

FAQs for Electrostatic Spraying

WHAT IS ELECTROSTATIC SPRAYING AND HOW DOES IT WORK?



Electrostatic spraying devices apply an electric charge to liquid particles. This charge causes the droplets to behave like tiny magnets. Because the droplets are all given the same charge, the droplets repel each other to spread out evenly across the surface being sprayed. This provides uniform and comprehensive coverage of surfaces, making product application very efficient. Environmental surfaces often have the opposite charge on their surface, causing the droplets to be attracted to the object being sprayed. These devices and products are not designed to treat the air. Hard surfaces must remain wet for the specified dwell time to achieve disinfection.

What is the difference between trigger spraying and electrostatic spraying?

TRIGGER SPRAYERS

Traditional trigger sprayers provide a manual method of spraying product, with nozzles that can often adjust between a fine and coarse spray. They are excellent tools for delivering product in a very directed manner. They are well-suited to small and mid-sized spaces.

ELECTROSTATIC SPRAYERS

For mid- to larger-sized spaces, electrostatic sprayers can provide many efficiencies. Electrostatic sprayers provide a continuous spray, making it very easy to evenly and consistently treat broad surfaces. An electrostatic sprayer also applies an electric charge to the droplets, allowing them to evenly spread across the surface being sprayed.

What products can I use through an electrostatic sprayer?

Electrostatic sprayers can be very versatile tools, when used according to the manufacturer's directions. They can be used to efficiently apply sanitizers and disinfectants to a wide variety of areas. Do not use flammable or oil-based products through an electrostatic sprayer.

Specific testing is required to demonstrate that sanitizers and disinfectants still provide the appropriate level of efficacy (i.e., ability to kill microorganisms) when used through an electrostatic sprayer. Please refer to your Ecolab rep for more information on recommended disinfectants and sanitizers for electrostatic spraying prior to use.



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I already own an electrostatic sprayer. How do I know if my electrostatic sprayer will work?

There are many versions of electrostatic sprayers available today. To see if a particular sprayer would be recommended for use, refer to the considerations at right. Always follow the manufacturer's directions for use.

- + Ensure the internal components of the sprayer are compatible with the chemistry being used. Contact the sprayer manufacturer for more information.
- + Ensure that the sprayer delivers droplets that are limited to a volume median diameter (VMD) greater than or equal to 40 μm , regardless of the ability to change nozzles.
- + Ensure the sprayer has the capability to add an electrostatic charge to the droplets. If there is an ON/OFF switch, ensure the switch is set to ON.
- + Ensure the sprayer allows the user to spray surfaces from no farther away than 2 feet. Consider the location of outlets for corded units.

What are recommendations for setting up and storing electrostatic sprayers properly?

Follow the manufacturer's specific instructions for use. Some best practices for use are:

- + Start with a fully charged battery (for battery-operated units).
- + Fill product to the appropriate volume. Do not overfill tank.
- + Label the tank with the appropriate identifying product information.
- + Lock or secure tank into the sprayer to prevent leaks or spills.
- + Ensure the nozzle is set to a droplet size of 40 μm or greater prior to spraying.
- + Before storing or filling with a different product, fill the tank with water and spray through unit to rinse the internal components and the nozzle. This will help prevent potential product interactions, clogging, or loss of useful life of the unit.
- + Disconnect the tank from the sprayer when not in use.
- + If the nozzle becomes plugged, soak in warm, soapy water to loosen the blockage. If the nozzle is removable, remove it from the unit prior to soaking. Do not soak electronic parts of the unit.



What Personal Protective Equipment (PPE) is required to use an electrostatic sprayer?

Customer and user safety is of foremost importance to Ecolab. We have been and will continue to work closely with customers and all regulatory bodies to ensure our products meet the highest standards of efficacy and safe use. Refer to the product Safety Data Sheet (SDS) for appropriate PPE to use when handling the chemistry. When using disinfectants and sanitizers through an electrostatic sprayer, refer to the specific product's direction for use through electrostatic sprayers to determine additional PPE requirements, such as an N95 mask or half-face respirator. Avoid product contact with eyes, skin and inhalation during treatment. Ensure spraying is away from user's breathing zone.

