



# ABSA INTERNATIONAL

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## Covid-19 FAQs for Disinfection

### 1. What are the recommended disinfectants for use in my healthcare situation if SARS-CoV-2 is suspected?

If you are working in a situation where strict adherence to Joint Commission Guidelines or CDC guidance is required, you should use those disinfectants listed on the EPA **List N: Disinfectants for Use Against SARS-CoV-2**.

<https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>

When purchasing a product, check if its **EPA registration number** is included on this list. If it is, you have a match and the product can be used against SARS-CoV-2. You can find this number on the product label – just look for the EPA Reg. No. These products may be marketed and sold under different brand names, but if they have the same EPA registration number, they are the same product. There may be additional EPA-registered disinfectants not currently on the list that meet the criteria for use against SARS-CoV-2. EPA will update List N with additional products as appropriate. In the meantime, the EPA recommends using products on the list to combat this virus.

### 2. How did List N appear so quickly after the emergence of SARS-CoV-2? How do we know these products are effective against SARS-CoV-2?

While the products included in **List N: Disinfectants for Use Against SARS-CoV-2** have not been tested against SARS-CoV-2, the cause of COVID-19, they are expected to be effective based on:

- Demonstrated efficacy against a harder-to-kill virus (such as parvo virus, Hepatitis A Virus, poliovirus);
- Qualified for the emerging viral pathogens claim; or
- Demonstrated efficacy against another human coronavirus similar to SARS-CoV-2.

SARS-CoV-2 is a new virus. Such pathogens are often unavailable commercially for laboratory testing.

<https://www.epa.gov/coronavirus/how-does-epa-know-these-products-work-sars-cov-2T>

### 3. How do I use List N?

There are currently more than 350 registered products on List N. You will notice that the list includes active ingredients such as bleach (sodium hypochlorite), citric acid, ethanol, quaternary ammonium compounds, etc. There is a search box on the List N page that allows you to search by product name, manufacturer, EPA registration number, or active ingredient. You must dilute or use as instructed on the product label following the column where it says, “follow the disinfection directions and product directions for the following virus”. This is identifying the “harder-to-kill” organism that has been considered a proxy for SARS-CoV-2, such as non-enveloped viruses like canine parvovirus, norovirus,

Hepatitis A virus and poliovirus. Since this list is so extensive, you are already likely to have some of these products in your home or workplace.

Don't forget, by law, you must follow the manufacturer's instructions for all cleaning and disinfection products (e.g., concentration, application method, contact time, used solution and empty bottle disposal, etc.). Many products will require **cleaning** of soiled surfaces for the disinfectant to be effective.

#### **4. Why do I need to clean surfaces before disinfecting?**

Cleaning is done to remove microorganisms, dirt, and impurities from surfaces. Cleaning does not necessarily kill microorganisms but reduces the load of organic materials so that when disinfectants are applied to a surface these can actually kill the microbes.

<https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cleaning-disinfection.html>

#### **5. What can I use if I am disinfecting at home and cannot obtain products from List N?**

- Wear disposable gloves when cleaning and disinfecting surfaces. Gloves should be discarded after each cleaning. If reusable gloves are used, those gloves should be dedicated for cleaning and disinfection of surfaces for COVID-19 and should not be used for other purposes. Consult the manufacturer's instructions for cleaning and disinfection products used. Clean hands immediately after gloves are removed.
- If surfaces are heavily soiled (i.e., with organic matter of any kind), they should be cleaned using a detergent or soap and water prior to disinfection.
  - For disinfection, diluted household bleach solutions, alcohol solutions with at least 70% alcohol, and most common EPA-registered household disinfectants should be effective. Check to ensure the product is not past its expiration date (see Question 6 if using bleach).
  - Diluted household bleach solutions can be used if appropriate for the surface. Follow manufacturer's instructions for application and proper ventilation. Never mix household bleach with ammonia or any other cleanser.
  - Household bleach will be effective against coronaviruses when properly diluted.
    - Prepare a bleach solution by mixing:
      - 5 tablespoons (1/3<sup>rd</sup> cup) bleach per gallon of water or
      - 4 teaspoons bleach per quart of water
      - (when using 5.25% sodium hypochlorite, these 2 dilutions translate to an ~2% bleach solution, or 1000 ppm of chlorine)

<https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cleaning-disinfection.html>

#### **6. If I use bleach to disinfect, what precautions do I need to consider?**

- Bleach is inactivated by organic matter, thus cleaning must be done before applying diluted bleach.
- Diluted bleach is more effective in disinfecting surfaces than the concentrated solution.

