

# NOVEL CORONAVIRUS (COVID-19)

Cleaning and disinfecting guidance for  
foodservice operations



# GENERAL INFECTION PREVENTION GUIDELINES

Preventative measures that may help prevent an outbreak of COVID-19 as well as other illnesses.

1

## MONITOR NEWS AND ADVICE FROM PUBLIC HEALTH AGENCIES

Follow local public health recommendations related to local infection activity and need for isolation and closing.

2

## IMPLEMENT GOOD INFECTION PREVENTION PRACTICES

Reinforce personal hygiene throughout your operation.

Provide hygiene materials such as tissues, hand soap and sanitizer.

Stock effective disinfectant products and follow protocols.

3

## COMMUNICATE WITH AND MONITOR EMPLOYEES

Educate and inform employees.

Closely monitor employee health.

Have symptomatic employees stay home.

# ABOUT THIS GUIDANCE

**Dated 3/16/20:** The novel coronavirus is an emerging pathogen and the situation is constantly evolving. This guidance references CDC and WHO guidelines and is supplemented with Ecolab expertise.

For the most up-to-date information, please refer to [Centers for Disease Control and Prevention \(CDC\)](#), [World Health Organization](#) or your local health authority.

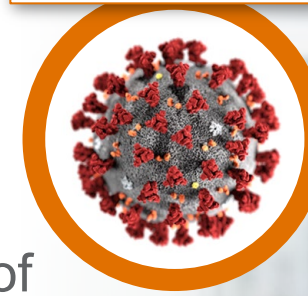
Contact your Ecolab representative for additional questions on products or procedures.

Additional information:

- [CDC: Interim Guidance for Business and Employers](#)
- [CDC: Guidance for Cleaning and Disinfection](#)
- [CDC: Prevention in Communities, schools, healthcare settings and businesses](#)

# WHAT WE KNOW ABOUT CORONAVIRUS (COVID-19)

Coronaviruses



- **Coronavirus disease (COVID-19)** is a respiratory disease of international public health concern caused by a “novel coronavirus” not previously seen.
- The virus causes fever and respiratory symptoms.
- To date, the virus has infected more than a hundred thousand people, with thousands of reported deaths.
  - There may be more cases identified--access case counts here: [Global Map of Confirmed Cases](#)
- Public health authorities are actively investigating this outbreak and **the situation is evolving**.
  - Please follow local public health authority and World Health Organization guidance for the most up-to-date information.

