

THE MOST ADVANCED MULTIPURPOSE CLEANING PROTOCOL IN THE WORLD
-DISINFECTANT AND SUPER SANITIZER-



POULTRY HOUSE CLEANING AND DISINFECTING

OVERVIEW

- AKTIVORA is Environmentally Friendly and Biodegradable.
- AKTIVORA easily destroys and removes Biofilm, Germs, Algae, Mould, Dirt and surface contamination/soiling whilst giving long lasting protection.
- AKTIVORA utilises Renewable Plant Extracts as key ingredients.
- AKTIVORA works well on ALL surfaces without tainting.
- ► AKTIVORA enhances the efficacy and longevity of the disinfection processes.
- Usual disinfectants struggle to remove Biofilm dirt Algae and surface contamination.
- Usual disinfectants have only 10-15% efficacy on plastic surfaces.
- AKTIVORA makes it impossible for Germs and Viruses to build up a resistance.
- AKTIVORA is a Broad Spectrum Killer against ALL Germs and Viruses, including Superbugs.
- AKTIVORA is a Super Efficient Multipurpose Cleaner, safe to humans and animals.



The Problem...

- Treating and preventing infections is becoming very expensive, that is an undeniable fact. Decontaminating your poultry house is crucial to prevent Avian Flu, Salmonella Enteritidis (SE), Marek's disease, mycoplasma, respiratory viruses, E. coli., mites, and other poultry problems. DAERA Publication- Salmonella control: Effective Cleaning and Disinfection of Poultry Housing.
- The financial cost of these infections, in terms of the economic consequences to the world and the physical, social and psychological costs is devastating. In order to reduce Avian Flu, SE and other health risks, a complete washing and disinfection protocol of the poultry house after each cycle is mandatory.

So,...How does AKTIVORA work?

- AKTIVORA combines a unique system of chemistry and physics that works in reverse of the current and existing cleaning/disinfecting technologies.
- AKTIVORA has "Seek and Destroy" molecules that penetrate and break apart biofilm and dismantle the cell walls of germs, at the same time, dehydrating them so they effectively "implode" therefore, **building a resistance to this technology is impossible!**
- AKTIVORA provides a *Super Strong Electrostatic Positive Charge* that coats and protects treated surfaces from further contamination of Germs, Dirt, Algae and surface soiling for prolonged periods. This protective barrier also prevents bacteria from feeding and breeding by cutting off the food source, at the same time the electrostatic effect also disrupts and kills germs. It is also accumulative, meaning, the more you use it, the stronger the protection, as any broken surface matrix will "heal itself" and therefore you need apply significantly less for every application thereafter as the previous coating is still active.
- AKTIVORA penetrates up to 10 times more efficiently than conventional cleaners and disinfectants and therefore delivers **Unrivalled and Superior** performance in kill rate efficiency and cleaning power, with log kills up to **99.999999%**.

Disinfection Protocol for Poultry House

CUSTOMERS WILL BE SUPPLIED WITH THE READY TO USE PRODUCT.

- 1) Remove all the usual feeding tracks and drinkers etc from the enclosure, then remove all heavy soiling as much as possible and wash down the area with a power-washer as you normally would to remove any remaining soiling, leave to dry as much as possible with no puddles or excessive wet spots.
- 2) Wearing suitable PPE, begin the disinfecting process by using the supplied "ready to use" product, spray or fog the area and allow to soak until dry (no need to rinse off).
- 3) Repeat the above cleaning steps every rotation of new birds.

Note: You can use a power-washer or fogger, (including electrostatic fogger) however, fogging is more economical compared to power-washing the product to the surfaces).

Fogging: Benefits & Limitations

A highly effective way to disinfect high levels of horizontal surfaces, hard to reach areas and confined spaces such as extractor units. Fogging is considered to be a top-level of disinfection and should not be considered as a replacement for cleaning and disinfection practices. Fogging is not suitable for disinfecting closed sections such as electrical control panels.

Fogging systems deliver very small, fog-like, droplets, of disinfectant, that are deposited on surfaces based on the direction of spray and the effect of gravity. Electrostatic foggers delivers charged droplets that are actively attracted to surfaces, including crevices and out of sight surfaces regardless of the direction of spray for complete **wrap-around** disinfection coverage.

Standard Fogger:

BENEFITS

- Fogging is effective at reducing air-borne contaminants
- Effective at disinfecting hard to reach areas
- Highly effective at disinfecting horizontal surfaces
- AKTIVORA has proven effective on surfaces and demonstrated up to 5 log reductions in 5 minutes.

LIMITATIONS

- •Only partially effective on vertical walls due to the presence of gravity, meaning the disinfectant will drip/fall.
- Not as effective at disinfecting the undersides of horizontal surfaces.
- Has no impact on closed areas electrical boxes etc
- Electrical components can be damages by the fog if not bagged up or removed from the area.



