Bleach: The Basics

Chlorine bleach – a mixture of sodium hypochlorite, sodium hydroxide, and water – is a common surface disinfectant. Before you choose a surface disinfection product, it's important to know what you're getting.

To confirm you're using bleach in your facility, look for ingredients like **sodium hypochlorite**, **hypochlorous acid**, **sodium dichloroisocyanurate**, or **dichloro-s-triazinetrione**.

Combined with its low cost and effectiveness against a wide variety of bacteria, bleach is a very common active ingredient in surface disinfectants. **This effectiveness, however, can be compromised easily**.

- Exposure to light can effect the stability of bleach products
- Concentration must be monitored frequently to ensure product effectiveness
- Dirt and other soils quickly reduce efficacy
- Surfaces should be scrubbed and rinsed prior to disinfecting

Most bleaches have a disinfection time of 30 seconds, but maintaining the proper concentration is key. **For food-contact surfaces, the chlorine concentration must be less than 200 parts per million** (ppm) to be used without the need for a potable water rinse – approximately 1 teaspoon of a 5.2% concentrated bleach solution per 1 gallon of water.

Along with ensuring their effectiveness, properly diluting bleach solutions is critical for safety reasons. **Bleaches are corrosive and can damage skin and surfaces**. Bleach also has other health hazards, including:

- Eye and skin damage
- Inhalation risks
- Potential for violent, harmful reactions if mixed with other chemicals

Did You Know?

Bleach can cause pitting to surfaces, which gives germs a place to hide and can compromise your surface disinfection efforts.

Eliminate Germs – and Compromises – with Alcohol-Based Disinfectants

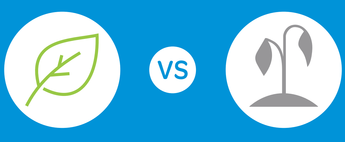
Disinfectants that use alcohol as the active ingredient — like PURELL® Surface Sanitizers and Disinfectants — are proven effective without harsh chemicals. These innovative formulations maximize the power of alcohol, so they're approved for food-contact surfaces, with no rinsing required.

Fast and Effective: These one-step cleaners and disinfectants eliminates cold & flu, strep, human coronavirus,* and a broad spectrum of other pathogens quickly and effectively – many in just 30 seconds.

Worry Free: The lowest allowable toxicity rating for EPA Design of he Environment (DfE) certified products means there's no need to rinse or wash hands after using. Plus, with no harsh fumes, allergens, or irritants, you can use it regularly throughout your school.

Multi-Surface Performance: Proven on most hard and soft surfaces, including desks, upholstered furniture, toys and hands-on learning tools, health and fitness equipment, and more.

Sustainability Spotlight: Alcohol vs. Bleach



Unlike bleach disinfectant products, which can leave unwanted residues on surfaces if not rinsed properly, PURELL Surface Disinfectants are approved no-rinse formulations so you can count on a formulation that's effective against germs while helping promote a culture of sustainability.

* Coronavirus Disease 2019 (COVID-19) is caused by SARS-CoV-2. PURELL® Surface Sanitizer and Disinfectant Sprays kill similar viruses and therefore can be used against SARS-CoV-2 when used in accordance with the directions for use against Hepatitis A Virus on hard, non-porous surfaces. Refer to the CDC website at https://www.cdc.gov/coronavirus/index.html for additional information.