

AVILIM Uses for Poultry Industry www.AVILIM.com 2015

Production, breeding and slaughter of birds take place in an environment and in conditions favorable to bacterial, viral and fungal contamination. The birds are receivers and vectors for the reproduction of multiple germs, many of them pathogenic to themselves and to human consumers. The market's sanitary requirements grow both stronger and more restrictive. Both producers and the bird and egg processing industry have a great sense of awareness regarding the contents of microbes in their productions, as well as diseases that may affect animals, since it not only affects the quality of production that develops, but also its value on the market. Such is the level of awareness in each of the stages of this industry, that investigative methods and formulas are constantly created in order to find and develop products that are absolutely harmless for human or animal consumption.

Most common Diseases or conditions:

- Salmonellosis y Shigellosis (Tifus)
- Newcastle Disease – Estafilococias
- Micoplasmosis
- Bird Flu virosis, varicela by retrovirus.
- Aspergillosis pulmonar and intestinal
- Coccidiosis - Gangrenes (Chlostridium)
- Cólera Avis
- Diarrheas by E. coli and coliforms

Recommended Uses:

1) Water for Consumption

- Few times due attention is paid to the water that birds consume, this being a high incidence factor in the feed – egg conversion or the amount of meat produced.
- Is proven that the water chlorinated produces a decrease in the will to eat and drink.
- Treating the consumption water with 1.0 ppm of **AVILIM** not only eliminates bad odors but also produces better “tasting” and “fresher” water.
- Biofilms, which are protective biological bacteria growth plates, are generated in all mains carrying water for consumption.
- These Biofilms are only destroyed by ClO₂, ozone and UV light.
- As the other methods are impossible to install throughout the system, only **AVILIM** remains as the best solution to ensure quality water for animal consumption.

2) Disinfection of poultry barns and common areas

- Disinfection will be helpful at each chicken litter change in a barn by a misting “cloud”, using a machine that dispenses micro drops of AVILIM reaching walls and

ceiling, in order to reduce any pollutant present. In a few hours (3) they can be accessed and used again without any toxicity risk.

- Areas can be sprayed with the animals still inside, since the product is harmless, at the indicated concentrations, for both animals and personnel.
- The continued use of water treated with 25 ppm AVILIM removes all existing germs on floors and walls.
- Added to the benefit of disinfecting floors and walls, bacteria in the air and are eliminated.
- An element to be considered is that the oxidizing effect of products usually used for the cleaning of equipment, AVILIM does not oxidize metals or affect any part of facilities such as plumbing, separators, waterers, feeders, membranes and sprinklers.

3) *Spraying the animals*

- The plumage of birds is an easy setting and reproduction place of various microorganisms, especially fungi such as Aspergillus, which then pass to and lodge in the lungs and liver.
- There are studies of claw treatment caused by micro bacterial or fungal infections, especially when favored by weather, confinement or animal concentration. AVILIM treatment significantly helps control these infections and can recover the animal within a brief period.
- Treating animals with sprayed AVILIM in concentrations between 25 and 50 ppm avoids these problems.
- Using the misting systems to cool poultry farms to apply the recommended of AVILIM in the cooling water, avoids the use of iodophors and other products that can be toxic or harmful, both to birds as for the operators and facilities If the their application is not controlled appropriately

4) *Incubator Base*

- The use of AVILIM at 50 ppm in the egg incubator base prevents all infections in chicks at birth, decreasing the risk of death from other normally used disinfectants, sometimes illegal and/or carcinogenic.

5) *Spraying the eggs*

- A quick spray of the AVILIM to 50 ppm in either aqueous or alcoholic, dilution produces the immediate abatement of all the germs adhered to the shells, and prevent further pollution in the incubation or egg consumption.
- This is especially important for companies producing liquid or powdered eggs and its by-products, because inevitably, if skin is contaminated, it is very likely that it will also contaminate the product, and once contaminated is very difficult to treat, especially the liquid egg.

6) *Poultry transport*

- The disinfection of the cages used to transport birds from breeding to slaughter, is an element that should not be left to chance. For biological security and that the

health of the animals can be affected, notwithstanding the care that is given during its breeding.

- **AVILIM** is an excellent alternative for the disinfection of cages and trucks, both by its easy application, and because it is not corrosive or leaves toxic residue. Its effectiveness as a bactericide, fungicide and virucide is highly recognized in the food industry.

7) Equipment Sterilization

- Sterilization of equipment, countertops, and other equipment used in the slaughter of animals is a key factor in the quality of products, to such a point that you can have the best genetics, receive the best animals and the best teams, but if they are not properly cleaned and disinfected, it will directly affect the quality of the products, its image and its value.

- **AVILIM** is an excellent alternative that leaves no residue and its effectiveness as a bactericide and virucide, fungicide is highly recognized in the food industry.

- **AVILIM** does not interact with other chemicals, can be combined efficiently with detergents and descaling, since these do not affect its biocide efficiency nor this interacts with the first. That is a big difference with other biocide products, allowing a saving in steps and water consumption, time and energy to combine processes.

- Even quintupling the recommended concentrations, **AVILIM** does not affect in any sense polymers, silicones, plastics or metals of the facilities or equipment.

8) Washing and rinsing of processed parts

- One of the features of **AVILIM** is that generate a gas, that evaporates in the environment in matter of hours, not leaving any residues. What, in other industries, is counterproductive, since they require some residuality to prevent recurrent contaminations, for the food industry this is a great benefit.

- Washing parts with a solution of up to 50 ppm of **AVILIM** prevents contaminated superficial contamination, allowing to handle a sterile material in the working chain and extending thus its useful life.

- This wash or rinse, does not change in any way the organoleptic characteristics of the meat, that is, taste, smell or color.

- It is used efficiently in the world with excellent results in the agro-food industry

Microorganism	DCE ppm	time in minutes
• Staphylococcus aureus	0.304	0.5
• Staphylococcus faecalis	0.190	2.0
• Mycobac. tuberculosis	19.000	1.0-3.0
• Bacillus anthracis .	0.950	120.00
• Clostridium botulinum	0.950	120.00
• Pseudomonas florecens	2.090	0.25
• Escherichia coli	0.020	1.0
• Salmonella thyphi	0.040	1.0
• Aspergillus niger	38.000	60.00
• Adeno virus	0.080	6.10
• Polio virus	0.114	16.00
• Pseudo Rabia Virus	0.100	1.0

• Corona virus	0.090	2.0-3.0
• Parvo virus	0.080	1.0-2.0
• Gripe Aviar (H5N1)	0.80	2.0

What are other advantages of the AVILIM?

- **AVILIM** can be used together with any detergent, because it does not generate toxic or irritating fumes for the operators. It does not chemically interact with detergents. Also it can be used after the rinsing.
- Subsequent rinsing is not required.
- Acts as reverse catalytic and not as an oxidizer, so it does not oxidize steel elements or facilities, or impairs hoses or plastics
- Does not bind with organic matter, is not consumed by it and does not form THMS (trihalomethanes)
- Does not form chloramines or dioxins.
- It acts in a wide range of pH (4 to 10) and temperature.
- NON-TOXIC for animals, plants and humans.
- Is used in minimal amounts, easy dosage.
- Removes biofilm (only biocide that does)
- Not oxidizing or corrosive.
- It leaves no residual taste or smell

AVILIM Biodegrades in 72 hours