

Home Made Berkey Water Filter

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<http://www.alpharubicon.com/kids/homemadeberkeydaire.htm>

This article will guide you through the construction of a filter equivalent in performance to the Imperial Berkey that sells for about \$300. My total cost was \$122

1) Gather the necessary components. You will need the following:

- two 5-gallon food grade buckets (got mine from Lowes for \$5 each)
- two lids for the buckets (got mine from Lowes for \$1.50 each)
- a pair of Black Berkey filter elements (ordered mine on Ebay for \$99)
- a food grade spigot (the kind used for large coffee pots or water coolers is perfect, ordered mine from jamesfilter.com for \$10)



(1)

1) Gather your Supplies



(2)

(2) Drill two 1/2" holes in the bottom of the upper bucket and two matching holes in the lid of the lower bucket.

3) Drill a 3/4" hole in the side of the lower bucket make sure the hole is up just far enough for the spigot to clear when the filter is sitting on a flat surface.

4) Assemble the lower bucket by installing the spigot and the lid with holes.



(3)



(4)

5) Install the filter elements in the upper bucket through the holes in the bottom.



(5)



(6)

6) Assemble the filter by placing the upper bucket on the lower. Be sure to line up the holes so the tubes extend through the lid of the lower bucket. Place the remaining lid on top.

7) To use the filter, fill the upper bucket with water and wait. If you are starting with dry elements, it will take quite a while before the water starts dripping into the lower bucket. It takes up to several hours for the clean water to drain into the lower bucket. This process can be sped up considerably by frequently topping off the water in the upper bucket. This maintains maximum pressure on the elements.

Notes: Using gamma lids seems to work a little better. Also, the filter can be made considerably larger by using any two stacking containers suitable for water, trash cans or 30-gallon water barrels for instance. The flow rate can also be increased by adding more filter elements. The filtered solids remain on the outside of the filter elements and will eventually interfere with the rate of flow. Therefore, it is important to pre-filter through a dense cloth (we use cloth diapers) if your source water is particularly cloudy. The elements can be scrubbed clean with a plastic scouring pad.

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