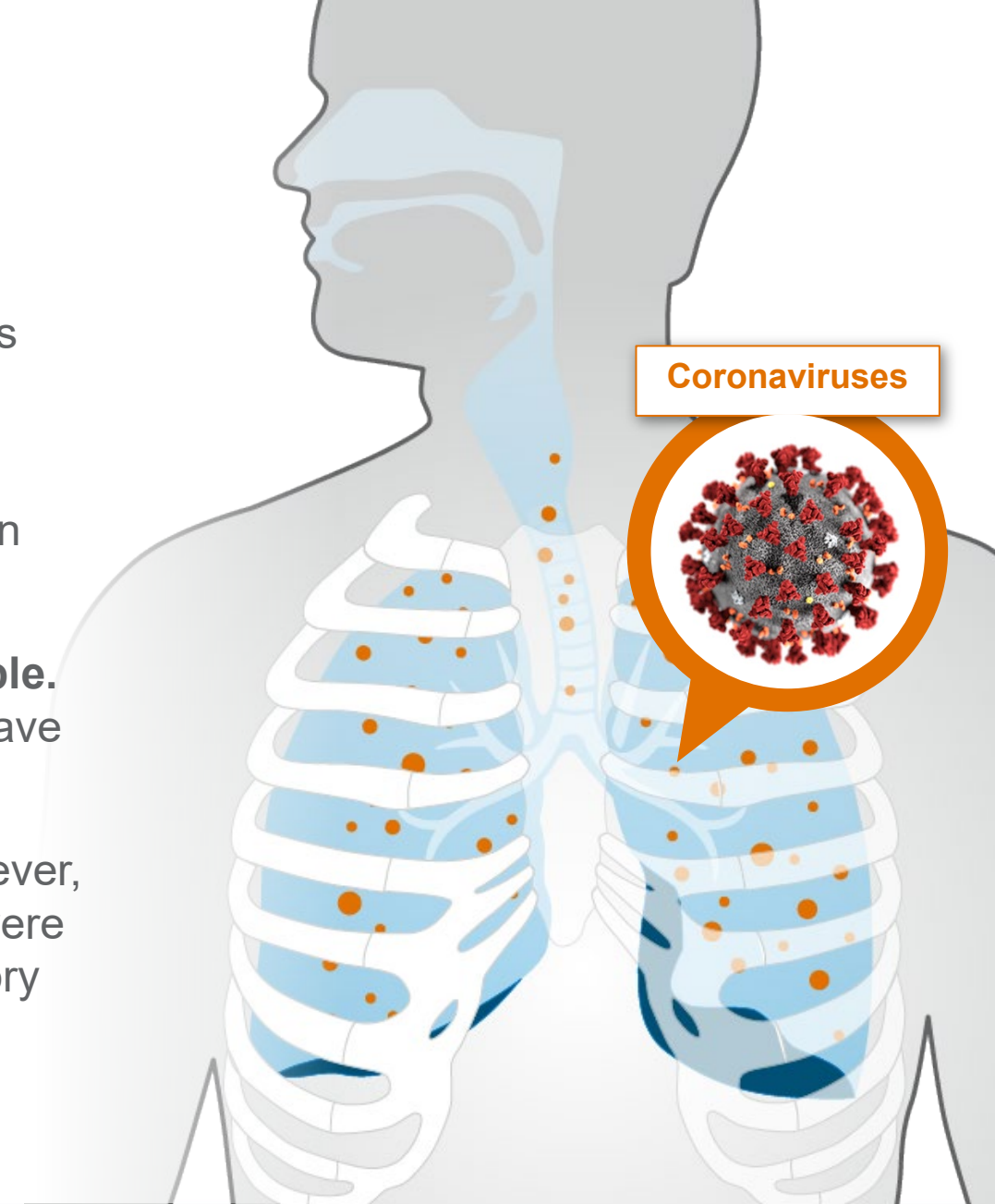


Sources: (1) <http://jiangsu.sina.com.cn/news/s/2020-01-15/detail-iihnzhha2508664.shtml> (2) <http://wjw.wuhan.gov.cn/front/web/showDetail/2020011509040>  
(3) [http://news.youth.cn/jsxw/202001/t20200115\\_12170407.html](http://news.youth.cn/jsxw/202001/t20200115_12170407.html) (4) [https://www3.nhk.or.jp/nhkworld/en/news/20200116\\_46/](https://www3.nhk.or.jp/nhkworld/en/news/20200116_46/) (5)  
<http://wjw.wuhan.gov.cn/front/web/showDetail/2020011609057>  
(6) <http://wjw.wuhan.gov.cn/front/web/list2nd/no/710> (7) <http://wjw.wuhan.gov.cn/front/web/showDetail/2020011909074>



# WHAT IS A CORONAVIRUS?

- **Coronaviruses (CoV)** are a large family of viruses that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV).
- **A novel coronavirus (nCoV)** is a new strain that has not been previously identified in humans.
- **Coronaviruses are transmitted between animals and people.** Several known coronaviruses are circulating in animals that have not yet infected humans.
- **Common signs of infection** include respiratory symptoms, fever, cough, shortness of breath and trouble breathing. In more severe cases, infection can cause pneumonia, severe acute respiratory syndrome, kidney failure and even death.

