When Does Bleach Expire?

By Linda F. Golodner
April 3, 2020

As COVID-19 continues to spread around the world, household chlorine bleach—a mainstay of household disinfection—has become a sought-after commodity. We recently worked with several public health experts to develop a user-friendly poster on how to prepare a solution of bleach and water for disinfecting surfaces against the COVID-19 virus. But the question arises: Without an expiration date on the bleach jug, how do you know when bleach expires and that a solution made with it will be effective?

It’s a fact that bleach degrades over time. But now, thanks to a helpful article from Reader’s Digest, we have learned how to “crack the code” and determine when some bleach products were manufactured. The code is a string of characters on the outside of the plastic jug.

How to Know When Your Bleach Was Manufactured

The image at right shows a one-gallon bleach jug imprinted with a series of numbers and letters. According to the Clorox website, one can use this “production code” to determine the date of manufacture. This is how to decipher the code when reading the first seven characters from left to right:

- The first two characters indicate the plant at which the bleach was manufactured and do not provide information on the production date.
- The next two characters indicate the year of manufacture, which in our example is “19,” for 2019.
- The next three characters indicate the day of the year of manufacture— in the case of the jug shown, this bleach was produced on the 308th day of 2019 (November 4, 2019).

Now that you can decipher when your bleach was produced, consider that the product stays fresh for about six months, according to The Scripps Research Institute. After that it begins to degrade and “becomes 20% less effective as each year goes by.”
Storage conditions make a difference in how long your bleach will last. For best results, store regular bleach at temperatures between 50 - 70 °Fahrenheit. And don’t store bleach on a sunny laundry room window sill, as sunlight helps degrade the product. Clorox recommends replacing properly stored bleach after one year.

Remember that bleach should only be mixed with water (and laundry detergent in the washing machine). Combining bleach with acid cleaners or ammonia can produce hazardous gases.

**When and How to Discard Bleach**

As the Reader’s Digest article notes, if you cannot smell the familiar odor of bleach from cautiously sniffing the jug contents, it is time to dispose of it. Bleach degrades to mostly salty water, so one can pour it down the toilet.

With that, you can be a more informed user of chlorine bleach.

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