

Planetary Wellbeing

Cut Pollution & Toxicity

- [Cleaning & Laundry](#)
- [Green Carwash](#)
- [Low-Toxin Manufacturing](#)
- [Natural Garden & Lawn Care](#)
- [Organic & Sustainable Agriculture](#)
- [Pest Control](#)
- [Plant-Based Eating](#)
- [Zero Emissions](#)
- [Zero Toxin Parenting](#)

Ensure Animal Wellness

Guard Water Resources

Ocean Awareness

Protect Biodiversity

Reduce Resource Consumption

Save Energy & Climate

Latest Jewelry & Accessories



[Shop all latest jewelry & accessories](#)

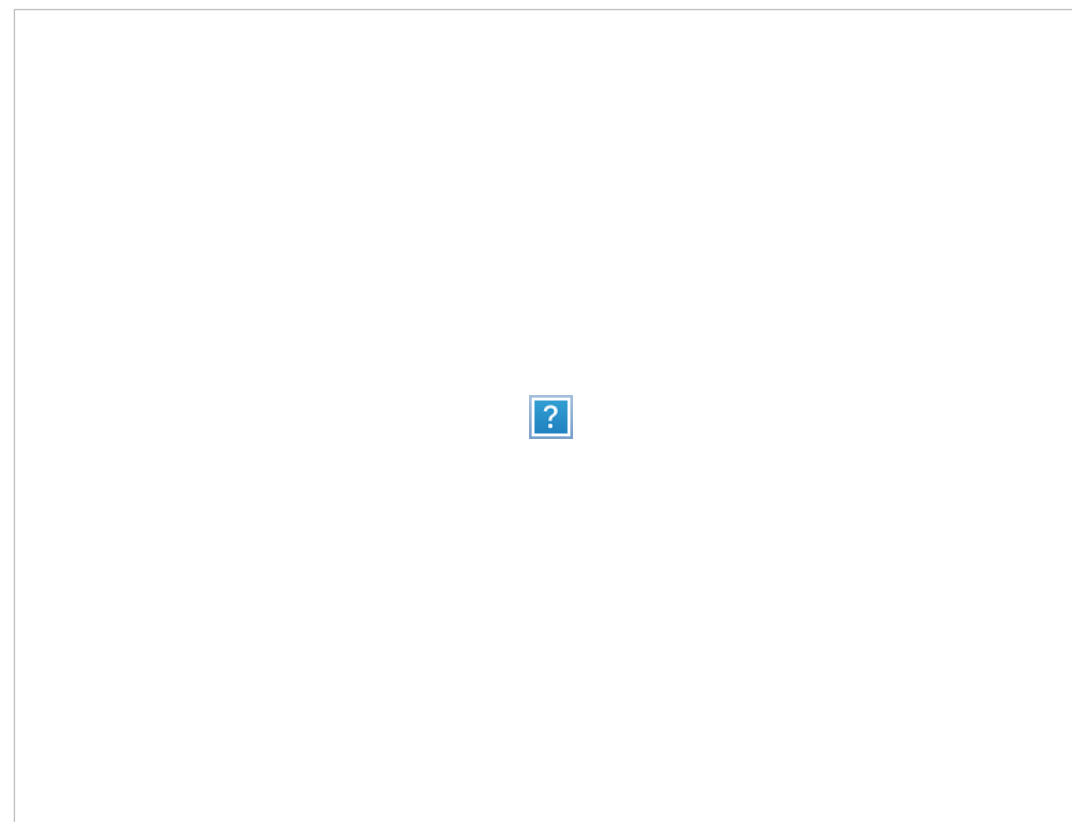
[Learn More](#) 

Green Cleaning Alternatives Go Chlorine Free

For decades, chlorine bleach has been touted as the king of disinfection and whitening, but scientists, health care professionals, and environmentalists are sounding the alarm about this ubiquitous chemical. Hazardous for human health and the source of some of the deadliest chemical by products known to humanity and our planet, chlorine is having a pretty negative impact on our environment and our families.

