



FACT SHEET: WATER DISINFECTION USING CHLORAMINES

1. What is chloramine?

Chloramine is a disinfectant used in drinking water to remove bacteria and viruses. It consists of chlorine and ammonia.

2. When will I start getting chloraminated water?

Starting this week Improvement District A (IDA) will begin receiving chloraminated water. The District installed two chloramine facilities and switched the IDA system of water disinfection from chlorine to chloramine. Within the next two weeks the chloraminated water will be distributed District wide.

3. Why is the District converting from chlorine to chloramine?

For many reasons. (1) Chloramine is a better choice as a final disinfectant than chlorine alone because chloramine produces lower levels of disinfectant by-products like trihalomethanes, suspected carcinogens that form when chlorine mixes with natural organic substances in water. (2) The conversion enables water agencies to comply with more stringent regulatory standards (present and anticipated). (3) Chloramine is more stable than chlorine and lasts longer in the distribution system. This provides increased protection from bacterial and viral contamination.

4. Will the water with chloramine disinfection taste different?

Possibly. Most consumers should not notice the change. In fact, many consumers from other utilities report chloramine improves the taste and odor of drinking water. You may however, notice an unfamiliar odor or taste for a few days when the change from chlorine to chloramines first occurs.

5. Is chloraminated water safe?

Chloraminated water is safe for people and animals to: drink, cook with, bathe in, water the garden, and for all other general uses. However, as with chlorine, precautions must be taken to remove or neutralize chloramine during the kidney dialysis process, in the preparation of water for fish tanks and ponds, and for businesses requiring highly processed water.

6. Is it safe to wash open wounds with chloraminated water?

Yes. Chloraminated water is completely safe to use on cuts and wounds.

7. How will chloramine affect household plumbing, pipes, and water heaters?

After the conversion, rubber parts on some household plumbing and water heaters may degrade faster than previously experienced. When replacing rubber plumbing parts, ask for chloramine-resistant parts, which are readily available. Plumbers and hardware supply stores and plumbers will be able to provide further information.

8. Do I need to take any precautions or do anything different when using chloraminated water?

Only three special groups need to take precautions with chloraminated water: fish, reptile and amphibian owners, dialysis facilities, and businesses or research facilities using or requiring highly treated water.



9. Why is chloramine harmful for fish and amphibians?

Fish and some amphibians and reptiles pass water through their gills directly into the bloodstream. Like chlorine, chloraminated water can do harm if passed directly into the bloodstream. Chloramine can be removed from water with inexpensive water treatment products (drops or tablets) or specified carbon filters. These products are readily available at most pet supply stores.

10. Why is chloramine harmful for dialysis patients?

Like chlorine, chloramine can harm kidney dialysis patients during the dialysis process if it is not removed from water before it passes into the bloodstream. Like everyone else, dialysis patients can drink chloraminated water because the digestive process neutralizes chloramine.

11. How can I remove chloramine from my water?

Chloramine cannot be removed by boiling water, adding salt, or letting water stand still. Treatment devices to reduce chloramine levels are available. These devices should be independently tested and specifically certified to reduce chloramine. Although home filtration system will reduce the level of chloramine from water, it will not remove it completely. Some modern household treatment and filter systems may remove chloramines, please refer to your original filter packaging or contact a local provider of home water filters.

12. How can sensitive users remove chloramine from water?

The California Department of Health Services (DHS) will oversee the upgrades of dialysis facilities and equipment. Generally, dialysis providers can use ascorbic acid or a granular-activated carbon filtration system designed to remove chloramine as provided. Fish and amphibian owners can use water treatment products or specified carbon filters before adding water to their tank or pond. Business may wish to contact their equipment supplier or water treatment professional to review current operations.

13. Will pool owners need to treat chloraminated water differently?

As with chlorinated water, pool owners will need to maintain the same chlorine residual as before to prevent algae and bacterial growth. Pool supply stores can provide pool owners with more information.

14. Is chloraminated water safe for plants and animals that do not live in water, like my pet dog or cat?

Chloraminated water is as safe as chlorinated water for plants and animals that do not live in water. Chloramine is only dangerous for fish, reptiles, shellfish, and amphibians that take water directly into their bloodstream.

15. If chlorine and ammonia are toxic to mix at home, why is it safe to drink chlorine and ammonia in the form of chloramine?

Household chemical cleaners such as chlorine bleach and ammonia are sold as highly concentrated solutions; the hazardous mixture of these chemicals is due to their high concentrations. In comparison, the concentrations of chlorine and ammonia added to drinking water for disinfection are very low, so low that concentrations are expressed in "parts per million" or ppm. After the conversion to chloramine, average chlorine concentrations in water will be about 2 ppm; ammonia concentrations will be even lower at 0.5 ppm. As an analogy, one PPM represents about 5 tablespoons in a 20,000-gallon swimming pool.