Electrostatic Fogger:

It is a process that quickly and evenly coats a surface with a disinfecting solution. The electrostatic applicator gives a positive charge to the disinfecting solution as it exits the nozzle, allowing the solution to stick to a targeted surface with 360-degree coverage due to the fact that most surfaces are negatively charged due to them being naturally grounded, and so attract the positively charged droplets. This leads to a more thorough and even coating of disinfectant across all surfaces, even those that are harder to reach with traditional wet spraying methods.

BENEFIT (Coverage) The electrostatic effect covers 360 wrap-around on surfaces. In so doing, the chemical not only reaches visible areas, but also reaches beyond the front surface to coat the underside and backside of objects.

Positive charged droplets will strategically seek and kill contaminations on surfaces.

BENEFIT (Accuracy) These positive charged agents are not just sprayed on the surfaces, they will get attracted to negative contaminated surfaces.

Positive charged droplets will repel each other and get attracted to contaminations, which eliminates the excessive use chemicals.

BENEFIT (Efficiency) The use of chemicals is a must when we disinfect, but electrostatic technology will utilise a lot less chemicals than needed with better results.

For these reasons, electrostatic spraying is an excellent disinfection's solution for the below:

- Prevent the spread of infection, cutting down on germs and potential illness in your poultry houses
- Avoids cross contamination and the movement of bacteria from one surface to another.
- Applies chemicals in a more efficient, uniform and controlled manner, eliminating the dangers of overuse.



Electrostatic fogging and how it works. Continued...

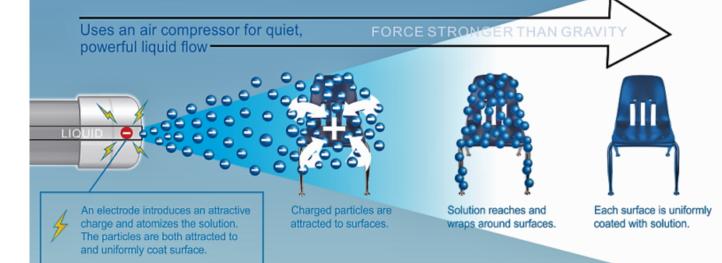
The droplets will reverse direction and move against gravity to coat even hidden surfaces.

Atomized droplets pass an electrode inside the nozzle. Positively charged electrons are attached to the droplets.

ELECTRODE

The positively charged droplets are carried in an air stream towards the surface. Since the surface has a natural neutral or negative charge, the droplets are magnetically attracted to the surface.





How to Fog?

- 1. It is critical that the area to be fogged has been thoroughly cleaned following the recommended procedures (cleaning practices) up to and including the rinse (if applicable).
- 2. Any ceiling chill/evaporator units should be switched off, with any water sensitive equipment to be removed or sealed.
- 3. A thorough inspection of the area should be performed to ensure that it is visually clean (random ATP testing should confirm the level of cleanliness). Any areas that are either visually contaminated or fail the ATP test should be recleaned before.
- 4. The fogging units should be charged with the required volumes of AKTIVORA at recommended concentration see below calculations.
- 5. When charged with the required amount of disinfectant the unit(s) should be placed towards the centre of the area and airlines/electric supply attached. (Make sure air supply is off). FOR SAFETY PURPOSES THE AIR-LINE SHOULD BE CONNECTED TO A SUPPLY OUTSIDE THE AREA TO BE FOGGED.
- 6. Take care to ensure that the path of spray from the jets will not be immediately obstructed it is necessary for the fog to disperse and saturate the atmosphere, not be sprayed directly onto equipment surfaces.
- 7. When the unit(s) is in position, ensure all personnel have left the area and any doors or strip curtains are closed to seal the area and place warning/no entry signs at ALL potential access points.
- 8. Once the area has been fully prepared the air supply to the unit(s) should be switched on the time(s) required to discharge the unit(s) completely are shown in the below calculations.
- 9. When the specified time is reached the disinfectant has been fully discharged into the atmosphere and the air supply should be turned off.
- 10. Effective fogging will require the area to be vacated and free of all employees for at least 60-90 minutes from the air supply being turned off.
- 11. The chill/evaporator units should be switched on to enable the environment to return to its maintained temperature.
- 12. On completion the airlines should be disconnected, and the unit(s) rinsed and flushed with clean water and returned to store.

It must be stressed that <u>no-one</u> should enter the fogged area for AT LEAST 60 minutes (time dependent upon disinfectant used) after the air supply is turned off – unless they wear a respirator and have full skin and eye protection.



Site Security...



All of the above is only as good as your total site security.

Foot baths must always be used before entering poultry houses. Boots much be cleared of soil with a stiff brush and then cleaned before using the foot bath.

Keep vehicle tyres, paths and areas around the farm as clean as possible. Litter and refuse are a potential source of infection.

Thank you for choosing AKTIVORA as your Farming Disinfectant.

AKTIVORA is bottled in N.Ireland **ensuring no supply issues** plus you have local technical and scientific support available to you.



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