Yet we consume it in ever increasing quantities, especially with the increased concern over germs and viruses and consumer demand for whiter-than-white products. For instance, every day, Americans wash more than 95 million loads of laundry and dose white loads with huge quantities of chlorine bleach.^[i] In fact, in the US, more than 13,900-10³ short tons of chlorine are consumed every year (though a good deal of this is consumed by industry).^[ii]

Are there ways we consumers can reduce our consumption of chlorine to benefit the planet and humanity without endangering our health? Yes!



Quick Guide: What is Chlorine Bleach?

- **How chlorine is formed:** Chlorine is a highly corrosive gas that is dissolved in liquid to form sodium hypochlorite (bleach). In this form, it is often used as a disinfectant, bleaching agent, or to purify water. It is also used as a building block for other chemicals, including pesticides and refrigerants.
- **What chlorine does to the environment:** The US EPA says that chlorine, even in small quantities, can harm wildlife, especially those living in water and in soil.^[iii]
- **The chlorine-dioxin connection:** When chlorine combines with organic material (like food waste), it forms dioxins. This is a group of byproducts that are highly toxic and do not naturally degrade in the environment. Byproducts of chlorine like dioxins pose significant risks to wildlife.
- **The chlorine-mercury connection:** Producing chlorine bleach is incredibly energy intensive. As a result, chlorine production is one of the biggest sources of mercury (a pollutant from coal fired power plants).^[iv]
- **Health impacts of exposure to chlorine:** Humans can experience serious harm when exposed to chlorine, including skin, eye, and respiratory irritation, nausea and vomiting, liver toxicity, tooth corrosion, exacerbation of heart conditions and asthma, coma, and even death when swallowed.
- **Cleaning products that contain chlorine:** Chlorine bleach is used for laundry, automatic dishwashing detergents, chlorinated disinfectant cleaners, toilet bowl cleaners, mildew removers. There are many brands that use chlorine in their ingredients, including Drano, Clorox, Lysol, Cascade, Tilex, Liquid Plumr, SOS, Easy-Off, Fantastik, Comet, Electrasol, Soft Scrub, Dynamo, Scrubbing Bubbles, Palmolive, Armor All.
- **Alternative names for chlorine:** This chemical can go by many names, so you'll need to know them all to recognize it on the ingredient list. They include sodium hypochlorite, hypochlorite, chloramine, bleach, hydrochloric acid, trihalomethanes, and even the generic disinfection by-products. However, you should note that not all cleaning products list their ingredients, which means you may not even be able to determine if your product has chlorine in it.

Take Action! Cut Chlorine Use with Bleach Alternatives

1. **Choose oxygen based bleach products:** This type of bleach does a great job in many cleaning challenges – sometimes removing stains better than chlorine. These cleaners can be used on delicate and color sensitive things, including carpeting, upholstery, vibrant clothing, and more (though it's not recommended for wool or silk). Use oxygen based bleaches for removing tough stains, but give it a bit more time to do the job.
2. **Choose chlorine-free laundry and cleaning product brands:** Here are a few: [Biokleen](#), [Ecover](#), [Natural Choices](#), [OXY-BOOST](#), [Seventh Generation](#), [Shaklee](#), and [Sun & Earth](#).
3. **Use vinegar:** In laundry, vinegar will help to whiten whites. Vinegar is also an amazing antimicrobial – in combination with table salt or hydrogen peroxide, vinegar can inhibit the growth of *E. coli* and is an effective mold killer.^[v] Vinegar is especially useful for cleaning grease in kitchens.
4. **Try hydrogen peroxide:** This little compound can also help when whitening as required in the laundry room. Add a cup of hydrogen peroxide to a full load of laundry of whites to brighten naturally.
5. **Add baking soda:** This white powder mixed with your laundry detergent will boost its cleaning power and help to whiten and brighten your laundry.
6. **Use lemon juice:** If you need to restore the white to your whites, add some lemon juice to the load of laundry and then hang it in the sun which will do a lot of the work for you. Lemon juice is also a great disinfectant and can be used on

countertops and other surfaces.

