



## Before You Buy – What to Look for on Household Cleaner, Sanitizer, and Disinfectant Labels

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### Introduction

There are many products you can purchase to clean, sanitize, and/or disinfect surfaces in your home. Some products are pre-prepared and ready-to-use (e.g., spray solutions that require no mixing like *409* or pre-wet wipes like *Clorox Disinfecting Wipes*). There are some products you will have to mix before you use it (e.g., bleach and water) (see [FST-386NP](#)). Important information to know before you buy can be found on the product label. This document will guide you to demystifying labels. The label will let you know if the product can be used as a cleaner, sanitizer, and/or a disinfectant, what surfaces you can use the product on, how to use the product, and key safety information to help you use the product without harm. Overall, the label is key to determining if the product can be used in the way you want.

When making your purchase, look on the label for the purpose, a description of the surfaces you can use the product on, and instructions for how to use it.

### Is it a cleaner, sanitizer or disinfectant? What can I use it for?

A quick review of the label can give you a sense of what the product can or cannot be used for (Figure 1). Claims such as “all-purpose cleaner,” “dishwashing soap,” “to sanitize”, or “to disinfect” mean that the product can be used for those purposes. Some might only have one use (for example, dishwashing soap), and others

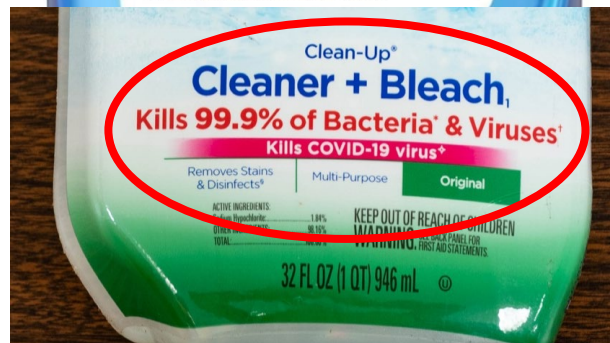


Figure 1. Examples of labels indicating how to use a product. (Photos courtesy of Keri Rouse, Virginia Seafood AREC).

can have multiple uses (for example, a cleaner, sanitizer, or disinfectant based on how long it is in contact with a surface).

## Where can I use it?

Sanitizer or disinfectant products may be intended for use only on “hard, non-porous surfaces,” such as non-wood tables, countertops, cabinets, handles on sinks and refrigerators, and light switches (Figure 2). Other products may be intended for use only on food contact surfaces such as dishes, cooking utensils, and kitchen countertops. Chemicals can damage certain surfaces and/or leave a residue behind that can rub off onto your food (and cause potential harm from chemical exposure).

If there are instructions “only for laundry use” and “general cleaning”, then it may not be suitable for use to sanitize or disinfect your household surfaces since these statements typically infer use on non-food contact surfaces.

## Can I use it out of the bottle?

The label will provide instructions for mixing a solution for cleaning, sanitizing, or disinfecting if you need to before using it (Figure 3). The label could also provide instructions for how to use it directly from the bottle if it is pre-mixed.

## Does the product always require a rinse after application of sanitizer or disinfectant on the surface?

The label will tell you if need to rinse a surface with water after applying a sanitizer or disinfectant (Figure 4). Often the manufacturer will include this instruction if the concentration of the chemical in solution is strong, and if the surface is a food contact surface. Rinsing with water removes any chemical residue so it is not left behind on the surface and does not transfer to food and people. Since disinfectants normally have a higher chemical concentration than sanitizers, this statement is often found on chemicals used as disinfectants.



Figure 2. Example of label indicating what surfaces to use the product. (Photo courtesy of Keri Rouse, Virginia Seafood AREC).

For Laundry	Product	Water	Instructions	
Bleachable Fabrics <i>Avoid bleaching wool, silk, mohair, leather, spandex and nonfast colors.</i>	3/4 Cup	Standard Washer	Use a detergent. For best results: Dilute bleach with a quart of water and add to wash 5 minutes after the wash cycle has begun. For HE machines: Fill machine dispenser to maximum level.	
	1-1/4 Cups	Extra Large Washers		
<b>For Sanitizing</b>				
Work Surfaces	1 Tbsp.	1 Gallon	Wash, rinse, wipe surface area with bleach solution for at least 2 minutes, let air dry.	
Dishes, Plastic Cutting Boards, Baby Bottles	1 Tbsp.	1 Gallon	Wash and rinse. After washing, soak for at least 2 minutes in bleach solution and air dry.	
<b>For Disinfecting</b>				
Floors, Tiles, Bathtubs, Showers, Kitchen Sinks, Hard, Nonporous Baby Toys	3/4 Cup	1 Gallon	Pre-wash surface, mop or wipe with bleach solution. Allow solution to contact surface for at least 5 minutes. Rinse well and air dry.	
<p><b>DO NOT use this product full strength for cleaning surfaces. Always dilute strictly in accordance with label directions. For prolonged use, wear gloves.</b>  <small>Kills Methicillin Resistant Staphylococcus aureus (MRSA). *Influenza A2 and Rhinovirus Type 17.</small></p>				

Figure 3. Example of label indicating how to mix the chemical with water based on intended use. (Photo courtesy of Keri Rouse, Virginia Seafood AREC).



