Sporekill®

DISINFECTANT AEROSOL FOGGER

(Reg no. ACT5GNR529/243642/040/1199)

ICA International Chemicals contact details: +27-21-886-9812 | www.icaonline.co.za

A DISINFECTANT AEROSOL BREAKTHROUGH TO KILL HARMFULL AND UNWANTED MICROORGANISM

Building on the internationally tried and tested efficacy of **Sporekill®** registered as fungicide & bactericide in crop protection (SA Reg. no. L7115 (Act 36 of 1947) and as a broad spectrum disinfectant of pathogenic micro-organisms (SA Reg no. Act29GNR/27555/070/210), this new user-friendly **Sporekill® Disinfectant Aerosol Fogger** will greatly assist in controlling of harmful microorganisms, wherever they occur, even in difficult to reach areas. **Sporekill®** also comply with SANS 1853 (Disinfectants and detergents for use in the food industry). **Sporekill®** is known to be highly effective against a wide range of bacterial & fungal plant pathogens and pathogens compromising human & animal food safety, some listed below:

Plant pathogens genera:

Acidovorax, Acremonium, Alternaria, Aspergillus, Botrytis, Cladosprorium, Clavibacter, Colletotrichum, Erwinia, Erysiphe, Fusarium, Galactomyces, Geotrichum, Hyaloperonospora, Leveilulla, Monilinia, Mucor, Mycosphaerella, Pectobacterium, Penicillium, Phaeoacremonium, Phaeomoniella, Phomopsis, Phylosticta, Phytophthora, Pseudomonas, Pythium, Phoma, Ralstonia, Rhizoctonia, Sclerotium, Sclerotinia, Sphaerotheca, Streptomyces, Taphrina, Uromyces, Verticillium, Xanthomonas, Xylophilus.

Pathogenic microbial genera that compromizes animal & human safety:

Acinetobacter, Aspergillus, Bacillus, Candida, Clostridium, E. coli, Klebsiella, Lactobacillus, Micrococcus, Proteus, Penicillium, Pseudomonas, Saccharomyces, Salmonella, Shigella, Staphylococcus, Streptococcus, Trichophyton, Vibrio.

WHAT IS SPOREKILL® DISINFECTANT AEROSOL FOGGER

Sporekill® Disinfectant Aerosol Fogger is a ready-to-use specialized formulation of the highly effective disinfectant **Sporekill®** in a pressurised can, which, once triggered will completely empty, resulting in a very fine aerosol mist to disinfect any closed area of approximately 35 m^3 per aerosol can. Examples of such closed areas in the agricultural industry include (but not limited to) the following after the area is cleared from any food stuff, animals & humans:

- inside of trucks transporting food stuff
- cold rooms
- fruit & vegetable & food packing facilities
- fruit & vegetable degreening & ripping rooms
- storage & sample rooms
- germination chambers
- misting & growing chambers
- greenhouses
- transport containers
- laboratories & sporulation chambers
- food processing areas
- BA & CA storage room for pome fruit
- many more.

ADVANTAGES OF SPOREKILL® DISINFECTANT AEROSOL FOGGER

- Been tested and found to be very effective against wide range of pathogenic & unwanted micro-organisms compromising food safety and pre- and post-harvest plant diseases
- Non-corrosive to various metals, plastics, rubber and other surfaces
- Been proven to be less prone to the development of resistance than other disinfectants
- Shown a strong residual effect against microbial pathogens on hard surfaces
- Been shown to kill certain pathogens with only as little as 10 second contact time

EFFICACY TESTS OF SPOREKILL® DISINFECTANT AEROSOL FOGGER

TRIAL 1: DEPT OF MICROBIOLOGY & BIOCHEMISTRY, UNIVERSITY OF THE FREE STATE

In independent laboratory tests, the efiicacy of **Sporekill® Disinfectant Aerosol Fogger** has been demonstrated at low temperatures (cold room) and at high temperatures (incubator at 37°C). High levels of efficacy were experienced under both conditions (Fig 1 and Fig 2). Very limited bacterial growth was seen on the disinfected surfaces even after 5 days, illustrating residual activity.

