

DIY Berkey Water Purifier



Here we will show how we make our own water purifiers from used food grade plastic buckets, and Berkey water purification elements.

Materials Needed:

2 food grade Buckets w/ lids (these buckets are naturally BPA free)
a Berkey filter twin pack (we like the [black](#), but the [white ceramic](#) are also very good)
a [faucet kit](#)

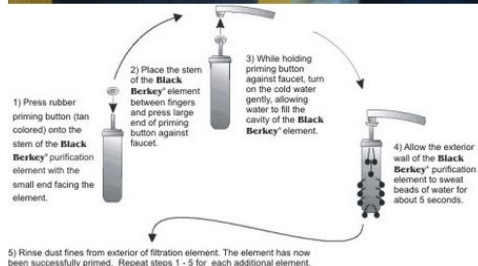
3/4" drill bit
7/16" drill bit

Step 1: Selecting the Buckets



We highly recommend food grade (BPA free) buckets. These can be obtained online, or picked up used at restaurants. We like the used ones due to the recycling and low embodied energy benefits. Any stackable bucket with lids from 3 gallon to 6 gallon, round or square can be used.

Step 2: Prime the filters



The filters need to be primed before first use, or if the filters are left uncovered and dry out. Instructions come with the filter cartridges on priming, as well as a small "priming button".

Step 3: Top bucket modifications



Two 7/16" holes are drilled through the bottom of the top bucket and the lid of the bottom bucket. Insert the two (primed) Berkey filters into the top bucket with the rubber grommet between the bucket and the filter. Tighten the nuts on the filter shafts with the lid between the nuts and the bottom of the top bucket.

Step 4: Modifying the bottom bucket



Drill a 3/4" hole near the bottom of the bottom bucket, high enough so the spigot clears the bottom of the bucket. Two inches is usually sufficient. Install the spigot kit, with washers on both sides and nut on the inside. You don't want the spigot to be below the bottom of the bucket, but you want it as low as possible.

Step 5: Finished



Stack the buckets (seal the bottom bucket lid), fill the top bucket with water, cover lightly (don't seal) and enjoy! Filters can be lightly "scraped" with a brillo pad when water flow decreases, and each filter element is good for approximately 3000 gallons. Multiple elements (1-6, depending on size of bucket) can be installed for increased flow.