- Bleach is corrosive and an irritant. Thus, after allowing a contact time of 5-10 minutes, rinse and dry the treated surface.
- Review the manufacturing date on concentrated solutions (see Clorox explanation (<https://www.clorox.com/how-to/laundry-basics/bleach-101/bleach-expiration-dates/>)). Concentrated Clorox maintains effectiveness for about 1 yr. when stored at room temperature.
- Bleach solutions should be stored in opaque containers and must be made fresh at a minimum of every 24 hours. Bleach rapidly degrades (becomes unstable) in the presence of light and when mixed with water.
- Never dispose of undiluted bleach down the drain. Follow the institutional or manufacturer guidance for disposal of concentrated and diluted bleach.

<https://www.clorox.com/how-to/disinfecting-sanitizing/cold-flu-other-diseases/>

**7. Do I have to use List N disinfectants if I am working in an academic or private laboratory with SARS-CoV-2 samples or viral isolates?**

Given that List N contains more than 350 commonly used laboratory disinfectants (Clorox Healthcare® Bleach Germicidal Cleaner Spray, Cavicide, Lysol Disinfectant Spray, VIREX™ II / 256, Sani-Cloth Bleach Germicidal Disposable Wipes, etc.) it is very likely that the disinfectants you are already using in your laboratory (particularly if you are adhering to the OSHA Bloodborne Pathogen Standard) are found on List N, which contains ready to use products, concentrates, and wipes.

If you are using freshly made generic-label bleach as a disinfectant in your laboratory, a 2% bleach solution (1000 ppm of chlorine) can also be used. Bleach solutions must be prepared daily, see Q. 5 for instructions for preparing bleach dilutions.

**8. How can I assess what type of disinfectant can be used for certain areas?**

We recommend preparing a list of available disinfectants and collecting certain information as shown in the table below and review the label to ensure the EPA registration includes activity against SARS-CoV-2 (EPA List N) or is included in the CDC Guidelines for disinfection against SARS-CoV-2

| Product                        | Surface type                                  |
|--------------------------------|---|
| ProKureV 100 ppm liquid (mist) | Non-porous - common areas door handles, rails |
| PDI Sani-Cloth Bleach (wipes)  | Non-porous - vehicle                          |
| Clorox Disinfecting (wipes)    | Non-porous - bathrooms                        |
| Lysol brand (spray)            | Non-porous - desk, chairs                     |
| 70% ethanol* (wipe)            | Electronics - smartphones, remote controls    |
| Soap (and water)               | Soft surfaces - carpet                        |

\*[https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/disinfecting-your-home.html?CDC\\_AA\\_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-](https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/disinfecting-your-home.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-)

[ncov%2Fprepare%2Fdisinfecting-your-home.html](http://www.cfsph.iastate.edu/Disinfection/Assets/CharacteristicsSelectedDisinfectants.pdf)

9. For additional information on the mechanism of action of disinfectants, sample trade names, active ingredients, effectiveness against various organisms, please consult the “Characteristics of Different Disinfectants” chart available at:<http://www.cfsph.iastate.edu/Disinfection/Assets/CharacteristicsSelectedDisinfectants.pdf>

**NOTE: ABSA International is not endorsing any commercial product that is mentioned in this FAQ – product names are only used as examples.**

**References:**

1. Iowa State University, The Center for Food Security and Public Health, *Characteristics of Selected Disinfectants*:  
<http://www.cfsph.iastate.edu/Disinfection/Assets/CharacteristicsSelectedDisinfectants.pdf>
2. EPA Pesticide Registration, *List N: Disinfectants for Use Against SARS-CoV-2*:<https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>
3. CDC, *Disinfecting your home if someone is sick, Interim Recommendations for US Households with Suspected/Confirmed Coronavirus Disease 2019*:[https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cleaning-disinfection.html?CDC\\_AA\\_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fprepare%2Fcleaning-disinfection.html](https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cleaning-disinfection.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fprepare%2Fcleaning-disinfection.html)