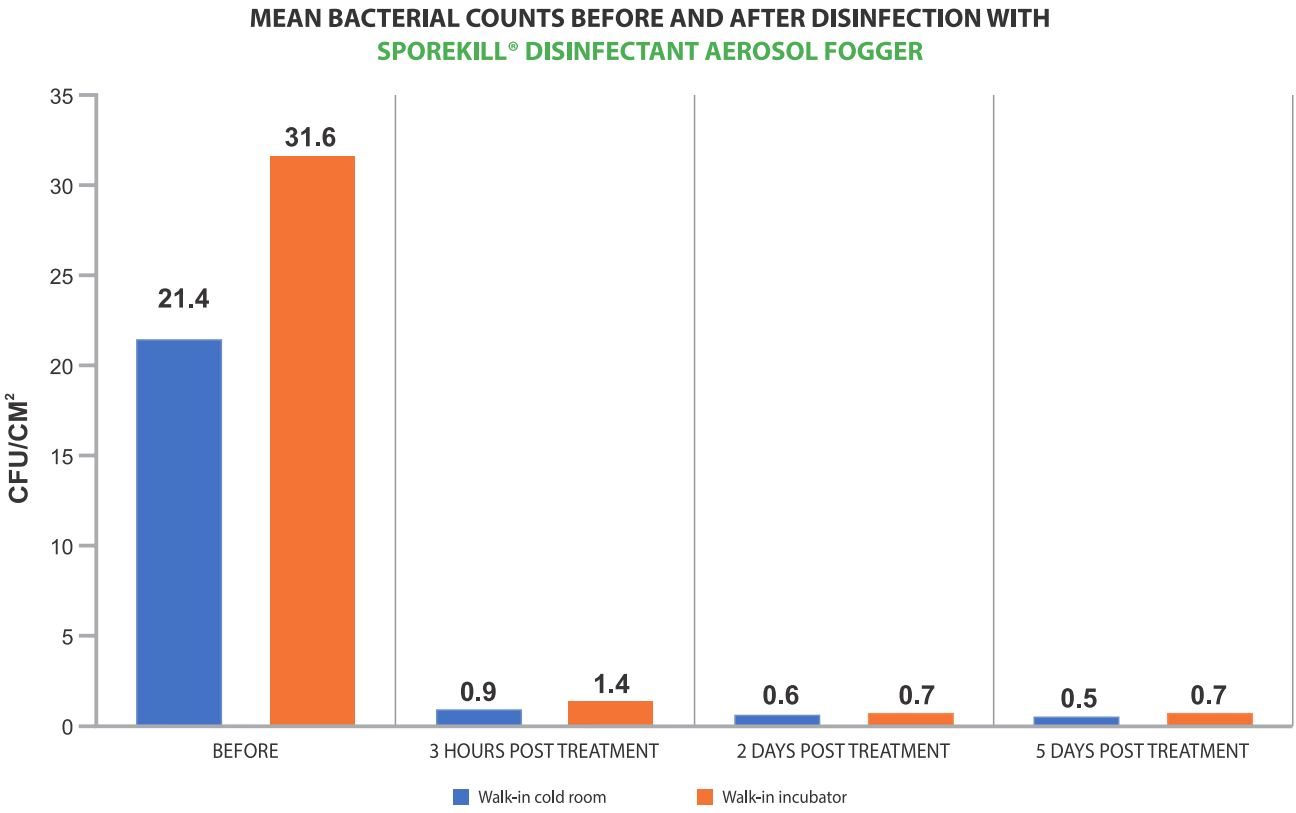


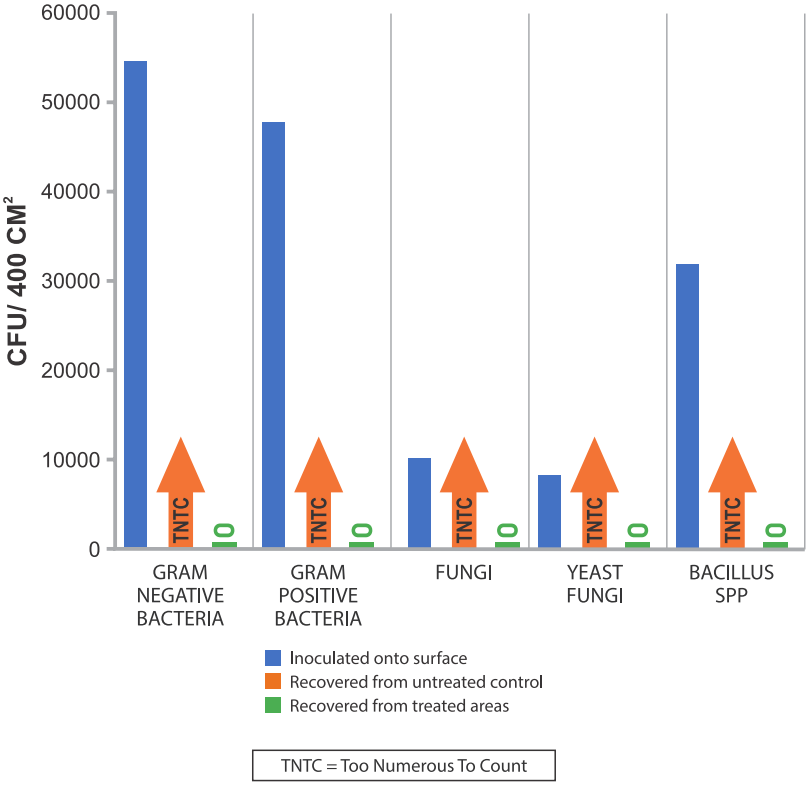
Figure 1: Bacterial counts before and after disinfection with the Sporekill® Disinfectant Aerosol Fogger in a cold room and incubator.

Figure 2: Example of contact plates collected before and after treatment with the Sporekill® Disinfectant Aerosol Fogger.

TRIAL 2: INDEPENDENT SANAS ACCREDITED LABORATORY

Efficacy trials by independent testing laboratory were conducted inside controlled sealed chambers (Chamber = Length 3.3 m x With 2.4 m x Hight 2.6 m). Seven pathogen species which include Gram positive bacteria, Gram negative bacteria, fungi, yeast and hard to kill *Bacillus subtilis* spores were inoculated onto tiles and placed around the chamber. One 500 ml **Sporekill® Disinfectant Aerosol Fogger** was released in the treated chamber while the control chamber was not subjected to the test product. After prescribed contact periods (5 min for bacteria, 15 minutes for fungi & yeast and 1 hour for Bacillus spores), agar contact plates were brought into contact with each inoculated tile surface to determine the killing rate. A total of 25 contact plates per pathogenic organism were used which calculated to a total of 400 cm^2 agar plate surface. All contact plates from the **Sporekill® Disinfectant Aerosol Fogger** treated chamber and untreated control chamber were incubated at 30°C for 48 hours to determine the % killing rate.

EFFICACY OF
SPOREKILL® DISINFECTANT AEROSOL FOGGER
ON SURFACE SANITATION



DIRECTIONS FOR USE

USE ONLY AS DIRECTED

