

Berkey Biofilm Drops

Storage and Maintenance of Pure and Fresh Water

CONCENTRATED

Berkey biofilm drops were scientifically designed to be used in defense against biofilm formation in ceramic filters, Black Berkey filters, and water storage containers.

Use **Berkey biofilm drops** to extend the shelf life of stored water for up to 5 years. **Berkey biofilm drops** also extend the lifespan of your elements. By using **Berkey biofilm drops**, you no longer need to rotate your stored water every 6 months and can keep your water tasting fresh and odorless. You can test for residual ions in stored water using the included test kit.

Berkey biofilm drops are a patented, scientifically-designed silver-copper ion solution. Safe and easy to use. With over 10 years of development and testing, **Berkey biofilm drops** were designed as a pretreatment to defend against microbiological growth and **control of biofilm accumulation in filters and water storage containers**. Compatible with any type of filter media.

Although copper-silver ionization technology is not recognized as a disinfectant, it plays an essential role in controlling bacteria. To understand how it works, one must understand the true cause of bacterial contamination — the "biofilm." Studies have shown that copper/silver ionization is the most effective technology on the market for treating bacteria associated with biofilm. Researchers have estimated that 60 to 80% of microbial infections are caused by bacteria developing in biofilm form, as opposed to planktonic bacteria (free-floating).

Biofilm is a viscous substance created by bacteria that enter water from numerous sources, adhering to all wet surfaces — storage container walls, faucets, joints, lids, plumbing, filter housings, and cartridges. Once fixed, bacteria form colonies and the biofilm protects them. These biofilms can develop in filter media and remain hidden inside the housing. Independent studies have shown that copper and silver ionization is the best proven defense method against biofilm contamination.

The operating principles of **Berkey biofilm drops** use cutting-edge technology compared to traditional agents. Scientific studies have shown that up to 99% of bacteria live not in water, but in the biofilm. Only 1% of bacteria actually live in water — the free-floating bacteria destroyed by traditional disinfectants such as chlorine and bromine.

Berkey biofilm drops work by incorporating multiple barrier processes to inhibit biofilm growth and regeneration using silver-copper ion technology, as well as other additives and complexes to help control and precipitate calcium, iron, minerals, and tartar where biofilm bacteria reproduce, feed, form, and attach.

Since no system can guarantee 100% eradication of biofilm, **Berkey biofilm drops** offer the best proven line of defense with lasting results.

USING THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING OR DIRECTIONS FOR USE CONSTITUTES A VIOLATION OF FEDERAL LAW. READ THE LABEL AND ALL OTHER INSTRUCTIONS CAREFULLY BEFORE USE! KEEP ALL INSTRUCTIONS FOR FUTURE REFERENCE.

Berkey Biofilm Drops for storing and maintaining pure and fresh water

For use in reservoirs, pitchers, cans, bottles, gallons, drums, hydration bags, large water storage tanks, and rainwater recovery tanks. For use in camping vehicles, boats, backpacks, in emergencies, humidifiers, and water filtration devices.

- * Simple to use.
- * Specially designed for rainwater containers, long-term water storage, and emergency preparedness and disaster relief.
- * Maintains the purity and freshness of water.

DIRECTIONS FOR USE

WATER PREPARATION

1. Remove the security seal from the **Berkey biofilm drops** packaging. Do not use if the seal is broken or missing.
2. Prepare the **Berkey** system elements or other containers to be filled by adding **Berkey biofilm drops** with ordinary tap water.
3. Use **Berkey biofilm drops** as a pretreatment against biofilm accumulation in ceramic filters and containers. Add 4 drops per 3.8 liters.
4. These levels are below the maximum permitted levels (MPL) of the EPA (1.33 ppm) and the World Health Organization (WHO) of 2.0 ppm.

FILLING AND TREATMENT TIPS

- 210-liter drums. Gently remove the dropper tip and fill the 10 ml bottle, then add to a 210-liter drum for long-term storage.
- Smaller containers. Follow the water preparation instructions above.

WATER STORAGE TIPS AND TESTS

- Do not open stored water until needed. Once opened, use the test kit to check for residual **Berkey biofilm drops**. Fill the test tube halfway (5 mL) then add 2 drops of test reagent. The water should turn light yellow to amber if copper ions are present. If clear, the water is contaminated and must be retreated; when the test succeeds, the water can be used as needed.
- Berkey recommends using the cleanest stored water possible and passing it through your purifier before use.
- Labeling: All long-term storage containers must be labeled as drinking water. The date and disinfection method must be written on the container.

COPPER TEST – VISUAL COMPARISON. After filling the enclosed vial halfway, add 2 drops of test liquid, replace the cap, and shake. The ideal result should be a light yellow/orange between the first and second color shade, according to the table below.

