

# Simple Four Step Disinfection Method

One packet of “SOCK IT” will purify over 12,000 gallons of water and can be purchased at WalMart for about \$3.00!!

## Step 1: Strain water and allow to settle for 30 minutes

When emergency disinfection is necessary, disinfectants are less effective in cloudy, murky, or colored water. Filter murky or colored water through clean cloths and allow it to settle for 30 minutes. Then, draw off the clean and clear water for disinfection. It is important that the cloth used is clean, as dirty cloth may introduce additional pollutants. The cloth must always be used with the same surface uppermost. The cloth may be cleaned using soap and clean water.

## Step 2: Make Concentrated Solution using “Sock IT”

In a container create a concentrated solution by dissolving the appropriate amount of “SOCK IT” powder to the corresponding amount of water. “Sock IT” is granular calcium hypochlorite and is recommended by the EPA for disinfecting water.

WATER	“SOCK IT” Powder		
	Ounces	Teaspoons	Tablespoons
2 gallons	0.75	4.50	1.50
1 gallon	0.38	2.25	0.75
1 quart	0.10	0.50	0.20
1 pint	0.05	0.25	0.10
1 cup	0.02	0.13	0.05

## Step 3: Make Concentrated Solution

Add the appropriate amount of concentrated solution to another container of water according to the chart below.

WATER	Concentrated Chlorine Solution			
	Ounces	Teaspoons	Tablespoons	Cups
1 gallon	0.43	3	1	-
2 gallons	0.86	5	2	-
5 gallons	2.14	13	4.5	0.25
10 gallons	4.28	26	9	0.50
55 gallons	23.53	141	48	3.00

## Step 4: Let Water Sit for 30 minutes and then shake the water for better taste

**IMPORTANT:** make sure to put warning labels on the container holding concentrated mixture such as “CONCENTRATED CHLORING MIXTURE – NOT FOR DRINKING”.

Read the “**Danger**” notes and “**First Aid**” notes on the “SOCK IT” package before handling it.

Once opened, store the “SOCK IT” package inside a closed container such as a zip-lock bag and keep it away from children.

## Emergency Disinfection of Drinking Water

### USE ONLY WATER THAT HAS BEEN PROPERLY DISINFECTED FOR DRINKING, COOKING, MAKING ANY PREPARED DRINK, OR FOR BRUSHING TEETH

1. Use bottled water that has not been exposed to flood waters if it is available.
2. If you don't have bottled water, you should boil water to make it safe. Boiling water will kill most types of disease-causing organisms that may be present. If the water is cloudy, filter it through clean cloths or allow it to settle, and draw off the clear water for boiling. Boil the water for one minute, let it cool, and store it in clean containers with covers.
3. If you can't boil water, you can disinfect it using household bleach. Bleach will kill some, but not all, types of disease-causing organisms that may be in the water. If the water is cloudy, filter it through clean cloths or allow it to settle, and draw off the clear water for disinfection. Add 1/8 teaspoon (or 8 drops) of regular, unscented, liquid household bleach for each gallon of water, stir it well and let it stand for 30 minutes before you use it. Store disinfected water in clean containers with covers.
4. If you have a well that has been flooded, the water should be tested and disinfected after flood waters recede. If you suspect that your well may be contaminated, contact your local or state health department or agriculture extension agent for specific advice.

#### **You can use granular calcium hypochlorite to disinfect water.**

Add and dissolve **one heaping teaspoon** of high-test granular calcium hypochlorite (approximately ¼ ounce) **for each two gallons of water**, or 5 milliliters (approximately 7 grams) per 7.5 liters of water. The mixture will produce a stock chlorine solution of approximately 500 milligrams per liter, since the calcium hypochlorite has available chlorine equal to 70 percent of its weight. **To disinfect water, add the chlorine solution in the ratio of one part of chlorine solution to each 100 parts of water to be treated.** This is roughly equal to adding 1 pint (16 ounces) of stock chlorine to each 12.5 gallons of water or (approximately ½ liter to 50 liters of water) to be disinfected. To remove any objectionable chlorine odor, aerate the disinfected water by pouring it back and forth from one clean container to another.