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How do I use an electrostatic sprayer?

Follow the manufacturer's specific instructions for use.

BEFORE SPRAYING

Remove all bystanders and animals from the area. Ensure all food and food stuffs are removed from the area. Check for general surface compatibility or for soft surfaces prior to use. Avoid spraying in confined spaces with poor ventilation. Ensure that the electrostatic function is turned on for models that have the functionality to toggle on/off. Prior to treating electronics, sensitive, or high-value items, please consult with the manufacturer.

WHILE SPRAYING

Electrostatic spraying should be conducted in a manner that minimizes exposure to customers and staff. For best coverage, spray surfaces that are no more than 2 feet away from the nozzle of the sprayer. When spraying, move from sprayed areas to unsprayed areas whenever possible, and allow a 15-minute resettling time before re-entry into the space to allow small respirable droplets to settle. Be cautious about overspray.

AFTER SPRAYING

For best performance, wipe surfaces after spraying to remove soils and any excess chemistry. Hard surfaces must remain wet for specified dwell times to achieve disinfection efficacy. Surfaces may also be allowed to air dry. Prior to re-opening the area, it is recommended to clean or mop the floor to remove any overspray that settled.

WHAT ARE SOME DO'S AND DON'TS FOR ELECTROSTATIC SPRAYING?

DO

- DO consult with your Ecolab representative to learn about recommended products.
- DO follow the directions for use for any chemical that is sprayed.
- DO wear the appropriate Personal Protective Equipment (PPE).
- DO allow the surfaces to stay wet for the required contact time for disinfectants and sanitizers.
- DO ensure food and food related items are removed from the space.

DON'T

- DON'T use flammable products through an electrostatic sprayer.
- DON'T use electrostatic spraying to treat the air.
- DON'T spray directly on people or animals.
- DON'T spray electronics, sensitive, or high-value items unless this application is confirmed with the manufacturer.
- DON'T spray areas with sources of heat, open flames, sparks, or other ignition sources.

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Should I be concerned about overspray?

Overspray can occur when product lands somewhere other than the place it was intended. It can be avoided through carefully targeted application of product, and by turning the sprayer off when moving from one surface to another.

If overspray occurs, use a damp cloth to remove product from undesired areas. Ensure that floor cleaning is done after the completion of electrostatic spraying to remove any overspray from the floor.



What is the difference between fogging and spraying a disinfectant?

The EPA considers spray applications to be a separate method of applying a disinfectant from fogging and misting applications, and they use the method in which the product is applied to differentiate between them.

Traditional spray applications include the use of trigger pump sprayers, aerosols, and hand-held manual or mechanical pressure sprayers. Electrostatic spraying is also considered to be a different application method than traditional spraying.

Fogging or misting includes two common scenarios:

- 1 Use of an automated fogging machine that is placed in an enclosed space and controlled remotely with no humans or animals present in the space being treated;
- 2 Use of a hand-held fogger that is operated by an applicator who is wearing proper PPE and they apply the product in a space where no other humans are present.

For a disinfectant or sanitizer to be used by either method of application, it must have supporting directions for use on the EPA approved product label for that specific application. This demonstrates that the product is able to achieve the appropriate level of kill when used through a specific application.



What does resettling time of 15 minutes mean?

Electrostatic spraying should be conducted in a manner that minimizes exposure to customers and staff. Prior to spraying, the area to be treated should be put out of service. After spraying, wait 15-minute prior to re-opening the area to allow any small respirable droplets in the air to settle. After 15 minutes, the area may be re-opened and put back into service.



What do I do if I have issues with my Electrostatic Spraying Equipment?

All Victory electrostatic equipment comes with a 1-year warranty for defective parts. If you experience equipment issues, contact Victory customer service directly at (800) 741-7788 or contact your Ecolab Representative.