



# Applications for First Responders

## Binary Ionization Technology (BIT™)

# When Clean is not Clean Enough

## Technology Solutions for Critical Incident Response

### • ***BIOLOGICAL / CHEMICAL WARFARE AGENTS EFFECTIVENESS*** –

BIT has proven effective in reducing spores, viruses, bacteria, and mold within seconds in third party lab testing. BIT has reduced GD, VX, and HD 98% in less than 2 minutes in government labs. BIT is effective against organophosphates such as pesticides.

• ***MULTIPLE PRODUCTS FOR THE FIRST RESPONDER*** - The BIT product line can be packaged in a variety of products (see back). Titan is designing products for decontaminating surfaces, air volumes, gloves, and contained areas. The product only requires gloves and goggles to apply.

• ***SAFE AND EASY TO APPLY*** - The BIT product will not harm a building, it's contents, or occupants. The product consists of a sprayer and solutions that can be set up and changed out in seconds through quick disconnects.

• ***ENVIRONMENTALLY FRIENDLY*** - The BIT spray breaks down into water and oxygen and does not require any post treatment clean-up.



*What can BIT™  
do for you . . .*



Titan's focus and commitment to:

- EMS, Fire and Rescue
- Hazmat, Bomb Squads
- Hospitals
- Public Health Agencies
- Risk Management Agencies
- Law Enforcement
- 911 Emergency Centers



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[www.bitgrouptech.com](http://www.bitgrouptech.com)

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# Biological Test Results

The following chart exhibits test data performed in Independent Lab testing.  
Titan makes no claims on product performance. BIT is not EPA or FDA approved.

Initial Concentration (CFU)	BIT Exposure Time (Spray Volume)	Post Exposure Concentration (CFU)
<i>Weaponized Bacillus atrophaeus</i> spores (1)		
From $2 \times 10^1$ to $2 \times 10^8$ Cells	60 seconds (10 ml)	0 (NO LIVING ORGANISMS)
<i>Bacillus atrophaeus</i> vegetative cells (1)		
From $1 \times 10^1$ to $1 \times 10^9$ Cells	60 seconds (10 ml)	0 (NO LIVING ORGANISMS)
Biofilm (2/3 <i>Bacillus</i> and 1/3 <i>Pseudomonis</i> ) approximately 1/8" thick (2)		
$1 \times 10^6$ Cells	150 seconds (25 ml)	0 (NO LIVING ORGANISMS)
<i>Stachybotrys chartarum</i> spores (3)		
$1 \times 10^6$ Cells	5 seconds (.83 ml)	0 (NO LIVING ORGANISMS)
Virus bacteriophage P22 HT105 (3)		
$4 \times 10^5$ Plaques	5 seconds (.83 ml)	0 (NO LIVING ORGANISMS)

(1) Tests were conducted by the University of Southern Florida Center for Biological Defense.

(2) Test was conducted by Beckman-Coulter.

(3) Test was conducted by Microbial Insights.

## Products

### Glove/Hand Kiosk

- Self-contained units for automatic hand cleaning

#### Applications

- Cleanrooms
- Device manufacture
- Food handling
- Patient contact



### Sprayers

- Family of nozzles and electronic activators

#### Applications

- Mobile handheld sprayers
- Personal "spray cans"
- Room "foggers"
- OEM equipment



### Decontamination Chambers

- Fixed volume
- Applications
  - Instrument sterilization
  - Biological isolators
  - Burn treatment



### Air Purification

- Retrofit units for conventional HVAC

#### Applications

- Critical buildings
- Commercial aircraft
- Hospitals
- Residential



**TITAN**

C O R P O R A T I O N

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