

# COVID-19 Product Safety and Efficacy

*Answers to frequently asked questions (FAQs) about COVID-19 and how to use Ecolab products safely.*

During a crisis like COVID-19, choosing the right product and using it safely is paramount. Following almost 100 years of scientific exploration and research, Ecolab knows that because of the many variables involved in keeping environments clean, there is no silver bullet when it comes to fighting infectious disease. The best solution is a science-based, comprehensive approach to managing risk. This requires effective products and a dedicated focus on training and compliance.

All of our programs and products are developed through a rigorous scientific process, based on a deep understanding of pathogens, environments in which our customers operate, and chemistry involved in our products, all supported by extensive testing. We integrate our solutions into programs designed to mitigate the risk of spreading disease and keep customers safe and operations healthy.

When dealing with pathogens it's critical to always read and follow product label instructions for safe and effective use. This is particularly important now, as new products, registrations and formulas enter the market quickly to help combat COVID-19.

Also, it's important to keep in mind that the solutions, organism, environment, application method and regulation can all impact the safety and efficacy of your cleaning solution. Here are some questions to keep in mind as you review product instructions.

- Is the product formula effective for killing the target organism? Does it have a virus kill claim?
- Is it safe to use in your facility? Are there any tradeoffs? (e.g. damage to equipment, or furniture)
- Is this the approved application method to maintain safety in your environment and efficacy?
- Are there regulations that determine how the product is used?

This FAQ provides helpful guidance as you decide what's best for your operations. **If you have additional questions, please ask you Ecolab service specialist who can contact our technical and regulatory specialists.**

## FREQUENTLY ASKED QUESTIONS

1. What kinds of products should I use to kill the coronavirus that causes COVID-19?
  - The EPA offers a list of products approved for use against COVID-19: [List N](#). Read the product label for instructions about:

- Surface Type: Will the product work effectively on this surface? Can it damage the surface?
  - Most List N products are intended to be used on hard surfaces, such as floors, walls, benches, countertops, etc. If you are unsure of the suitability of a product, check with Ecolab for surface compatibility.
- Method of application: How should this product be applied to be effective?
  - Methods include spraying on a surface or immersion in a solution (for instance, using a bucket with a cloth or mop). These are all listed on the label.
- Dilution: What is the optimal concentration for a product?
  - The EPA has approved the amount of product diluted in water or RTU (ready to use) concentrations that can kill specific pathogens listed on the label.
  - Some products have different/multiple claims depending on which pathogens are targeted.
- Contact time (also described as “dwell time” or “kill time”): How long does the product need to remain on a surface to kill the pathogen?
  - The EPA mandates that surface **must remain wet** for the entire contact time listed on the product label. If the label lists three minutes for Human Coronavirus, it will take the product three minutes to kill that virus. If it dries sooner, it won't have enough time to work. The best way to ensure contact time is to thoroughly wet the surface or to reapply product if necessary.

## 2. What is the difference between a cleaner, sanitizer and disinfectant?

- There are multiple types of cleaning products and they are intended for different uses:
  - **Cleaners** are substances that remove soil. Surfaces must be cleaned first so that the sanitizer or disinfectant that follows can get to the targeted virus, fungi or bacteria.
  - **Sanitizers** are substances that reduce bacteria by significant numbers but do not destroy or eliminate all bacteria.
  - **Disinfectants** are substances that destroy or irreversibly inactivate bacteria, fungi and viruses.

## 3. What are my options for large scale/large area disinfection?

- Fogging, spraying, and vapor generation are all options for large area disinfection that can help ensure broad and complete coverage of all relevant surfaces. However, these applications require specific label claims and for effective use against COVID-19, must be linked to viricidal claims.
  - It is always important to use the required equipment and PPE for these applications.
- Large Area Disinfection uses include:
  - Traditional spray
    - A spray that is applied using a pump or a pressurized container.
  - Specialized Spray

- A spray that is applied with an electrostatic sprayer, which charges droplets electrically to increase coverage. Additional PPE may be required.
  - Fogging/Misting
    - A product that is applied using an automated fogging machine placed in enclosed space, controlled remotely.
    - Or by using a handheld fogger operated by a person wearing proper PPE, applied in a space where no other humans are present.
  - Vapor
    - A product applied using specialized vapor generating units placed in enclosed space, controlled remotely.