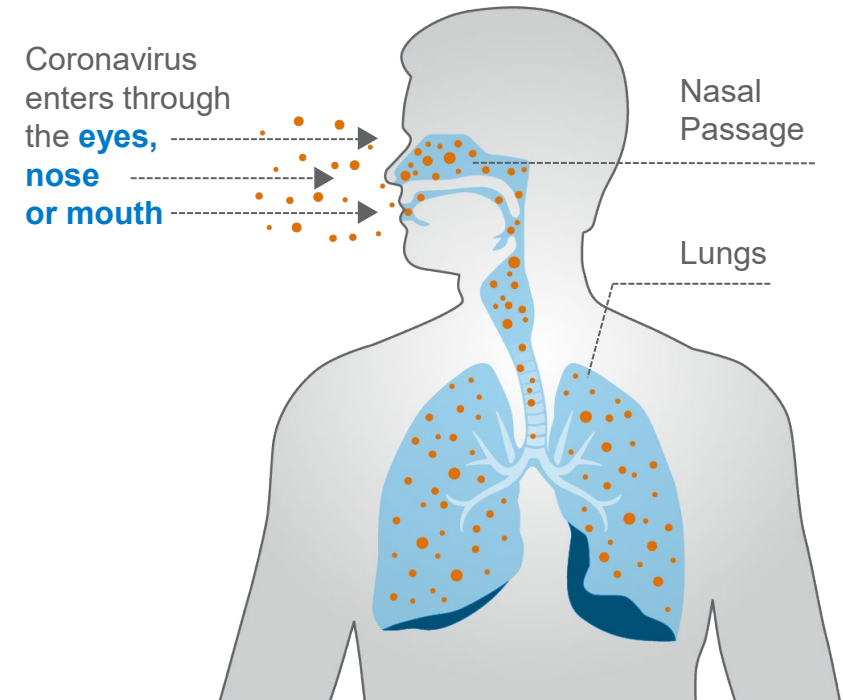


# HOW DOES CORONAVIRUS SPREAD?

It depends on the particular coronavirus.

Human coronaviruses **may spread by respiratory droplets from an infected person to others through:**

- **The air** by coughing and sneezing
- **Close personal contact**, such as touching or shaking hands
- **Touching** an object or surface with the virus on it, then touching your mouth, nose or eyes before washing your hands



Transmission from person to person is occurring **with COVID-19**. Surveillance continues.

# STEPS TO HELP PROTECT YOURSELF AND YOUR EMPLOYEES AND GUESTS

Public health recommendations focus on **standard infection control practices, training and compliance.**



## Good News

Coronavirus is a small-enveloped virus. Enveloped viruses are the least resistant to disinfection, which means **disinfectants can be used to effectively kill coronavirus on surfaces.**



# HOW TO PROTECT YOURSELF

➤ There are currently no vaccines available to protect you against human coronavirus infection.

You may be able to **reduce your risk** of infection by doing the following:

- 1 **Wash your hands** often and correctly.
  - The World Health Organization recommends performing hand hygiene with soap and water or alcohol-based hand sanitizer if soap and water are not available.
- 2 **Avoid touching** your eyes, nose or mouth with unwashed hands.
- 3 **Avoid close contact** with people who are sick.
- 4 **Avoid areas where live animals are being sold or raised** in regions where excessive cases are being reported.
- 5 **Wear a mask if directed by health care or local requirements.**
- 6 **Seek medical advice immediately** if you have a fever or other symptoms after traveling. Tell the doctor where you have traveled.





# HOW TO PROTECT OTHERS

If you have cold-like symptoms, you can **help protect others** by doing the following:



Wear a mask if advised by healthcare experts.

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Stay home while sick.

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Avoid close contact.

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Wash your hands.

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Cover your mouth and nose.

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Contact a doctor immediately.

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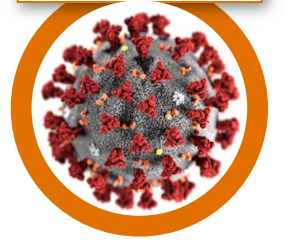
Clean and disinfect.

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# PROCEDURES BASED ON RISK PROFILE

Ecolab recommends that customers take the following steps based on the risk profile of their operations. This 3-tiered guidance is informed by public health reports and our understanding of the scientific characteristics of underlying causes.

