

THE MANY USES OF OXINE

By: K J Theodore

** A suggested read!



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No, I don't own stock in Oxine, but I do love it! Since I introduced a product named Oxine AH (Animal Health) to the fancy about four years ago, I have had so many questions about its effectiveness and many uses, that I thought it may be time to put something together that would answer the most popular questions in one place. So, in this article, I'm going to be covering **THE MANY USES OF OXINE**.

I first introduced Oxine as a medicinal treatment for upper respiratory fungal infections, as outlined in the first article I ever wrote for the *Poultry Press*. Oxine was certainly not anything new at that time, but it was new information to most of the fancy. It had already been used for decades in both the chlorination of municipal drinking water supplies, and was widely used throughout the commercial poultry industry. But few fanciers knew anything about it. I happened to have a duck at the time that was suffering so severely from a respiratory infection that I spoke to a Poultry Research Veterinarian friend of mine about possible treatment experiments, since illnesses such as Aspergillosis were thought of as fatal if severe. He told me about Oxine AH and how successful it had been when used as a nebulizing agent both in poultry and in the equine field. (*Nebulizing meant the bird had to breathe the product into its airways.*)

I had nothing to lose since the duck could barely breathe, so I tried it. I used a Tri-Jet fogger and a solution of 6-1/2 ounces of Oxine to a gallon of water as prescribed, and I 'fogged' the bird's face and cage three times daily for ten days. She was cured.

Since then, I have learned quite a bit about this product. Since Oxine is technically a disinfectant and I have over 26 years in the specialty chemical industry, I understood the mechanics of how the product worked from the start. I also understand EPA registrations, USDA, and FDA, so I had access to all of the many applications of the one parent product under various label uses.

Oxine is known to kill every bacteria, virus, and mold it has ever been tested against and is 200 times more effective than chlorine bleach. But one of the most impressive things about Oxine for me is that it does it with such relative safety (when used according to label instructions). Environmentally speaking, Oxine actually biodegrades to ordinary table salt. And it is so safe to use on livestock that it is actually *approved for use in the drinking water of 'organically grown' animals*. I use it myself at the rate of 7-15 drops per gallon of water in our stock tank of drinking water for our own sheep. It keeps the water impressively clear and algae free, while keeping down the biofilm 'slime' that tends to develop on the sides of the tank.

Oxine is used in many commercial operations in the automated drinking lines for poultry. It keeps the bacteria level down in the water lines, prevents biofilm from developing, and keeps the birds healthier by keeping down the pathogen level that could potentially travel from one bird to another. The side benefit for commercial growers is that Oxine makes the drinking water more palatable to the birds and therefore they drink more. This is especially important in layers, but can have a benefit in any operation since it also improves feed conversion.

Technically, Oxine Concentrate is a 2% chlorine dioxide gas suspended in an aqueous solution. It is diluted with water to varying degrees depending on how you would like to use it. Since it is a disinfectant and not a drug, it must make direct contact with the pathogen in order to kill it. In the diluted *inactivated* state, Oxine is perfectly safe to use around both your birds and yourself. Oxine can also be 'activated' using citric acid crystals, which 'release' more of the available chlorine in the solution, but I highly discourage this method of use within the fancy. If you were to activate the product, it is recommended that you wear a NIOSH approved respirator and you would not be able to fog the solution into any area where the birds are present. Without activation, I am very comfortable with using the product without a respirator or mask, although you should follow whatever precautions you are most comfortable with.

Here's how I use Oxine in my operation (this is simply an example program – you should adapt this to your particular situation since every coop and hatchery is different). I raise both chickens and waterfowl (ducks). I use 1/8 tsp/gallon of water for my ducks' bath water to keep the bacteria level down and to help prevent bacterial enteritis, since E-Gads, we all know what ducks do in their water besides drink from it. They get a separate small dish (that they won't fit into) at night before bed with drinking water that I can fortify with vitamins, minerals, and probiotics if I choose – but not with Oxine in it which could kill the beneficial bacteria in the probiotic supplement.

I use 1/8 tsp/gallon of water in my chickens' drinking water every other day to keep down the biofilm (slime) that forms on the inside of the waterers. It also keeps the bacteria level down for when that amazingly accurate missile of a dropping somehow makes it into the drinking water trough every day. (On the opposite days I like to include a combination vitamin, mineral, and probiotic supplement in their water instead.)

Since I run a biosecurity program in my show bird coop, I use Oxine to fog the entire inside of the coop (including the birds themselves) once a week. It keeps the dust down and knocks all of the viruses, bacteria, and mold spores out of the air. It also keeps the air fresh smelling in there. Oxine also has a residual disinfecting quality so I try to moisten surfaces such as roosts with the fog as I go. I see no need to remove feed or drinkers from the coop when I fog so the procedure is quite simple.

Other possible uses for the product are an egg dip prior to incubation (always using water warmer than the egg and at the rate of 4 oz/gallon of water). In this case, you would simply dip the egg in the solution and lay it on a clean paper towel to air dry – *do not rub since that would breach the egg's cuticle*, something which is important to hatching success. You can also use it at the rate of 7 drops/gallon of water in your water reservoir in your incubator, and/or in a humidifier that may be running in a room where you store eggs prior to incubation.

Oxine has so many approvals for use in the (human) food industry that they're too numerous to mention here, but it's worth noting since it reinforces Oxine's overall relative safety.

You may purchase Oxine through several of the poultry supply houses. A few that I know of are Seven Oaks Game Farm, Smith Poultry, First State Veterinary Supply, Cutler Pheasant Supply, and Aire Solutions, LC. All of the suppliers listed above advertise in the *Poultry Press*. There may be more and I apologize if I have left them out. If you are a supplier of Oxine and were not mentioned here, then I suggest you advertise that you are in the next issue of the *Poultry Press* so it becomes known. Also, if you let me know who you are, I would be glad to include you in an amended copy of this article prior to putting it up on my website next month.

If you need a fogger and cannot afford the more expensive ones, there is an alternative. It is the Preval Paint Sprayer from www.dickblick.com. It's a small hand held device that is commonly used when vaccinating poultry against viruses that the birds need to breathe in to become inoculated. The Preval sprayer requires 'power units' to work and they can be purchased from Dick Blick as well. Also, Fogmaster makes a 'Fogmaster Jr.', which you can view and purchase at www.fogmaster.com. The suppliers of Oxine may also provide fogger options and perhaps some kind of package deal, so I would check that option out as well.

Note to our members: I will admit truthfully when I first read this article I was curious about this product but that was the end of my thoughts on Oxine. All of the sudden, after my move to Tennessee, I started having quite a bit of respiratory problems in my chicken barn. The floors were dirt, I used hay and shavings on the floors of my pens and TN is normally very low on humidity. My birds were just not as active as they were before the move, although it was several weeks for all of this to take place. I put them on vitamins, gave them antibiotics and all sorts of things to try to improve the situation. I misted and sprayed the floors and walls to keep the dust down in the barn and the birds were turned outside to scratch around and breath nice clean air. It wasn't working all that well. Once again I ran across this article and thought, ok, why not. I'm going to try it. I am now such a "true believer" of Oxine. I can brag and say I've not had one day of any type of respiratory problems in my barn for over 7 years now. Even when I show birds and bring them home and they are isolated from the flock for several days, I haven't had a problem with any type of illness. Luck or what, I'm not sure. I just know I will always keep Oxine in my "9-1-1 kit. Doris Robinson