- 7. **Convert your chlorine pool to a saltwater pool:** Instead of using chlorine to kill bacteria in your pool, why not convert it into a salt water pool? You can find basic information here: [Salt Institute](#).

Dig Deeper: Chlorine Impacts on Your Health and the Environment

- Read more about the hazards of chlorine bleach on [Healthy Child Healthy World's Chemical Encyclopedia](#).
- Find out which of your cleaning products contain chlorine by visiting the US Department of Health and Human Service's Chemical Information Database for [sodium hypochlorite](#).
- Chlorine isn't just in our cleaning products. It's also used extensively in industry for textiles, paper, and much more. Learn about the basics of chlorine and where you'll find it in industry through the [Reach for Unbleached Foundation](#).

Image by [Jason Tester Guerrilla Futures](#)

[i] *Seventh Generation Laundry Challenge*. (2010, July 1). Retrieved from Seventh Generation: <http://www.seventhgeneration.com/learn/video/seventh-generation-laundry-challenge>

[ii] Khursheed, A. F. (2000, April). *Economic Analysis of Air Pollution Regulations: Chlorine Industry*. Retrieved from US Environmental Protection Agency: <http://www.epa.gov/tneecas1/regdata/EIAs/Chlorine%20EIA.pdf>

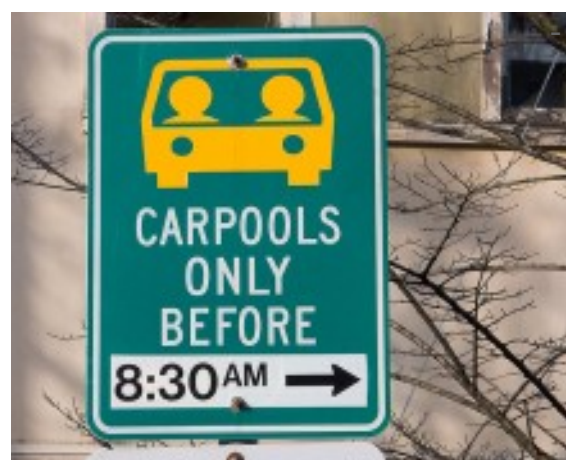
[iii] *CHEMICALS IN THE ENVIRONMENT: CHLORINE (CAS NO. 7782-50-5)*. (1994). Retrieved from US Environmental Protection Agency: Office of Pollution Prevention and Toxics: http://www.epa.gov/chemfact/f_chlori.txt

[iv] Main, E. (n.d.). *The 5 Biggest Sources of Mercury Pollution*. Retrieved from Rodale Institute: <http://www.rodale.com/natural-disinfectant>

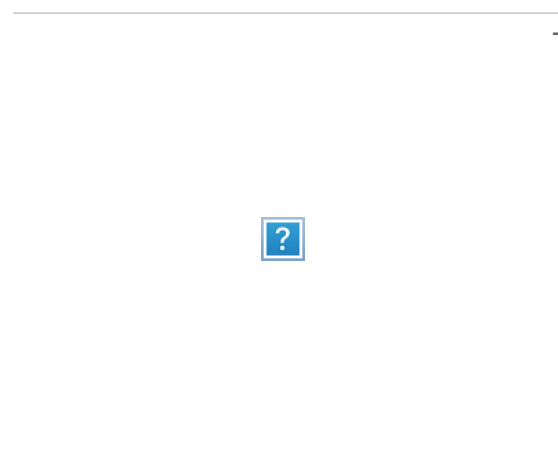
[v] Main, E. (n.d.). *This or That: Bleach vs. Vinegar to Kill Germs*. Retrieved from Rodale Institute: <http://www.rodale.com/natural-disinfectant>

Share:  

Related Articles



Rideshare to Save the Environment



Recipes for Natural Window Cleaner



Natural Recipes for Paint Remover

Comments

0 Comments

Sort by **Oldest**



Add a comment...

 Facebook Comments Plugin