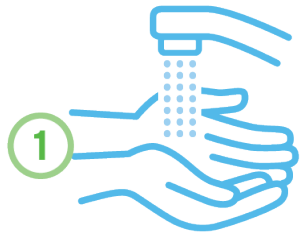
Coronavirus



LEVEL	GREEN: Standard Prevention	YELLOW: Risk Reduction	RED: Remediation
DESCRIPTION	<b>RISK PROFILE:</b> No known outbreak in your geographic area	<b>RISK PROFILE:</b> The potential exists for an outbreak in your geographic area	<b>RISK PROFILE:</b> A publicly declared outbreak in your facility or region is disrupting normal business
ACTIONS	<ul style="list-style-type: none"><li>Follow current procedures</li><li>Regularly revisit training to ensure compliance</li><li>Maintain standard hygiene and sanitizing/disinfection practices</li></ul>	<ul style="list-style-type: none"><li>Educate employees on infection control, PPE use and communicate Infection Control Procedures</li><li>Assess your preparedness status and collaborate with vendor partners on response readiness</li><li>Evaluate facility usage, lead times and stock shelf life and their impact on ordering supplies</li><li>Increase frequency of standard procedures</li></ul>	<ul style="list-style-type: none"><li>Enhance procedures to respond to an outbreak in your facility, designed to break the chain of infection or illness</li><li>Facilitate training for heightened procedures</li><li>Perform heightened procedures using approved products</li><li>Plan for deep cleaning and reopening procedures after down time or quarantine</li></ul>
Increase frequency of cleaning and disinfection of high-touch surfaces			

# HAND HYGIENE

Practice and promote **proper hand hygiene**.



## WET

hands with clean running water turn off the tap and apply soap.



## LATHER

the back of hands, between fingers and under nails.



## SCRUB

for at least 20 seconds.



## RINSE

hands well under clean running water.



## DRY

hands using a clean towel or air dryer.



ALCOHOL

**IF SOAP AND WATER ARE NOT AVAILABLE,**  
use an alcohol-based hand sanitizer

# DISINFECTION: NON-FOOD CONTACT

Clean and disinfect hard surfaces and high-touch objects with approved disinfectants.  
**Increase frequency as needed.**

## 1 PRE-CLEAN

Pre-clean visibly soiled areas to be disinfected

## 2 DISINFECT

For an emerging viral pathogen, use a disinfectant with an EPA-approved emerging viral pathogen or coronavirus claim. Refer to the product label for complete directions for use.



