

# A Practical, Life-Sustaining Water Filter

## A problem and a solution

These Ceramic Filters have been successfully used all over the world in third world countries where safe drinking water is a very big problem. “Whenever there is a breakout of disease, as soon as the filters are used, it stops the epidemic immediately, every time,” is what one man in the field told me in a phone interview.

The filters can be used in as small a container as a #10 can, a 1, 2, 3, 4, or 5 gallon bucket, or even a 55 gallon garbage can.

The filters can also be used as a counter-top filter to just make water taste good, and save money on bottled water.

A girl in Paraguay gets water filtered through the ceramic filter system made with plastic trash cans.



It is described as, “A ceramic, half-micron water filter. The micron size removes water-borne bacterium. The inside of the filter is loaded with different media or ingredients, such as man-made carbons, mother nature carbons and man-made resins. Those different resins and carbons remove the different contaminants in the water.



Ceramic Filtration Specifications: Manufactured to meet: National Sanitation Foundation (NSF) Standard 42 National Sanitation Foundation (NSF) Standard 53 ISO 9002 Quality Standard USA AEL Laboratories USA Analytical Food...

## Testing

The Johns Hopkins Bloomberg School of Public Health, as well as other laboratories, have tested the Just Water Ceramic Drip-Filter. They found the system very effective in filtering all bacteria from laboratory test water.



# Ceramic Water Filter – General Information

4/23/09

## How do I know it works?

These filters were created to fill the need for clean water throughout Third World Countries where serious outbreaks of numerous epidemics occur, including Cholera, Giardia, E. Coli, and many more. John Hopkin's University tested these, and made an impressive report on their findings.

When I talked to a man that actually places them 'in the field,' and sees first-hand how they work, he said, "The filters stop an epidemic RIGHT NOW, PERIOD! Always works, the sickness goes away, every time." He's seen them work in India, Africa, Afghanistan, and a number of other places around the world.

When I talked to the president of the company, he said that it was demonstrated to him by a man who put some mud-puddle water in the top bucket, then added some dog manure. He then drank what came out of the bottom bucket. He said that this is how it is for third world countries around the world. They have pond water, water from floods, lakes, rain, wells, taps, rivers, or streams. This filter is rated to handle all of these.

John Hopkins rates it as a level #4 for dealing with viruses, and says it takes care of 100% of the bacteria, and 100% of the viruses most of the time. Bacteria in the water is the most prevalent problem, and viruses rarely can exist in the water. If you suspect a water source has been infected with a virus, then you can treat it first with a water disinfectant, like chlorine, or iodine. The disinfectant that is recommended by two preparedness experts is "Polar Pure." This will be offered soon at a great discount through the food storage emails/blog I send out.

## But how much does it cost?

Ceramic filters of this nature and quality run \$200-\$300 for a gravity fed system. This one runs \$38. It is sold by a non-profit organization to help people in third world countries. So this price is a great benefit to us.

## How long will it last?

The ceramic part of the water filter's shelf life is indefinite. Once it gets wet, the charcoal inside the ceramic shell will last 6 months. The charcoal is what makes the water taste so good. After the charcoal has expired, you can exchange it for fresh activated charcoal from the pet store.

The ceramic portion is impregnated with silver and lasts until it is worn away from scrubbing/cleaning. It is 3/8<sup>th</sup>s of an inch thick, and generally lasts a small family about one year, if used constantly.

If you would like to have a "Clean Water" class at your ward or group, just let me know, and either I or my friend will come and show you more about the filters.

Joan Elder, *Food Storage Now*, [www.foodstoragenow.blogspot.com](http://www.foodstoragenow.blogspot.com)  
435-757-6854, [joan\\_elder@comcast.net](mailto:joan_elder@comcast.net)

## Prices

### Water filter prices

(Includes tax, filter shipping, bucket pick-up in SLC, bucket hole drilling)

Replacement filter only	=	\$30
Filter with 1 gal buckets, <u>new</u> , white, gasket in lid	=	\$49
Filter with 2 gal buckets, <u>new</u> , white, gasket in lid	=	\$50
Filter with 4 gal <u>used</u> buckets	=	\$38

## ...Just Water Ceramic Filtration Specifications

(filters Manufactured by Winfield and Black Jack Industries)

