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## Technical Report

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# **ELECTROSTATIC DISINFECTANT BACKPACK SPRAYER**

**with Rechargeable Lithium-ion Battery**

- Capacity: 16L (4.2 Gallon)
- Rechargeable Lithium Ion dry cell battery
- Charging Input voltage: 110 AC, 50Hz
- Output voltage: 12V DC, 1.2A
- Working pressure: 0.10 to 45mPa
- Usual battery specification: 12V/12Ah
- Droplet size: Brass Nozzle 40 micron
- Droplet size: Red Nozzle 160 micron
- Operating speed: 3000-15000m<sup>2</sup>/h
- Working time: Full Charge: (fog) 5-6 hours
- Working time: (fog and blower) about 2 hours
- Spraying flow: 3L/min
- Electrostatic generator output voltage: 28kv]
- Spray Distance: (Fog mode) 2-3 feet
- Spray Distance: (Blower mode) up to 18ft



**Always wear the appropriate PPE protection while using the unit**

**Chemex Industries, Inc.**

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— continued —

### **Fine Atomization:**

These sprayers were designed with a very thin nozzle. Almost 4 times smaller than a conventional sprayer. This produces an extremely fine mist allowing it to be airborne longer and provide more complete coverage of the surfaces being sprayed.

### **Strong Adhesion:**

The electrostatic sprayer sends out your chemical solution as a charged particle. This particle is the opposite electrical charge of the surfaces being treated and therefore your treatment solution is strongly attracted to those surfaces. Once it reaches the surface it wraps itself around the entire exposed area providing 360-degree protection. This gives you the best disinfecting (or pest control) possible and saves you the amount of disinfectant or insecticide need to achieve the same results with a conventional sprayer or fogger.

### **High Efficiency:**

The electrostatic mist is so fine that it does not over saturate surfaces and therefore drip off of the treated surface. It forms a film that completely encapsulates the surface on all sides due to the particle attraction. For example, no matter which angle you disinfect a surface from, the charge created by the electrostatic sprayer makes the disinfectant wrap around and cling to the entire surface. This improves the efficiency and effect of the product being sprayed. With this “touchless” method, this can all be achieved from a safe distance for the user. When used with the proper disinfectant (or insecticide), it will kill unwanted pathogens or insects from every targeted surface. This unit is designed to treat more square footage effectively and safely in less time.

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