1. Shake container before use.
2. Remove humans/animals/produce/plants/feedstuff and fodder from space to be treated.
3. Highly flammable: Put off all electronics and extinguish all flames before use.
4. Protect food utensils and packaging materials from direct exposure (cover with paper/plastic sheet).
5. Pre-clean dirty surfaces with an appropriate detergent, rinse and dry. Efficacy of disinfectant will be compromised if surfaces are soiled.
6. Place the canister on a solid surface in centre of area to be treated, or evenly distribute canisters if more than one is required, open cupboards, close all windows and doors, seal any openings. **Sporekill® Disinfectant Aerosol Fogger** can be placed on a raised surface if area is higher than 4 m.
7. Activate the **Sporekill® Disinfectant Aerosol Fogger** and leave the area immediately.
8. Allow 60 min for the aerosol to disperse and settle before re-entry.
9. Re-introduce fruit/vegetable/plants only after fumes have cleared.
10. Thoroughly rinse or wash treated linen and clothing that will have skin contact during use, to remove disinfectant residues.
11. One canister will disinfect ~35 m^3 from fungi and bacteria, including spores.

ICA INTERNATIONAL CHEMICALS

Sporekill® Disinfectant Aerosol Fogger
(Didecyldimethylammonium chloride: 0.88 %).
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ICA International Chemicals (Pty) Ltd. | Reg. No: 2001/013319/07
Tel: +27-21-886-9812 | www.icaonline.co.za | 28 Planken Street,
Plankenbrug Industrial, Stellenbosch, 7600, South Africa.