



BUFFERMIN[®] METHIONATES

Methionine Complexed Mineral Feed Supplements

BUFFERMIN METHIONATES

As defined by the Association of American Feed Control Officials (AAFCO), the **Buffermin Methionates** are a line of products resulting from the complexing of minerals with methionine. These animal feed supplements are formulated to correct and/or prevent mineral deficiency in all animals.

The **Buffermin Methionates** supply the sulfur amino acid methionine. Methionine is the first nutrient to be limiting in typical poultry, cattle, dog, and cat diets. In adult animals methionine is part of body proteins and is important for a healthy skin and coat, optimal eye health, proper heart health and more. In young animals methionine plays an important role in metabolism processes, muscle bulk growth, and quick growth. Methionine is also an initiator of protein synthesis. It serves as a precursor to other amino acids like cysteine which can then be converted into taurine. Methionine can also be converted into glutathione, an important antioxidant.

Diets for piglets and growing pigs can show a considerable deficiency in methionine, especially when formulated to achieve low nitrogen excretion for ecological and sanitation reasons. In poultry methionine deficiency causes

growth velocity reduction, poultry feathering deterioration, muscle atrophy, fatty liver, and a reduction in bone strength. Such a deficiency can be conveniently compensated for by using **Buffermin Methionates**.

Advantages of Using BUFFERMIN[®] METHIONATES

- High nutrient availability
- Not synthetic
- Easy to use
- Uniform blending
- Low heavy metal content
- Supplies both minerals and amino acids.



OTHER ANIMAL FEED SUPPLEMENTS & ADDITIVES

- ◇ **Odor Buster**
Natural Odor Reducer
- ◇ **NutraOligos**
Oligosaccharides
- ◇ **Iron Dex**
Oral Iron
- ◇ **MorGard**
Mold Inhibitor for Feed
- ◇ **Mor-Acid**
Acidifier and Antioxidant
- ◇ **Instamins**
Soluble Amino Acid Chelates
- ◇ **MicroFerm Yeast**
Yeast Product



Diets that contain adequate levels of methionine include animal proteins such as meat and poultry (and their associated protein meals), egg products, fish and fish meals, corn co-products such as corn gluten meal, and brewers dried yeast. These ingredients are adequate in methionine and do not require any supplementation. **Buffermin Methionates** are ideal for diets that contain minimal amounts of meat proteins or are heavily weighted with vegetable proteins like soy, or are low calorie foods diluted with inert ingredients such as cereals and cellulose.

The **Buffermin Methionates** supply both minerals and methionine.

Currently there are nine **Buffermin Methionates** mineral formulations available: calcium, cobalt, copper, iron, magnesium, manganese, molybdenum, potassium, and zinc.



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For labels and MSDS, visit our website at www.jhbiotech.com or call us at 805.650.8933