

WaterStep's BleachMaker Frequently Asked Questions

1. Why make bleach?

Chlorine bleach is the World Health Organization's (WHO) recommended disinfectant to stop the spread of infectious disease, and it's the most commonly used disinfectant/sanitizer in the world. The BleachMaker by WaterStep produces a bleach concentration that meets the WHO standard for disinfection in a medical setting.

2. How does WaterStep's BleachMaker work?

The BleachMaker uses a process called electrolysis to make sodium hypochlorite (bleach) at a 0.5% concentration, the level recommended by WHO for medical disinfection. The device will make 5 liters (about a gallon) in 1½ hours using available water, table salt and a power source. The power source could be a car battery or a 110 or 220 volt outlet, connected to the power converter, which is shipped with the BleachMaker. Go to: ***[link to bm instructions - making bleach section](#)***

3. Is the bleach made by the BleachMaker the same as purchased bleach?

Purchased bleach, depending on the source, may or may not be as strong as the bleach made by the BleachMaker. Tests have shown the bleach sold in some developing countries is nothing more than soapy water. Purchased bleach must be diluted carefully to be at the appropriate concentration for medical use.

4. What are the uses for bleach?

Bleach can be used to sanitize hospitals and medical clinics that handle bodily fluids; to disinfect cooking areas, cooking equipment and clothing; and it can also be dosed into small amounts of water to make it safe to drink.

5. How can the bleach produced by the BleachMaker be used to disinfect water?

Add 1 milliliters of the bleach solution produced by the BleachMaker for each liter of water that needs to be disinfected. Stir and let it set for 30 minutes, then test the solution. The complete instructions are available at: ***[link to Bleach Maker instructions - disinfecting water section](#)***

6. WaterStep's M-100 Chlorine Generator is designed to disinfect water. Why does WaterStep have two products to disinfect water?

The M-100 is typically a permanent installation and best suited to communities that have large water tanks. The BleachMaker can be advantageous when flexibility and portability are considered. The BleachMaker likewise can be used for both disinfecting water and for sanitation.

7. What makes the BleachMaker more efficient than using purchased bleach?

Liquid bleach is expensive in many parts of the world, and it's very costly to ship. The BleachMaker is small enough to fit in a backpack for easy shipping and transportation. The kit weighs about 2 KG (5 pounds). All that is needed to make bleach with the BleachMaker is common table salt, water and power from either a

110 or 220 volt power source, if available, or if not a 12 volt DC car battery.. These necessities are readily available on every continent of the globe. The ability to make medical strength bleach on-site can be far less expensive and more efficient than purchasing, transporting and storing liquid bleach in remote areas.

8. Who will use the BleachMaker?

The tool was created for members of the medical community to use in the developing world, but it can be used by anyone who needs a sanitizing disinfecting solution.

9. Where did the idea for the BleachMaker come from?

After experiencing sanitation challenges in the field, and recognizing the devastation of the 2014 West Africa Ebola outbreak, WaterStep endeavored to create a device that could produce medical strength bleach for disinfection that was simple, effective and portable.

10. Who designed the BleachMaker?

The BleachMaker was designed and developed by WaterStep volunteers with assistance from the University of Louisville, the Louisville Water Company and General Electric's First Build Innovation Center. After nearly two years of development and field testing, the device was put into service in 2016.

11. How can the Bleach Maker be purchased?

The device can be purchased at: ***link to WS store - BM***

12. Who can I contact if I have more questions?

For more information, go to: ***info@ WS***