

PLT® - POULTRY LITTER TREATMENT

- Safe and suitable for use in all antibiotic-free operations anytime throughout the growout cycle (no antibiotics ever, no human antibiotics, raised without antibiotics, etc.)
- Immediately binds ammonia for improved air quality
- Lowers pH of poultry litter (down to between 2.0 to 2.5) creating an environment unfavorable for pathogen growth
- Paw quality improves through the reduction of ammonia released from litter
- Enables safe reuse of litter—eliminating cost of new litter and cleanout
- Ammonia bound in the litter is beneficial to crops and increases the nitrogen fertilizer value
- Can be applied with any type of spreader or with professional application services



PRODUCT DATA SHEET FOR ANTIBIOTIC-FREE PRODUCTION

As the number of antibiotic-free operations increases, the industry has learned that a greater degree of micro-management is required. Antibiotic-free operations are facing increased challenges, such as greater incidence of cocci, necrotic enteritis and paw lesions early in the flock cycle. The opportunity to treat birds through water, feed and genetic selection is becoming more of a challenge, creating the demand for a greater focus on environmental impacts. Jones-Hamilton offers producers the opportunity to create a more favorable environment for birds with PLT®.

PLT® litter treatment eliminates ammonia and lowers litter pH while releasing sodium ions, creating an environment unfavorable for pathogen growth and optimal for bird health and performance. Plus, PLT® helps poultry producers decrease environmental emissions and increase the nutrient value of poultry litter:

**Sodium Bisulfate has been reviewed by EPA's Safer Choice Program and qualifies for use in Safer Choice-labeled products.*



For optimal performance of PLT® and to gain the maximum health and performance benefits for birds, the following application rates should be considered as part of any antibiotic-free production program (no antibiotics ever, no human antibiotics, no antibiotics added).

APPLICATION FOR NON-CONVENTIONAL OPERATIONS

Pad Treatments

Remove all litter and hard pan from the house (including sidewalls) to expose the soil. Disinfect and apply insecticide a minimum of 48 hours prior to PLT® application. It is important to select an insecticide that prefers a low pH environment.

Apply PLT® at the rate of 100-200 lbs./1,000 sq. ft. (41-91 kg/100m²) to the whole pad. Apply new bedding at a minimum depth of 4-6 inches on top of the PLT®-treated pad. If a disease outbreak occurred prior to clean out, contact your Jones-Hamilton technical support rep for specific application alternatives.

On a built-up litter program, PLT® should be applied to the whole house 24 hours prior to placement at the rate of 100-150 lbs./1,000 sq. ft. (49-73kg/100 m²). A minimum rate of 125 lbs./1,000 sq. ft. (57 kg/100 m²) should be used if you are treating a house with repetitive disease outbreaks. The off chamber can be applied 1-24 hours prior to bird move down for better environmental control and a lower pH target.

In the absence of antibiotics, it is recommended that multiple applications of PLT® be considered if stress periods occur during the flock (i.e., feed changes, vaccine reactions, environmental changes, etc.). Application to the whole house at the rate of 25-50 lbs./1,000 sq. ft. (11-23 kg/100m²) is recommended.

One example of a program for antibiotic-free environments would be:

- At placement, apply PLT® at a rate of 100 lbs./1,000 sq. ft. (49 kg/100m²)
- Prior to move down, apply PLT® in the off chamber at a rate of 100 lbs./1,000 sq. ft. (49 kg/100m²)
- Reapply PLT® at 21 days, 35 days, and 42 days at a rate of 25-50 lbs./1,000 sq. ft. (11-23 kg/100m²)

A custom program can be designed based on litter age, litter quality and management, ammonia volatility, floor moisture and bacterial challenges.

Paw Quality

Paw quality diminishes in antibiotic-free programs using an all-vegetable diet. In these instances, it will be vital to reapply PLT® at the desired rates at the onset of paw lesions. Paw quality surveys should start at day 5 to 10 to identify lesion onset. Waterline management and relative humidity percentage is critical to salvaging and harvesting grade A paws.

Disease Outbreaks

In antibiotic-free programs there is often an increase in the incidence of enteric disease. The growth of these diseases and pathogens are affected by a pH lower than 4. If a disease outbreak occurs, reapply PLT® to the whole house at the first sign of elevated mortality, at a rate of 75-125 lbs./1,000 sq. ft. (34-57 kg/100m²). Treat the specific areas where mortality occurs with extra PLT®. Timing is critical to reduce mortality and an extensive mortality removal program should be put into immediate action.

Water Acidification

For antibiotic-free production, water acidification using an inorganic mineral acid such as LS-PWVT²/PWVT® is recommended to reduce crop pH to 3.5-4.0 from 0-21 days, or in the first week, and then 3-4 days around the time of each feed change. Intermittent applications should be considered for 72-96 hours during stress periods and the last 48 hours prior to movement. An inorganic acid will not affect the taste profile of water, allowing birds to maintain optimal consumption levels.

See your Jones-Hamilton representative for help creating an effective litter and water acidification program.

PROPER STORAGE AND HANDLING INSTRUCTIONS

When applying PLT®, please wear the following protective items: safety goggles, long pants with pant leg outside of boot or shoe, long sleeve shirt, gloves and dust mask. Store PLT® in a dry area and tightly re-seal open bags when storing. Be sure to prevent exposure from moisture prior to application. **DO NOT MIX** PLT® with liquid chlorine bleach, ammonia cleansers, or similar products. Wash and disinfect equipment immediately after application using a strong, alkaline disinfectant.

QUALITY AND SAFETY

- Non-hazardous per current U.S. Department of Transportation definition
- Sodium Bisulfate is on the EPA Safer Choice Program Safer Chemical Ingredient List
- Produced following a Quality Management System certified to the ISO 9001:2008 Standard
- GMO-Free, BSE-risk free material

