

Mixing of Bleach Solution for Disinfecting PPE

Important Considerations

- For greatest effectiveness, prepare bleach solutions fresh **daily**, preferably just prior to use.
- Allow all bleach solutions to stand for at least **30 minutes before using**.
- All containers should be labeled "**Bleach-disinfected water: DO NOT DRINK.**"
- **CAUTION: Never mix bleach with products containing ammonia.**

Preparing a 1: 10 Bleach Solution

Amount of Bleach	Amount of H ₂ O in ounces	Standard Units
$\frac{5}{8}$ teaspoon	1	$\frac{1}{8}$ cup
2 $\frac{3}{8}$ teaspoon	4	$\frac{1}{2}$ cup
1 $\frac{1}{2}$ Tablespoons	8	Cup
3 $\frac{1}{4}$ Tablespoons	16	Pint
6 $\frac{1}{2}$ Tablespoons	32	Quart
$\frac{3}{4}$ cups	64	Half Gallon
1 $\frac{5}{8}$ cups	128	Gallon

Disinfection guidelines

❖ Surfaces and items to disinfect

- Floors, door knobs, window handles, buttons, switches, furniture surfaces, ventilators, computers, keyboards, fans, etc.

❖ Disinfection procedures

- Start with wiping clean the less soiled surfaces.
- Allow articles and surfaces to dry for at least ten minutes.
- Wear a mask and rubber gloves while using bleach.

Precautions for preparing/using diluted bleach

- ❖ Use a mask, rubber gloves, and waterproof apron.
- ❖ Mix and use bleach solutions in well-ventilated areas.
- ❖ Mix bleach with cold water; hot water decomposes the sodium hypochlorite and renders it ineffective.

Precautions for the use of bleach

- ❖ Bleach can corrode metals and damage painted surfaces.
- ❖ Bleach should not be used together with, or mixed with, other household detergents because this reduces its effectiveness and can cause chemical reactions.
- ❖ Undiluted bleach liberates a toxic gas when exposed to sunlight and should be stored in a cool, shaded place, out of the reach of children.
- ❖ Sodium hypochlorite decomposes with time. To ensure its effectiveness, purchase recently-produced bleach, and avoid over-stocking.
- ❖ Organic materials inactivate bleach; surfaces must be cleaned of organic materials before disinfection with bleach.
- ❖ Keep diluted bleach covered, protected from sunlight, in a dark container.

Personal Protective Equipment Specific Disinfection

*** Personally Assigned Suits MUST be labelled to reduce cross contamination ***

1. Suits should be wiped to remove as much organic material as possible
2. Hang suit and spray in a well ventilated area
 - **NOTE:** Suit should stay wet for at least 10 minutes to provide adequate contact time
3. After suits are dry store in a ventilated area after drying

Goggles & Safety Glasses

**** There are 2 methods of disinfection ****

Method 1

1. They should be wiped to remove organic materials
2. Then they should be washed with warm water and soap
3. After they have dried spray with disinfectant and allow to air dry

Method 2

1. They should be wiped to remove organic materials
2. Submerge in disinfectant for at least 10 minutes
3. Remove and allow to air dry