## 3 WAIT

**Allow surface to remain wet** for the time indicated in the directions for use on the product label.



## 4 DRY

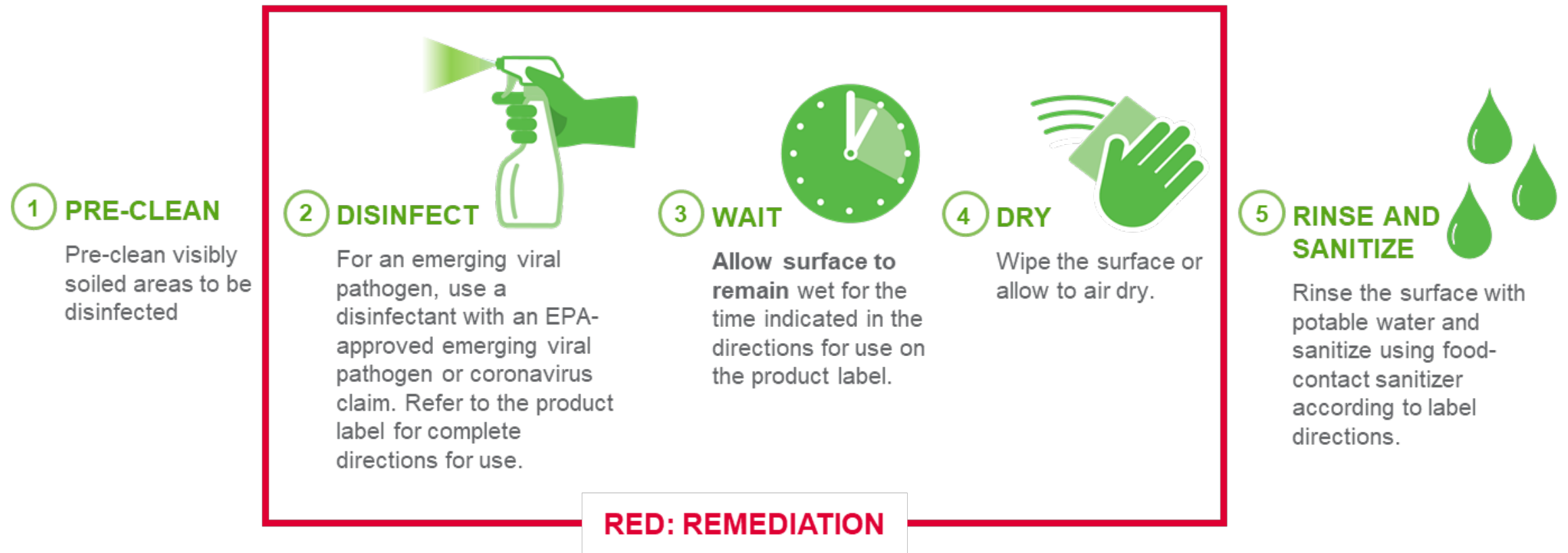
Wipe the surface or allow to air dry.





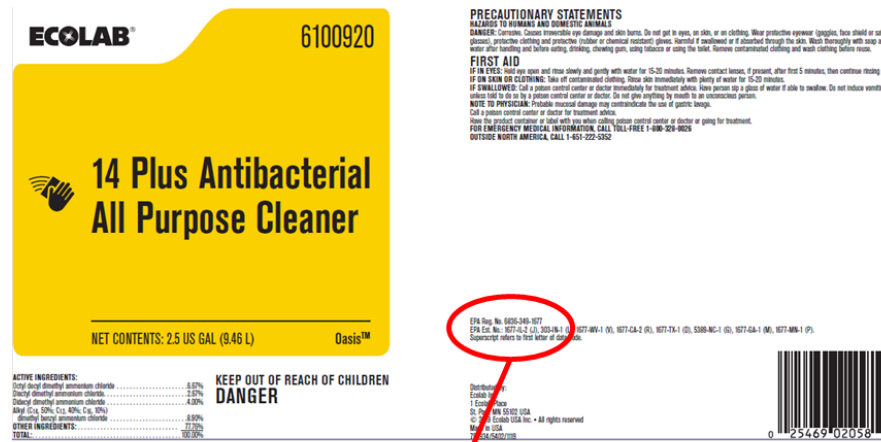
# DISINFECTION: FOOD CONTACT

**During RED REMEDIATION:** Clean and disinfect hard surfaces and high-touch objects with approved disinfectants. **Increase frequency as needed.**



# HOW TO KNOW IF DISINFECTANTS ARE APPROVED FOR USE AGAINST NOVEL CORONAVIRUS

Find the EPA Registration Number on the product label



**EPA Reg. No. 6836-349-1677**

Base Registrant  
Company Number

Product Number

Sub-Registrant  
Company Number

Not all products have a three-part EPA Registration Number.  
Ecolab-owned registrations are only two-parts.

To verify your product is on the list of [EPA registered antimicrobial products for use against novel coronavirus](#), match the first two parts of the EPA Registration Number.

Note: Searching by product or company name will not yield full approved list.

## List N: Disinfectants for Use Against SARS-CoV-2

List N includes products that meet EPA's criteria for use against SARS-CoV-2, the cause of COVID-19. 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 under different brand names, but if they have the same EPA registration number, they are the same product. This list includes products with emerging viral pathogen claims and those with human coronavirus claims. If a product with an emerging viral pathogen claim is not available, use a product with a coronavirus claim. If the product is listed as "N" under the Emerging Viral Pathogen column, then it has a human coronavirus claim.

