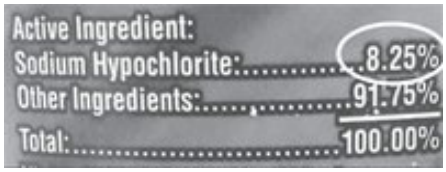
Public Health
Seattle & King County

How to Mix Bleach Solutions

Know What Type of Bleach You Are Using

- The active ingredient in bleach is **sodium hypochlorite**.
  - Bleach is available in different concentrations of sodium hypochlorite, ranging from 2.75% to 8.25%.
  - Do not use bleach if the percentage of sodium hypochlorite is not on the bleach container.
- Use only plain, fragrance-free bleach.



Safety Considerations

- People with respiratory conditions, like asthma or COPD, should not mix bleach solutions.
- If you decide to use a product other than bleach, including wipes, for sanitizing and disinfecting, you are required by WAC to use an EPA-registered product and get your DCYF licensor's approval prior to use.

Where to Mix Bleach Solutions

- Mix bleach solutions in a well-ventilated area.
- Bleach solutions should never be mixed when children are present. The best place to mix bleach solutions is in a laundry or utility room sink where children do not have access. If one of those spaces is not available, they can be mixed in a bathroom or kitchen sink.

What You Will Need

- Labor and Industries requires an **eyewash station, eye protection (goggles), gloves, and an apron** when mixing bleach.
- A copy of the sodium hypochlorite Material Safety Data Sheet (MSDS)
- Measuring spoons and cups
- A container that shows either a 1 gallon or 1 quart measurement
- A funnel

Spray bottles

- Make sure spray bottles are labeled with the contents (bleach and water), the percentage of sodium hypochlorite, and the date.
- Consider labeling the spray bottles with the class name so that they will be returned to the classroom they came from.
- Adjust the nozzle to the "stream" setting instead of the "mist" setting to make it less likely to inhale the bleach solution.

Steps for Mixing Bleach Solutions

1. Make new sanitizing and disinfecting solutions every day. Bleach loses its ability to sanitize and disinfect over time when it is exposed to light or mixed with water.
2. Gather the disinfecting and sanitizing bottles in separate bins to avoid cross-contamination.
3. Empty any leftover contents in the spray bottles into the sink.
4. Mix bleach solutions using the chart below (DOH Disinfecting and Sanitizing with Bleach Guidelines):
    a. Fill your mixing container with the appropriate amount of **cool water**.
    b. Measure out the appropriate amount of bleach and add it to the water in the mixing container.
    c. Mix gently.
5. **Use a funnel to avoid spills** when pouring the bleach solution from the mixing container into smaller spray bottles.
6. After the bleach solutions are mixed and the spray bottles are filled, **disinfect** any counter or surface that the spray bottles touched with the 3-step Method.

Disinfecting for Body Fluids, Bathrooms, and Diapering (~1000 ppm)

To be used on diaper changing tables, handwashing sinks, bathrooms (including toilet bowls, toilet seats, potty chairs and seats), door and cabinet handles, etc.

	Using a bleach (sodium hypochlorite) concentration of:		
Water	**2.75%**	**5.25-6.5%**	**7.0-8.25%**
1 Quart	3 Tablespoons	4 teaspoons	1 Tablespoon
1 Gallon	¾ cup	⅓ cup	¼ cup

Sanitizing for Food Surfaces, in Kitchen, and Classrooms (~100ppm)

To be used on eating utensils, classroom tables, food preparation surfaces, high chair trays, crib frames and mattresses, toys, pacifiers, floors, sleep mats, etc.

	Using a bleach (sodium hypochlorite) concentration of:		
Water	**2.75%**	**5.25-6.5%**	**7.0-8.25%**
1 Quart	1 teaspoon	½ teaspoon	¼ teaspoon
1 Gallon	1 Tablespoon	2 teaspoons	1 teaspoon

Storing Bleach

- Keep bleach out of reach of children in a secured or locked cabinet so it doesn't fall and spill in an emergency.
- Store away from food.
- Store away from other chemicals (such as ammonia), acids, and other cleaners. If bleach mixes with common cleaning products, it can create gases that could cause serious injuries.