### **Product is manufactured to meet:**

National Sanitation Foundation (NSF) Standard 42  
National Sanitation Foundation (NSF) Standard 53  
ISO 9002 Quality Standard  
USA AEL Laboratories  
USA Analytical Food Laboratories  
USA Johns Hopkins University  
British 5750 Quality Standard  
England's Water Research council (WRc) Performance Standards

The filtration efficiency is 0.5 micron

### **Removal capabilities as follows:**

- >99% Arsenic 5 and 99% Arsenic 3 (special order)
- >99% Hydrogen Sulfide (H<sub>2</sub>S)
- >95% Chlorine and Chloramines
- >99% Taste
- >99% Odor
- >98% Aluminum
- >96% Iron
- >98% Lead
- >90% Pesticides
- >85% Herbicides
- >85% Insecticides
- >90% Rodenticides
- >85% Phenols
- >85% MTBE
- >85% Perchlorate
- >80% Trihalomethanes
- >95% Poly Aromatic Hydrocarbons
- >99.999% of particles larger than 0.5 micron (Staffordshire University Labs) (includes Anthrax)
- >99.7% of particles larger than 0.3 micron (Staffordshire University Labs)
- >98% of particles larger than 0.2 micron (Staffordshire University Labs)
- >100% Giardia Lamblia
- >100% Cyclospora
- >100% removal of live Cryptosporidium (WRc Standard)
- >100% removal of Cryptosporidium (NSF Standard 53 – A.C. fine dust – 4 log challenge)
- >100% removal of E. Coli, Vibrio Cholerae (Johns Hopkins University)
- >99.999% removal of Salmonella Typhil, Shigella Dysenteria, Kiebsiella Terrigena (HyderLabs)

### **Product is silver impregnated**

and will not permit bacteria growth-through (mitosis)  
provides a hostile environment for all microbiological organisms and will not support their growth  
Ceramic elements may be cleaned 100 or more times with a soft brush or damp cloth.

### **Performance Features:**

Easy installation  
Good flow rate / Up to 1 gallon of clean water per hour (gravity flow)  
Up to 300 gallons per hour (pressure flow)  
Filter will accept water from floods, lake, rain, well, tap, river or stream  
Semi/Annual filter replacement      Cleansable with clean damp cloth

# CERAMIC WATER FILTER

## Operating Instructions

### **Spigot Installation**

1. Remove spigot from packaging.
2. Insert spigot into spigot hole from the outside, using one washer.
3. In the interior of the unit, screw on wing nut. Hand tighten.
4. Turn spigot by hand, clockwise, one full rotation (hand tighten only).
5. Fill unit with water and check for leaks.
6. If leaking occurs repeat Steps 4. & 5.

### **Filter Installation**

1. Remove filter from packaging.
2. Wash filter with cold water and cloth or *3m Scotchbrite* pad
3. Put washer on stem of filter.
4. Insert filter stem through filter hole with filter upright in the plastic reservoir.
5. Tighten wing nut on filter stem.
6. If leaking occurs repeat Step 5.

### **Filling Instructions**

To retain a constant capacity, always add the same amount of water to the filter sleeve that you will be dispensing from the reservoir.

### **Cleaning Instructions**

1. Remove the filter and clean the filter sleeve and water reservoir (buckets) every two weeks with hot water and soap.
2. Clean the filter with a soft tooth brush or 3m pad and cold water. (Never use hot water and soap on filter.)
3. Re-install filter and proceed as normal.

### **Flow Rate**

It usually takes several days for the flow rate to increase to 1 gallon per hour.

The flow rate will increase as the interior and mixed media becomes completely saturated.

If flow rate is slow, clean filter and keep filter sleeve full.

### **Shelf Life**

Once you start using the filter, the activated carbon is only good for 6 to 8 months. The anti-bacterial ceramic wall will work indefinitely.

The media inside (such as the activated carbon) will pack over time. The filter needs to be shaken to unpack the media.

The shelf life of the unit itself is indefinite. The only question is the carbon. Current figures say the unused carbon should have a shelf life between at least 2 to 3 years, if not much more.

The sock has an indefinite shelf life. Replacement during use will depend on filthiness of the water source.