

# The First and only Botanical Dry Fog Disinfection System in the **United Arab Emirates**

Maximum Efficiency with Savings in Time, Effort and Cost

FogClean Machine for Decontaminating Surfaces and Spaces

## **Dry Fog System**

Disinfecting surfaces and spaces using dry fog technique is extremely vital today due to its superb efficiency and cost-effectiveness. Compared to disinfection sprayers, this technique allows disinfecting a wider area in a shorter time span as well decontaminating airborne pathogens effectively due to the size of such pathogens and the micron size produced by the machine nozzle (3.9 micron average).

The unique ultrasonic mist nozzle of the machine's gun has the ability to break down the disinfectant into 10 microns or smaller that enable the created tiny droplets to cover hard to reach areas. In addition, these microscopic droplets produced by the ultrasonic mist nozzle have the ability to spread throughout any space allowing a much faster coverage area compared to other sprayers available in the market today.

This unique dry fog technique is designed to provide users with more effective decontamination solution that ensures a healthier living environment with a lower cost of manpower, equipment, and material.



## Description of the system

The machine is designed in a backpack style to allow users to maneuver in the target area being disinfected with ease and comfortability. This practical and portable design of the machine assists users to move without any difficulties in order to disinfect the covered area fast and more effectively with either dry fog or wet mist.

The pressure settings located on the nozzle gun provide users with the option to switch between dry fog, for hardto- reach areas resulting in extremely effective elimination of airborne microbes, or alternatively users can switch to wet mist setting to decontaminate regular and frequent touch-point areas. This unique machine has significant operating features.

Its 3 gallon-tank (11.34 liters) can offer a complete decontamination of a 290 square-foot space (27 square meters) in just below 1 minute with a minimal consumption rate reaching (0.07) gallons (0.26 liters) of the disinfectant. It is good to mention here that based on the aforementioned figures, this machine is capable to completely sanitize a 10,000 square-foot building in 60 minutes using only 1-2 gallons (7.5 liters) of the solution used.







## System advantages

- Its nozzle is able to produce microscopic sized droplets that provide a wider coverage of the disinfected surface area
- The size of the droplets produced by the nozzle is almost compatible with most sizes of viruses and bacteria (airborne pathogens)
- The nozzle produces dry fog that leaves no residue on the target surfaces
- The machine gun provides the user with dry fog and wet mist controller
- The machine consumes minimum solution when used

### THE IMPORTANCE OF THE PARTICLE SIZE

From a scientific view point the size of the disinfectant droplets is a pillar to ensure highly effective disinfection process. There are 2 major reasons why droplets size is important.

#### First:

If these droplets share almost the same size of airborne pathogens, there is a much better chance for these droplets to collide (this process is called Agglomeration) with these viruses and bacteria that spread infection and when this objective is achieved, the space around us and the air we breathe is much healthier for us to practice our daily routine without worrying about these pathogens. Other sprayers normally produce larger droplets (above 40 microns) that rarely collide with these pathogens leaving the target area with higher possibilities of contamination. However, this unique machine is designed to produce droplets size of 0-10 microns (3.9 microns average) which is almost the same size of most pathogens in the air, such size allows these droplets to agglomerate with airborne viruses and bacteria and eliminate them immediately.

#### Second:

The smaller the droplet particles produced from the ultrasonic nozzle, the larger the area covered by the disinfectant fog. Remarkably, such technique that relies on dry fog disinfection blankets the target area and consumes very little amount of the solution used whether it is dry or mist and eventually leading to cutting cost on time and manpower.





#### **HOW IS THE MACHINE POWERED?**

The machine does not require any batteries or electric connection to operate, yet it only requires an air compressor. For small or medium applications it is recommended to use a nozzle that functions at 80 psi which is capable of outputting 3 SCFM, while larger application disinfection requires a nozzle that utilizes 7.5 SCFM

## What are the typical uses for this for machine?

This unique machine is ready to provide effective disinfection to a countless number of commercial and residential locations such as; houses of all types, medical clinics, gym facilities, warehouses, offices, restaurants, hotels and many more. Its splendid features are not limited to the coverage area it can disinfect, but also the microscopic droplets size it produces is almost compatible with the sizes of airborne viruses and bacteria making it extremely effective in decontaminating spaces and surfaces.



## BAC Botanical Antimicrobial Cleaner -

Reimagining the Sanitization Experience 99.999% effective Biocide.

Safe for humans, pets, bees, butterflies and birds. Certified by:EPA / FDA

## / Dubai Municipality.

More than 20 years of research by chemists, engineers and experts have succeeded in creating a solution of organic plant ingredients recognized as a safe product by the Environmental Protection Agency and the US Food and Drug Administration and approved in the United Arab Emirates. Within minutes of application, this solution treats moldy odors, microbial and viral organisms causinginfectious diseases, is non-toxic or irritating to the skin and does not cause any corrosion or corrosion, making it the leading antimicrobial cleanser for commercial and residential use.



Strong enough to clean surfaces in hospitals, schools, nurseries and clinics. However, this product is gentle enough for household surfaces, including: glass, stainless steel, wood, carpets, and fabrics. It is the best to use as washing products. And when used in industrial treatment projects, it cleans and provides the required protection against mold that damagessurfaces in the future.







## Where to use:

- Hospitals
- Common areas
- Electronics, including touch screens, display screens, keyboards, and water-sensitive equipment
- Elderly care facilities
- Day care facilities
- Public buildings
- Airports
- Cruise ships
- Schools
- Sports facilities

## **Conclusion:**

BAC provides a sustainable alternative to environmentally destructive products. BAC can be applied as a mist (it does not need to be shaken or wiped) and unlike many harsh chemical products, our product contains winter green ingredients and fresh lemons.

The research team at BAC has created a formulation with whole plant essential oils fromnatural sources, to replace toxic products and reimagine highly effective green solutions.

BAC is safer and organically grown antimicrobial, antiviral, and antifungal.