

Notes About Bleach Alternatives

Liquid bleach can be used to make some contaminated water safe to drink, and can be used to cold sanitize feeding items. However, liquid bleach has drawbacks for use in emergency response, including challenges with sourcing, storage and shelf life.

What follows are details we have found so far about bleach tablets and water disinfection tablets as a potential alternative to liquid regular bleach in emergency response scenarios.

Use this information as a starting point for your own research and decision-making.

Bleach Tablets & Water Disinfection Tablets

WHO recommends them as an option.

<https://www.who.int/teams/environment-climate-change-and-health/water-sanitation-and-health/environmental-health-in-emergencies/humanitarian-emergencies>

“Following emergencies, chlorine or iodine tablets, or sachets of combined flocculant/disinfection powder may have been distributed. If this is the case, water should be treated using the directions that come with the tablets. If household bleach or other sources of chlorine are available, water may be disinfected with a dilute chlorine solution. Solar disinfection is an effective water treatment method that is applicable to emergencies, especially when no chemical disinfectants are available.”

EPA Emergency Disinfection of Drinking Water

<https://www.epa.gov/ground-water-and-drinking-water/emergency-disinfection-drinking-water>

Differences from liquid bleach

- Tablets usually contain NaDCC (sodium dichloroisocyanurate, aka sodium trichloroisocyanurate) as a more stable source of chlorine.
Shelf life of tablets are cited as 3-5 years or longer.
- Calcium hypochlorite granules are an alternative, but are very potent and seem hard to use with small amounts of water.

Chlorine tablet brands and potential use for sanitation/disinfection:

This is a list of those brands we have seen so far and notes about their potential suitability. **This is NOT an endorsement of any brand.** More investigation is warranted before deciding to use any product.

- **AquaTabs -**
 - Single-use tablets: <https://www.aquatabs.com/products/aquatabs-tablets/>
 - WASH Kit for making larger volumes of water safe and “instrument disinfection in low-resource settings”.
<https://www.aquatabs.com/products/aquatabs-wash-kit/>
 - Not certain about use of regular tablets for disinfection/sanitation of feeding items by individual households (beyond making water safe to drink)
- **Oasis water purification tablets -**
 - (WHO tested ok for making potable water)
 - <https://hydrachem.com/products/oasis-water-purification-tablets/>
 - Has a sterilizing product to use for sanitation of infant feeding items. Takes 30 min, NOT 2 min. <https://hydrachem.com/products/oasis-sterilising-tablets/>
- **Amaze bleach tablets, Original**
Needs more investigation - “original” may be an option. Each tablet makes 1 gallon of bleach. Additional steps would be needed to make water safe or sanitize items.
<https://getamazeclean.com/amaze-ultra-concentrated-bleach-tabs/>
- **Clorox** - Does not seem appropriate.
Clorox makes a bleach powder and a few varieties of bleach tablets. In examining the list of products available on the Clorox website and the information easily available on each, it does not look like any of these products are suitable to use for disinfecting water or sanitizing feeding items.
<https://www.clorox.com/products/>
- **Evolve Bleach tablets** - Label states "NOT FOR SANITATION OR DISINFECTION" (only laundry & hard surfaces)
- **EZ Bleach** - Not suitable for households
Large buckets of tablets, best for organizations.
“When mixed in water, the effervescent tablet activates and develops into a solution of hypochlorous acid (HOCl), a chlorine disinfectant much more potent than traditional liquid bleach.”
<https://berkshire.com/product-category/cleanroom-disinfectants/disinfectant-tablets/>
- **Total Home Bleach (CVS)**
Unsure. Ingredients are non-specific. Would require making the bleach first, then using it to disinfect/sanitize.
<https://www.cvs.com/shop/total-home-bleach-tablets-32-ct-prodid-4400074>

Water Filters Meeting WHO standards (3 *** are better!)

<https://www.who.int/tools/international-scheme-to-evaluate-household-water-treatment-technologies/products-evaluated>