Look for this or equivalent on ebay:





# PORTABLE WATER PURIFICATION CERAMIC/CARBON FILTER

Emergency Preparedness, are you ready. The water is the first thing you will need!

Use this filter with the gravity drip system using plastic buckets. This filter includes a 4x4 ceramic filter, sock, and spigot. You need to get your own plastic buckets, generally 5 gallon capacity

Product is silver impregnated and will not permit bacteria growth-through (mitosis). It 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. The filtration efficiency is 0.5 micron

- Easy installation
- Good flow rate up to 1 gallon of clean water per hour (gravity flow)
- Up to 300 gallons per hour (pressure flow)
- Accepts water from floods, lake, rain, well, tap, river or stream
- Annual/semi-annual filter replacement
- Cleans with clean, damp cloth
- Extend shelf life by shaking filter every 3-4 months (to loosen media inside and prevent packing)
- Once in use, filter will last 6-8 months
- Capable of filtering arsenic, lead, fluoride, iron and nitrates (special order)
- 99% Arsenic 5 and 99% Arsenic 3 (special order)
- 99% Hydrogen Sulfide (H2S)
- 95% Chlorine and Chloramines
- 99% Taste
- 99% Odor
- 98% Aluminum
- 96% Iron
- 98% Lead

# Gravity feed 5 gal bucket water purifier

- 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, including Anthrax (Staffordshire University Labs)
- 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% live Cryptosporidium (WRc Standard)
- 100% Cryptosporidium (NSF Standard 53 A.C. fine dust 4 log challenge)
- 100% E. Coli, Vibrio Cholerae (Johns Hopkins University)
- 99.999% Salmonella Typhil, Shigella Dysenteria, Kiebsiella Terrigena (Hyder Labs)
- • National Sanitation Foundation (NSF) Standard 42
- 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

Gravity drip system using using plastic buckets. Includes 4x4 ceramic filter, sock, spigot, and 2 buckets

## **DRILLING HOLES**

- 1) Turn the top bucket upside down and locate the center of the bottom, of the bucket.
- 2) Drill a 5/8 inch hole—this is for the filter.
- 3) Place the top bucket on the lid, for the bottom bucket. Going through the hole, in the top bucket, mark the lid. Drill a 5/8 inch hole.

#### \*\*IT IS VERY IMPORTANT THAT THE HOLES IN THE BUCKET AND THE LID MATCH PERFECTLY.\*\*

- 4) Going to the bottom bucket, locate a spot that is 2 inches above the bottom rim of the bucket and drill a  $\frac{3}{4}$  inch hole. This will be where the spigot is installed.
- 5) Drill one small hole just below the rim of each bucket. This will be a vent hole.

## INSTALLING THE SPIGOT

- 6) Remove the spigot from the plastic package.
- 7) Place one washer on the spigot, flat side against the flange on the spigot, and insert the spigot into the hole, in the bottom bucket.
- 8) Place the 2nd washer onto the spigot, angled side towards the wall of the bucket, and begin to screw on the nut.
- 9) You may turn the spigot, instead of the nut, until it is difficult to turn the spigot.
- 10) Straighten the spigot so the handle is parallel to the bottom of the bucket.

## Gravity feed 5 gal bucket water purifier

- 11) Fill about 1/3 of the bucket with water and check for leaks.
- 12) If a leak is detected repeat step 9.

## **INSTALLING THE FILTER**

- 13) Remove the filter from its' box.
- 14) Place one washer on the stem of the filter.
- 15) Insert the stem through the hole in the top bucket and through the lid of the bottom bucket.
- 16) Place the 2nd washer on the stem and attach the wing nut.
- 17) Turn the wing nut until tight.
- 18) Fill about 1/3 of the top bucket with water and check for leaks.
- 19) If a leak is detected repeat step 17.
- 20) Place the sock over the filter and use one rubber band to hold the sock in place.

IT IS VERY IMPORTANT THAT THERE IS NOT A LEAK AROUND THE FILTER STEM. THE CLEAN WATER, IN

THE BOTTOM BUCKET, WILL BE CONTAMINATED BY THE WATER FROM THE TOP BUCKET.

#### FILLING INSTRUCTIONS

- 21) Before using the filter system it is recommended to sanitize the buckets with a diluted bleach solution. 1 teaspoon of bleach mixed with 1 gallon of water will do the job.
- 22) Wipe down the outside and the inside of each bucket with the bleach solution. Let stand for
- 3-5 minutes then wipe off with a dry paper towel or cloth towel.
- 23) Assemble the filter unit and set on a level surface.
- 24) Fill the top bucket with water.
- 25) As water is removed from the bottom bucket add that amount of water to the top bucket.

## FLOW RATE

26) It will usually take a couple of days for the flow rate to reach its' maximum output—around 1-1.5 gallon per hour. The flow rate increases as the ceramic shell and the mixed media (inside the ceramic shell) become saturated with water.

#### **CLEANING INSTRUCTIONS**

- 27) When the flow rate of the filter decreases, this would indicate that the sock and the filter might need to be cleaned.
- 28) Using rubber gloves remove the sock and rinse it in clean water.
- 29) As the filter is used and is in contact with dirty water the white ceramic shell will become stained and the pores of the clay will become clogged with particulates.
- 30) Using a Scotch-Brite pad (green scrub pad) GENTLY rub the surface of the filter. This will remove some of the stain and the dirt.
- 31) Rinse with clean (filtered) water.
- 32) Reassemble the filter unit and fill it with water.

NEVER USE ANY TYPE OF SOAP WHEN CLEANING THE BUCKETS, THE

Gravity feed 5 gal bucket water purifier

SOCK OR THE FILTER. THIS WILL RUIN THE FILTER AND IT WILL NO LONGER FUNCTION PROPERLY.

## **IMPORTANT**

Once you start using the filter, the activated carbon is only good for about 6-8 months. The ceramic shell, which is filtering out the bacteria, will last between 1-2 years. The carbon, inside the ceramic shell, will become packed over a period of time and you will need to shake the filter, to loosen the carbon. Replacing the filter depends upon the flow rate. If the flow rate is very slow even after cleaning the filter, it should be replaced.