

# **Betain-Vet™ Powder**

## **Betaine Hydrochloride USP**

### **Enhance Stress Resistance**

Betaine is a functional nutrient commonly used as a feed additive in animal nutrition, mainly as methyl donor. In the past betaine was available as betaine anhydrous extracted from sugar beets; nowadays is present in different chemical forms and produced by different methods. Compared with betaine, Betaine Hydrochloride is better in anticaking, hygroscopicity and fluidity.

#### **Indication**

##### **1. Enhances stress resistance**

Betaine participates in the immunity regulation of animal bodies by influencing the generation of antibodies and phagocytic activity of macrophage. Therefore betaine can enhance an animal's immunity and stress resistance, most notably heat stress and coccidian injection stress.

##### **2. Saves methionine to cut feed costs**

Betaine, methionine and choline are three kinds of main methyl donors, and play an important role in methylate reaction. As to the function of providing methyl, betaine can partially replace methionine to cut feed cost.

##### **3. Regulates osmotic pressure to maintain cell water balance.**

When an external osmotic pressure generates convulsion, body cells can conduct self-regulation or absorb betaine from the outside to prevent water loss and salt entry, stabilize enzyme activity and biomacromolecule, further, regulate osmotic pressure and ionic balance and maintain normal nutrient absorption and physical health. During production, such action has the following advantages: improve the curative effects of anticoccidial drugs, protect weanling pigs against diarrhea and enhance the resistance of shrimp larvae to high humidity, high salt and high permeation in seawater.

##### **4. Improves meat quality**

Betaine can sharply decrease back fat thickness of hogs and the abdomen fat rate of poultry, increase lean meat percentage and pectoral muscle yield, and improve meat quality; reduce fat content in animals' livers and prevent fatty liver of poultry and aquatic animal.

##### **5. Feeding stimulation**

Betaine, with its delicate flavor, can stimulate the smell and taste receptors of fish and shrimp, and is ideal phagostimulant for aquatic animal. Betaine can improve feed's delicious flavor,

promote ingestion, shorten ingestion time, increase feed utilization rate and reduce water pollution.

### **Dosage and Administration:**

For oral administration through feed or drinking water. Add to feed or drinking water immediately before administration.

#### **Poultry:**

0.5 – 1 kg per ton of complete feed or 1 gm per litre of DW for 25-30 days.

#### **Fish:**

2 – 3 kg per ton of complete feed.

#### **Rabbit:**

1 - 2 kg per ton of complete feed.

### **Precautions**

During preparation, please evenly mix the product.

The product is hygroscopic, and shall be placed in a dry, shaded and ventilated place. After it is opened, if the product isn't fully used, the remaining shall be sealed for storage.

During storage and transport, the product shall be protected against package breakage, dampness, rain and sunlight. It is forbidden to store or transport with toxic or hazardous substances.

### **Storage:**

Store below 25° C temperature at cool & dry place. Protect from light. Keep out of reach of children.

### **Pack size:**

500 gm Sachet & 25 kg bag.