About Bleach Neutralizers

Bleach is a 3-5% solution of sodium hypochlorite [NaOCl].
Bleach neutralizers refer to chemicals that neutralize the harmful effects of sodium hypochlorite
Despite the benefits of bleach, bleach gives off toxic fumes, and it can be quite damaging to plumbing or fabrics if used in excess or if disposed inappropriately.
Bleach needs to be neutralized after it has accomplished its intended purpose and prior to sink disposal.

How to Make Bleach Neutralizer (you have a number of options)

Things you will need to make a Bleach Neutralizer

- Sodium Metabisulfite
- Sodium thiosulfate, or
- Sodium sulfite, or
- 3 percent hydrogen peroxide, or
- Ascorbic Acid
- Water
- Protective clothing, gloves and goggles
- Bucket

1. Sodium Metabisulfite

Sodium metabisulfite (chemical formula Na2S2O5) is also called disodium disulfite, pyrosulfurous acid and disodium salt. It is often used in the de-chlorination of swimming pools, or to lower its chlorine levels. Water treatment plants employ the substance to remove trace of excessive chlorine. Sodium metabisulfite is an effective bleach neutralizer. 2.2 grams (one teaspoon) of sodium metabisulfite added to 2.5 gallons of water effectively neutralizes all harmful bleach residue.

2. Sodium Thiosulfate

Sodium thiosulfate (Na2S2O3) is used in spas to lower bromine and chlorine levels. It is a valuable bleach neutralizer, and is just as effective as sodium metabisulfite, even though it is slightly more expensive. Sodium thiosulfate is used in developing photographic film and prints. Its common name is "Fixer". It is available in any photographic supply store, but is likely to be more expensive than sodium sulfite.

1. Put on protective clothing, gloves and goggles.
2. Fill a bucket with 1 gallon of warm water.
3. Mix 1 ounce of sodium thiosulfate into the water.

3. Sodium Sulfite

Sodium sulfite (chemical formula Na2SO3) is an effective, fast and cheap bleach neutralizer that is easily available at most swimming pool chemical vendors. It is typically used to stabilize high levels of chlorine in a swimming pool, and is sold under the trade names De-Chlor and Knock Down.

1. Put on protective clothing, gloves and goggles.
2. Fill a bucket with 2.5 gallons of warm water.
3. Add 1 teaspoon of sodium sulfite product to the water.

4. Hydrogen Peroxide

1. Put on protective clothing, gloves and goggles.
2. Fill a bucket with 1 gallon of warm water.
3. Pour 1 cup of 3 percent hydrogen peroxide into the water.

5. Ascorbic Acid

Ascorbic acid (chemical formula C6H8O6) is used commercially to neutralize bleach in water storage tanks. Bleach, which is added to water tanks as a disinfectant, needs to be completely eliminated before the water is fit for drinking or agricultural purposes. Ascorbic acid neutralizes all residual bleach in a matter of seconds, and 1/4 tsp. of the substance added to 1 gallon of water effectively removes all traces of bleach.

Caution

Acids besides those mentioned above should not be used in an effort to neutralize bleach.

Do not mix vinegar or acidic liquids with bleach, as the combination can be dangerous. Vinegar is one such substance that is erroneously purported to have a neutralizing effect on bleach. Instead, vinegar acts on the hypochlorite content of bleach, turning it into hypochlorous acid and other dangerous chemicals. Hypochlorous acid can convert to deadly chlorine gas in a low pH solution.