- [Frequently Asked Questions about List N: Disinfectants for Use Against SARS-CoV-2](#)
- [Emerging Viral Pathogen Claims for SARS-CoV-2: Submission Information for Registrants](#)

Note: Inclusion on this list does not constitute an endorsement by EPA. There may be additional disinfectants that meet the criteria for use against SARS-CoV-2. EPA will update this list with additional products as needed.

Show 1-4 of 4 items PDF

List N: Products with Emerging Viral Pathogens AND Human Coronavirus claims for use against SARS-CoV-2

EPA Registration Number	Active Ingredient/s	Product Name	Company	Follow the disinfection directions and preparation for the following virus
1677-256	Quaternary ammonium	FSC 35K	ECOLAB, INC.	Coronavirus
1677-251	Hydrogen Peroxide	PEROXIDE DISINFECTANT AND GLASS CLEANER RTU	Ecolab Inc/Kay Chemical Co.	Canine Parvovirus
1677-250	Hydrogen peroxide; peroxyoctanoic acid; peroxyacetic acid	Synergex	Ecolab Inc	Reovirus
1677-249	Isopropanol	KLERICIDE 70/30 IPA	Ecolab Inc	Rhinovirus

EPA list of registered antimicrobial products for use against novel coronavirus, the cause of COVID-19.

# DISINFECTANTS APPROVED BY EPA FOR USE AGAINST NOVEL CORONAVIRUS

Product Name	EPA Reg. No.	SKUs	Follow Directions for Use of Supporting Virus	Dilution	Application	Contact Time	Emerging Viral Pathogen Claim
14 PLUS ANTIBACTERIAL ALL PURPOSE CLEANER	6836-349-1677	6100912 (2 – 2L) 6100920 (2.5 gal)	Norovirus (Feline calicivirus surrogate)	1 fl. oz./gallon	Spray	5 minutes	Yes
20 NEUTRAL DISINFECTANT CLEANER	47371-129-1677	6100460 (2 – 2L)	Adenovirus	2 fl. oz./gallon	Immersion or Spray	10 minutes	Yes
A-456 II DISINFECTANT CLEANER	6836-78-1677	6166931 (2 – 1.3L)	Norovirus (Feline calicivirus surrogate)	0.5-1 fl. oz./gallon	Immersion or Spray	10 minutes	Yes
HB QUAT	61178-1-42964	6100270 (2.5 gal)	Human Coronavirus	2 fl. oz./gallon	Immersion or Spray	10 minutes	No
MULTI PURPOSE DISINFECTING WIPES	6836-340-1677	6101858 (6 – 185 count)	Norovirus (Feline calicivirus surrogate)	RTU	Immersion (wipe)	10 minutes	Yes
NEUTRAL DISINFECTANT CLEANER	47371-129-1677	6114541 (2 – 1.3L) 6101205 (2.5 gal)	Adenovirus	2 fl. oz./gallon	Immersion or Spray	10 minutes	Yes
OASIS 499 HBV DISINFECTANT CLEANER	6836-78-1677	6100281 (2.5 gal)	Norovirus (Feline calicivirus surrogate)	0.5-1 fl. oz./gallon	Immersion or Spray	10 minutes	Yes
PEROXIDE MULTI SURFACE CLEANER AND DISINFECTANT	1677-238	6100792 (2 – 1.3L) 6100791 (2 – 2L) 6100693 (2 gal; Oasis) 6100793 (2 gal; Quik Fill)	Norovirus	4 fl. oz./gal OR 6 fl. Oz./gal	Spray	2 minutes OR 45 seconds	Yes
SCRUB FREE BATHROOM CLEANER AND DISINFECTANT	1677-256	6101799 (2 – 1.3L) 6101798 (2 – 2L) 6101797 (2.5 gal)	Human Coronavirus	4 fl. oz./gal	Spray	5 minutes	No
TB DISINFECTANT CLEANER RTU	1839-83-1677	6143556 (12 – 32 fl. oz.)	Poliovirus	RTU	Spray	10 minutes	Yes
VIRASEPT™	1677-226	6002314 (12 – 32 fl. oz.)	Norovirus; Rhinovirus	RTU	Immersion or Spray	4 minutes	Yes

# PUBLIC AREA GUIDELINES

Lobbies, entrances, hallways, etc.