## How long does the surface need to be wet with the solution for enough “contact time”?

The contact time is the amount of time you need to leave the solution on the surface to adequately sanitize or disinfect; typically contact times are longer when disinfecting. You may need to reapply the solution on the surface, if the surface is drying before time is up.

The label should indicate a contact time and any steps to take once that time is up (for example, rinsing the surface with clean water).

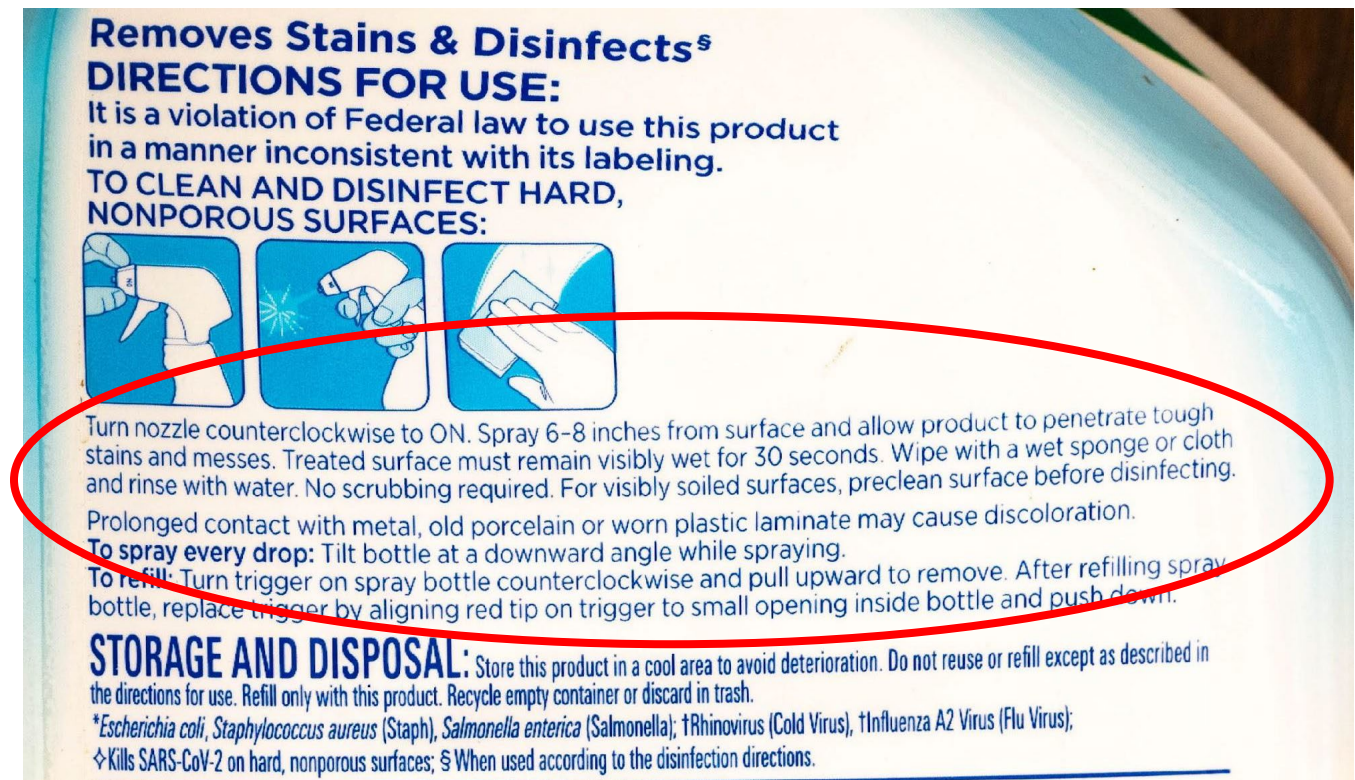


Figure 4. Example of label which includes wash instructions to remove any chemical residue. (Photo courtesy of Keri Rouse, Virginia Seafood AREC).

## References

United States Centers for Disease Control and Prevention (CDC). 2021. Cleaning and Sanitizing with Bleach after an Emergency. Available at: <https://www.cdc.gov/disasters/bleach.html>

CDC. 2021. Household Cleaning & Sanitizing. Available at: <https://www.cdc.gov/healthywater/emergency/hygiene-handwashing-diapering/household-cleaning-sanitizing.html>

United States Environmental Protection Agency (EPA). 2020. What's the difference between products that disinfect, sanitize, and clean surfaces? Available at: <https://www.epa.gov/coronavirus/whats-difference-between-products-disinfect-sanitize-and-clean-surfaces>

## **Additional Resources**

*Cleaning, Sanitizing, Disinfecting, and Sterilizing. What is the difference?* FST 386NP. Available at: <https://resources.ext.vt.edu/contentdetail?contentid=3198>

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