#### 4. How long does the virus survive on surfaces?

- The survival times for the coronavirus that causes COVID-19 are still being studied. [Initial findings](#) from the U.S. National Institute of Health (NIH) indicate in a lab-based study, the following:
  - Stainless Steel, Plastic: 2-3 days
  - Cardboard: 24 hours
  - Printing & tissue paper: 3 hours
  - Wood: 2 days
- To date, there's no evidence of transmission of COVID-19 from surfaces.
- Regardless of these findings, the [CDC continues to recommend](#) that effective cleaning and disinfection of high touch surfaces be done using approved products, following usage instructions on the label and training your staff appropriately. Additionally, use caution when applying these data to “real life” as the studies used high populations of the virus, did not evaluate whether the remaining viral particles were infectious, and they had to use aggressive techniques to remove it.

#### 5. Can products be used to eliminate COVID-19 on soft or porous surfaces?

- There are a limited number of products that can be used effectively to disinfect soft surfaces. Many virucidal disinfectants can cause damage to fabrics and other sensitive fabrics if used frequently.
- The [CDC indicates](#) for soft surfaces such as carpeted floor, rugs, and drapes, clean the surface using soap and water or with cleaners appropriate for use on these surfaces. Launder items (if possible) according to the manufacturer's instructions. Use the warmest appropriate water setting and dry items completely.

#### 6. What products can be used on food contact surfaces?

- Always make sure you follow the steps on the label to ensure your work environment is ready to prepare food safely after disinfection. If a product is suitable for use against COVID-19 it may not be suitable for food contact surfaces without additional steps.
- The products on the market today for use against COVID-19 generally are disinfectants (or products used at high concentrations). If applied to an area where food will be prepared or eaten, a potable water rinse and an extra sanitizing step will be needed as disinfectants may leave chemical residue that could be harmful to humans if transferred to food and eaten.
- Food contact sanitizers are made with approved ingredients that are evaluated by the Agency and are considered acceptable for this use. Regulators agree that under routine

circumstances (i.e. not during a pandemic), continued use of standard cleaning and sanitizing products and protocols are acceptable.

- However, under high risk situations (e.g. worker displays symptoms or has been diagnosed with COVID-19), a disinfection step may be recommended. Because most sanitizers do not have virus kill claims, a multi-step process is likely needed to disinfect surfaces and keep customers safe from chemical residues.

## 7. Does Ultraviolet Light (UV) work to kill the virus in my operations?

- The use of UV technology to combat COVID-19 is still being studied and is not yet substantiated.
- If a device meets EPA requirements and studies demonstrate effectiveness against SARS-CoV-2 it should be used as part of a broader program for use on specific surfaces because UV technology:
  - Only works where the light shines, thus shadows present an issue for efficacy.
  - Is regulated differently than chemical disinfectants.
  - May cause yellowing of certain plastics and bleaching/degradation of fabrics, depending on UV source and intensity.
- Rooms cannot be occupied while UV is operating.

## 8. How does Ecolab know your products are effective?

- Ecolab's sanitizer and disinfectant product development is informed by customer insights and robust research into usability, efficacy and safety at every stage of the process, in customer environments.
- Our packaging and dispensing expertise helps with safe handling, use and application of our solutions.
- In addition to products, we offer extensive training and monitoring programs to help our customers develop the most effective cleaning and sanitizing protocols for their operations.
- We employ more than 1,500 scientists who are dedicated to developing new products and programs and improving existing ones every day.
- All of our products are reviewed and approved for use by national and state regulatory bodies.
- Because we test the products we develop extensively, our products are supported by comprehensive data submitted to the EPA for product approvals.
- We have a team of regulatory experts dedicated to maintaining our product registrations and ensuring the federally required safety and efficacy standards of our products overtime as new research and pathogens emerge.

## 9. Is there anything different about the WHO hand sanitizer formula?

- Due to unprecedented demand for effective hand hygiene in the wake of COVID-19 the World Health Organization released a formula of hand sanitizer that is proven effective against the virus. Ecolab has transitioned more than 10 production lines to begin producing this formula.
- The WHO formula has relatively higher alcohol content (80%) to other hand sanitizers, meaning it may dry out surfaces or your hands and is more liquid and flammable and should be handled, stored and shipped accordingly.
- Ecolab will provide every customer who purchases the WHO hand sanitizer with detailed instructions.

## 10. Can Ecolab products be used in Disinfection Tunnels or Disinfection Booths?

- No, Ecolab does not sell products that are approved for use in 'disinfection tunnels' or 'disinfection booths' and is unaware of any disinfectant products that are approved for this use. There may be serious unintended health consequences from exposure of people to disinfectants in this way. Refer to the World health Organization for additional advice.