## STANDARD PROCEDURES

- Pick up debris and remove gum from floor with putty knife or blunt-edged tool.
- Empty and disinfect trash can and replace can liner.
- Clean and disinfect all hard surfaces including high-touch surfaces.
- Clean glass and windows.
- Refill air freshener and hand sanitizer dispensers as needed; disinfect dispensers regularly.
- Vacuum soft-surfaced floors (carpet/rug/walk-off mat); sweep then mop hard-surfaced floors (tile/wood/LVT).

## REMEDIATION PROCEDURES

- Follow **STANDARD PROCEDURES** above.
- Consider closing non-essential public gathering areas to limit transmission.
- Consider providing alcohol-based hand sanitizers in public areas especially near touchpoints.



## CONSIDERATIONS

- Provide Personal Protective Equipment (e.g., gloves, goggles/eye protection, masks) as directed by local and federal authorities for employees and infected individuals.
- Increase cleaning and **disinfection** frequency of high touch surfaces in public areas.
- Provide hand sanitizer in high traffic areas.
- Consider limiting non-essential visitors; restrict entry of symptomatic visitors or those who have been exposed.
- Follow all guidance as directed by public health authorities.

## Specific touchpoints

Door handles, push plates, drinking fountains, elevator buttons, gym equipment and machines, thresholds and hand railings, tables and chairs, coffee and beverage stations, vending and ice machines, ordering kiosks, trash can, telephone and keypad.

Refer to product label for complete directions for use



# FOODSERVICE GUIDELINES

## Food Contact Surfaces

### STANDARD PROCEDURES

- Clear surfaces of objects, food debris and other items.
- Wash the surface using a multi-purpose cleaner or manual detergent.
- Rinse with clean potable water using a clean cloth and allow to air dry.
- Sanitize surface with food contact sanitizer according to label directions for use.

OR

- Follow standard operating procedures for washing items in the dishmachine.

### REMEDIAL PROCEDURES

- Follow **STANDARD PROCEDURES** above.
- Follow your standard procedures to sanitize ware through low- and high- temperature dishmachines or a 3-compartment sink.
- Wash and sanitize food contact surfaces and equipment on a more frequent basis.
- Change out utensils in buffet line on a more frequent basis.
- Consider the addition of a **disinfection** step using an EPA-registered product with an emerging viral pathogen or coronavirus claim. Refer to product label for directions for use. Before putting back in service, continue with **STANDARD PROCEDURES** (i.e., wash if needed, rinse, sanitize in 3-compartment sink or process in dishmachine).

Refer to product label for complete directions for use



### CONSIDERATIONS

- Provide Personal Protective Equipment (e.g., gloves, gowns) as directed by local and federal authorities for employees and infected individuals.
- Reinforce all personal hygiene requirements, with special attention to hand hygiene. Refer to food code and hand hygiene procedures.
- Perform training to reinforce cleaning, sanitizing, and **disinfection** procedures.
- Verify dishmachine has product before use.
- Follow all guidance as directed by public health authorities, especially in regards to food handling via take-out or delivery or room-service.

### Specific touchpoints

Food Contact: tables, ice machine/bucket and scoop, food prep tools and equipment (e.g., cutting boards, knives, mixing bowls), plates and flatware, glassware, buffet serving trays, handles of all the equipment doors and operation push pads, highchairs, bar top and tools

# FOODSERVICE GUIDELINES

## Non-Food Contact Surfaces

### STANDARD PROCEDURES

- Clean surfaces with a multi-purpose cleaner or manual detergent.
- To disinfect high touch points, pre-clean visibly soiled areas.
- Spray **disinfectant** on surface making sure to wet thoroughly.
- Allow the surfaces to remain wet for the time indicated in the directions for use on the product label.
- Wipe the surfaces or allow to air dry.

