

# **Alpiguard CTC**

Advanced Antimicrobial Solution for Poultry

Alpiguard CTC is a scientifically formulated broad-spectrum antibiotic designed to combat bacterial infections in poultry. With Chlortetracycline Hydrochloride 15%, it provides effective control of respiratory, enteric, and systemic bacterial diseases, ensuring optimal bird health, growth, and productivity.

This highly bioavailable formulation ensures rapid absorption and action, making it an essential component in disease prevention and treatment programs for commercial poultry farming.

## **Composition:**

Each 100g contains:

Chlortetracycline Hydrochloride Excipients

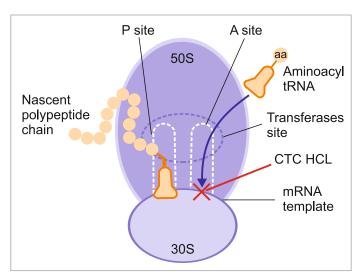
15% (HPCL Tested) Q.S.

## **Mechanism of Action**

Alpiguard CTC penetrates Gram-negative bacteria through porin channels via passive diffusion and enters Gram-positive bacteria and other susceptible organisms through an energy-dependent active transport mechanism. Once inside the bacterial cell, it accumulates within vulnerable cells.

Chlortetracycline HCl (CTC HCl) binds reversibly to the 30S ribosomal subunit, preventing the attachment of aminoacyl-tRNA to the acceptor site on the mRNA-ribosome complex. This inhibition blocks the addition of amino acids to the growing peptide chain, effectively halting bacterial protein synthesis and preventing bacterial proliferation.

The active transport carrier required for tetracycline uptake is absent in avian cells, preventing its accumulation in poultry tissues. Additionally, tetracyclines do not bind to the 60S or 30S ribosomal subunits of avian cells. These two factors contribute to the selective toxicity of tetracyclines, making them highly effective against bacterial pathogens while being safe for poultry.





#### **Benefits**

Chlortetracycline (CTC) in Alpiguard CTC is a broad-spectrum antibiotic designed to combat bacterial infections, enhance gut health, and optimize growth, feed efficiency, and egg production in poultry. It works by:

- 1. Targeting Bacterial Infections for Healthier Birds: Binds to the 30S ribosomal subunit of harmful bacteria, blocking protein synthesis and stopping their growth.
- 2. Broad-Spectrum Action: Effective against a wide range of Grampositive and Gram-negative bacteria.
- 3. Improving Feed Conversion Ratio (FCR): Controls harmful bacteria in the gut, reducing energy loss due to infection and inflammation, resulting in better weight gain and improved FCR.
- 4. Boosting Egg Production & Hatchability (Layers & Breeders): Enhances gut health and nutrient absorption, ensuring higher egg production, better eggshell quality, and improved fertility in breeders.
- 5. Protecting Poultry from Respiratory & Gut Diseases: Effectively combats Mycoplasma, E. coli, Salmonella, Clostridium, and Pasteurella, reducing CRD, colibacillosis, necrotic enteritis, and fowl cholera.
- 6. Maintaining Gut Integrity for Optimal Performance: Suppresses harmful bacteria while supporting beneficial gut flora, leading to better digestion, nutrient uptake, and stronger immunity.
- 7. Withstands High Pelleting Temperatures.

# Recommended Usage

### **Mixing Instructions:**

Thoroughly blend 335g of Alpiguard CTC per ton of poultry feed. The dosage may be adjusted based on the severity of disease challenges, which can vary due to management practices and environmental factors.

## Feeding Guidelines:

Administer continuously as the sole ration. It is advised to first prepare a preblend by mixing Alpiguard CTC with 8–10 kg of feed before incorporating it into the total feed batch. Ensure uniform mixing for optimal effectiveness.

## **Presentation:**

Available in 25 kg bags.

## Alpinist Pharmaceutical Pvt. Ltd.

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