic parts can especially susceptible to degradation over time shortening the life of the equipment and its usefulness. Sani-System is specially formulated with sanitizing agents called "Quats". These products are non-harmful to equipment and parts but are just as effective for sanitization procedures.

Quats won't harm people's homes, they aren't harmful to breath and they wash away with normal dish soap.

#### 2 - Why is Sani-System called a sanitizer?

Sani-System kills 99.9% of harmful bacteria and thus is granted the status of sanitizer by the Environmental Protection Agency (EPA). A bacteria killer has to sit longer.

#### 3 - What is the EPA?

The Environmental Protection Agency (Formed: December 2nd, 1970)

#### 4 - What is FIFRA?

The Federal Insecticide, Fungicide, and Rodenticide Act (Established in 1996)

The primary focus of FIFRA was to provide federal control of pesticide distribution, sale, and use. EPA was given authority under FIFRA not only to study the consequences of pesticide usage but also to require users (farmers, utility companies, and others) to register when purchasing pesticides. Through later amendments to the law, users also must take exams for certification as applicators of pesticides. All pesticides used in the U.S. must be registered (licensed) by EPA. Registration assures that pesticides will be properly labeled and that if in accordance with specifications, will not cause unreasonable harm to the environment.

#### 5 - What is Sani-System?

Sani-System is a concentrated blend of ingredients from the quaternary ammonium chloride family often called Quats, designed to attack and kill harmful bacteria and viruses in your water treatment equipment very quickly. It does its job in 60 seconds and is then safely rinsed away.

#### 6 - Does Sani-System work like Chlorine?

No. Chlorine based compounds and products like hydrogen peroxide belong to a family of products called "oxidizers". They work chemically by the process of oxidation-reduction to attack and kill bacteria and viruses. Sani-System is not an oxidizer.

#### 7 - How does Sani-System work?

Instead of oxidizing like chlorine based compounds or hydrogen peroxide, Sani-System kills bacteria and viruses by blocking their nutrient uptake and cutting off their ability to expel waste. In essence, Sani-System both starves and plugs-up the organisms natural process of digestion.

#### 8 - Will Sani-System harm my water treatment equipment?

My water softener? No. Sani-System will not harm common conditioner resins or equipment parts.

**My RO unit?** No. Sani-System is safe to use with all RO systems. Because Sani-System is not an oxidizer like hydrogen peroxide, bleach and sodium hypochlorite, it will not attack or destroy plastics in your system. Even thin film (polyamide) membranes are not affected by Sani-System.

My Water Cooler? No. Sani-System will not harm common water cooler parts and equipment.



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#### 9 - Are there DOT / HAZMAT issues with Sani-System?

No

#### 10 - What if I spill Sani-System? How do I clean it up?

Sani-System is easily neutralized and cleaned up with water and a small amount of regular household detergent (e.g. dishwashing liquid or laundry detergent).

#### 11 - Will Sani-System harm the homeowner's property?

No. Because Sani-System is not an oxidizer like chlorine based bleach and peroxide, spills are non-harmful to house-holds and easily cleaned up.

#### 12 - Will Sani-System harm people, animals?

Sani-System has been approved by the EPA for use in water conditioning equipment. Products like Sani-System have been in use in the market for over 30 years now and are common in industrial, commercial and everyday household products. Quaternary ammonium chlorides are used to clean and sanitize animal food and water storage systems for animal husbandry operations. From this standpoint these products are deemed safe for both human and animal use by the EPA. With this in mind, Sani-System is still a concentrated sanitizing compound designed to kill harmful microorganisms. Care should be taken to use it as it is indicated as with any household cleaning and sanitizing product.

#### 13 - Why do I need to rinse after using Sani-System?

Proper use directions for Sani-System are required by the EPA. It is illegal to use the product other than is indicated on the label. This is stated in this way to ensure that the product works in the way it is intended to work. Failure to follow directions clearly puts the risk and liability in the users hands.

#### 14 - Will Sani-System raise the levels of TDS?

No

#### 15 - Will Sani-System work if chlorine is in my water supply?

Yes

#### 16 - Will Sani-System work if I have high hardness?

Yes. All instructions for use will work up to a hardness level of 750 ppm (approx. 44 GPG).

#### 17 - Will Sani-System work for a wide pH range?

Yes.

#### 18 - Is Sani-System safe on carbon?

While Sani-System won't harm carbon, the porosity of carbon makes it difficult to rinse out completely. We are testing this currently to see if we can recommend it for carbon.

#### 19 - How much goes into a cubic softener?

1 packet per cubic foot. That means if the recommended amount is 3-5 gallons per cubic foot, put one packet into brine well. It goes directly to brine solution. Then regenerate the softener. Your set!



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#### 20 - How much do I add to a water softener?

Add one  $\frac{1}{2}$  oz pouch directly to the brine. Let set for 60 seconds. Then regenerate the softener through all the cycles (total of 48 gallons).

### 21 - What if you run the sani-system through the RO unit with the carbon in it? Will it decrease the effectiveness of the carbon?

The carbon will absorb the Quats, thus deactivating the efficiency of the Quat.

#### 22 - Once diluted does the product degrade?

No.

#### 23 - What if my softener has twin tanks? Is there extra time involved?

As twin tank units typically do not regenerate one tank until the other is exhausted, it would not be practical to wait for two hours while a first tank regenerates, and then run sanitizer through the second tank. However, most modern electronic controllers allow a service tech to run a softener through a "quick regeneration" cycle, lasting a few minutes. This might be a way to sanitize one tank and then the second tank within a reasonably short period.

#### 24 - Can I use Sani-System on Iron filters.

Yes. Greensand iron filters being regenerated with potassium permanganate. Per Tom Isaac at Stepan, he sees no reason Sani System cannot be used in this application.