### REMEDIAL PROCEDURES

- Follow **STANDARD PROCEDURES** above.
- Increase frequency of hard surface **disinfection** using an appropriate EPA-registered product with an emerging viral pathogen or coronavirus claim. Refer to product label for directions for use.

Refer to product label for complete directions for use



### CONSIDERATIONS

- Provide Personal Protective Equipment (e.g., gloves, goggles/eye protection, masks) as directed by local and federal authorities for employees and infected individuals.
- Reinforce all personal hygiene requirements, with special attention to hand hygiene. Refer to food code and hand hygiene procedures.
- Perform training, reinforcing cleaning, sanitizing, and **disinfection** procedures.
- Increase frequency of cleaning and **disinfection** of “high-touch” hard surfaces.
- Follow all guidance as directed by public health authorities, especially in regard to food handling via take-out or delivery.

### Specific touchpoints

Door handles, push plates, cash register, thresholds and hand railings, chairs and booths, non-food contact tables/counters, beverage station, drive-through window/counter, vending machine, public information/ordering kiosk, take-out order shelves, trash can, telephone and keypad, remotes, refrigerator and freezer handles, refrigerator and freezer curtains, 3-compartment sink and mop sink, sink faucets, soap, sanitizer and towel dispenser, non-food contact cleaning tools, mop buckets, computer and keypad, menus and bill folders, pens

# RESTROOM GUIDELINES

## STANDARD PROCEDURES

- Place wet floor sign at entrance.
- Evaluate restroom and remove debris from floors and counters.
- Spray (and do not wipe) all bathroom hard surfaces with **disinfectant** cleaner—toilet, urinals, sinks, countertops and fixtures.
- Restock supplies and empty trash.
- Clean mirrors, glass and windows.
- Scrub toilet and urinals.
- Wipe bathroom hard surfaces and high touch points after required disinfectant contact time. Refer to product label.
- Clean and disinfectant floors and apply odor control product (as needed).
- Inspect for quality and remove floor sign when floor is dry.

## REMEDIATION PROCEDURES

- Follow **STANDARD PROCEDURES** above.
- Increase frequency of deep cleaning and high touch point **disinfection**.
- Increase frequency of hard surface **disinfection** using an EPA-registered disinfectant with an emerging viral pathogen or coronavirus claim. Carefully read and follow label directions.

Refer to product label for complete directions for use



## CONSIDERATIONS

- Provide Personal Protective Equipment (e.g., gloves, goggles/eye protection, masks) as directed by local and federal authorities for employees and infected individuals.
- Provide alcohol-based hand sanitizer outside of public restrooms.
- Ensure hand soap is properly stocked.
- Follow all guidance as directed by public health authorities.

## ➤ Specific touchpoints

Door handles, bathroom stalls (latch) fixtures, light switches, toilet and urinal handles, towel and soap dispensers, hand dryers, baby changing station, trash can, countertops, feminine hygiene receptacle, toilet paper dispensers,

# EMPLOYEE GUIDELINES

- Reinforce personal hygiene and cough etiquette.
- Closely monitor employee health and have symptomatic employees to stay home per company illness policy.
- Identify critical staff members and functions – develop a business continuity plan. Consider the ability for employees to work from home.
- Provide hygiene materials such as tissues, hand soap and sanitizer.
- Have employees disinfect all personal hard surfaces as referenced on the product label.
- Educate and inform all employees of pandemic status and proper infection control procedures.

## Make sure your **team knows**:



To **stay home if ill** per your company illness policy



To **contact you if:**

- They were exposed to someone **confirmed to have COVID-19**
- **They reside in a restricted area**



**How to limit exposure** by avoiding large gatherings and close contact with people who are coughing or sneezing.



**How to keep business operationally ready during shutdown or quarantine:**

- Make sure regular cleaning and **disinfection** continues to take place.





For more information contact  
your Ecolab Representative  
or visit **[ecolab.com/coronavirus](https://www.ecolab.com/coronavirus)**