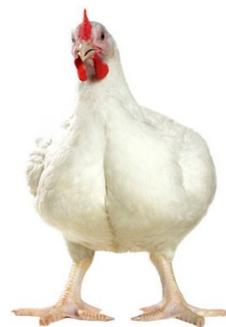




PHARMAPEX[®]
CREATING A HEALTHY WORLD[™]



QUALIZINC 70[™]

Certified Quality

**Zinc oxide micro-encapsulated for all
productive species**

A Product of PHARMAPEX INC. (USA)

Control of diarrhea, increased immunity and reduction of antibiotics.

Swine diets containing mineral zinc oxide, zinc oxide is added in large quantities because it recombines with amino acids and other substances and 75% of it is lost in the digestive tract and it is excreted, creating pollution and bad smells in the environment. This is why it is required in large quantities by nutritionists. It also affects the acidity of the animal stomach and occupies a large space in diet formulation.

Qualizinc 70

Has been designed to eliminate these problems and simultaneously control diarrhea, increase immunity and reduce or eliminate the use of antibiotics in animal rations.

What is Qualizinc 70:

Qualizinc 70 is a concentrated form of zinc oxide in a micro-encapsulated lipid micro-capsule that protects it as it passes through the stomach, releasing it, slowly, throughout the whole of small intestine, covering all the micro-flora, having a distal effect.

- Qualizinc 70 is consumed in its entirety and is not excreted to the outside.
- Qualizinc 70 does not affect the acidity of the stomach of the piglets.
- Qualizinc 70 Eliminates the problems of palatability of zinc oxide.
- Qualizinc 70 reduces the need for antibiotics and growth promoters.
- Qualizinc 70 effect is complete along the small intestine.
- Qualizinc 70- helps in diarrhea control.
- Zinc oxide in Qualizinc 70 IS U.S.P. grade and apt for human consumption.

Specifications

Zinc dioxide concentration: 685-700 mg / gr.

Particle Size: 500 / 700 microns.

Application

Nutritional supplement.

Packaging and storage

Fiber drums of 50 kg with safety seal and inner poly-ethylene bags.

Store in dry, indoor, closed, and out of sunlight.

Rate of Inclusion

Broilers, layers, breeders and turkeys: 45 gr. / MT of feed.

Pigs: 180 gr / MT of feed.

Beef & Dairy cattle: 2 gr /head / day.

Horses: 1g / head / day

Sheep and other: 200 grams / 125 head / day.

Comparisons of Qualizinc 70 with organic zinc oxide

Differences between the ZnO organic BMIZ

-ZnO: can easily pass (Zn + +)

- Organic Zinc: strong bonds

To obtain any antiviral effect, antibiotic and in the reduction of an excessive immune response (allergies, etc..) In the TGI, Zinc complex must release free ions easily.

Diarrhea in the TGI

- ❑ The main cause of dysfunction such as diarrhea in the GIT is the E. coli K88, K99 etc.
- ❑ E. coli is combined with specific receptors consisting of "Glico" protein "and" Glyco-lipids "in the intestinal surface creating toxicity in epithelial cells under typical conditions.

Antibacterial Effects of Qualizinc 70

- ❑ A high level of inclusion of Zinc (ZnO) decreases the activity of beneficial bacteria [Ole Hojberg et al, 2005].
- ❑ Qualizinc 70, its low level of inclusion, reduces the activity and quantity of E. coli, increasing the activity and amount of beneficial bacteria in the GIT.
- ❑ The Lactobacilli can also bind to specific receptors E. coli in the intestinal surface competitively. Therefore prevents the overgrowth of E. coli in the GIT. [Mathew, 2001]
- ❑ Divalent cation zinc ion appears to have affinity with the binding sites of E. coli's more than other beneficial microorganisms.
- ❑ With this hypothesis, the zinc ion appears to be linked to the 'glyco-protein' and the 'glyco-lipid' preferentially on the intestinal surface with binding sites of E. coli.
- ❑ Then, E. coli can not find a binding site to adhere, penetrate and create toxicity in the tissue in question, then moving to the stool.

- To produce such effects in the GIT, the zinc ion should be released easily in time and place. Therefore, a link too tight in a complex of zinc is not effective, as the case may be chelated minerals.
- **Effects of QUALIZINC 70 - Summary**
- The glycoprotein, the Glyco-lipids and CAMs are important in QUALIZINC 70
- QUALIZINC 70 is competitively bound to these receptors to prevent pathogens to exert their own toxicity in the epithelium.
- QUALIZINC 70 reduces the activity of E. coli as a pathogen, and increases the activity of beneficial bacteria in the GIT.
- QUALIZINC 70 can reduce an excessive immune response such as an 'allergy' induced HABs (anti-nutritional factors)
- QUALIZINC 70 exceeds the 'stomach' by 100% and starts Zinder ion release at the beginning of the intestine (duodenum).

Certificate of Analysis

Chemical Name: Zinc oxide micro-encapsulated in lipid capsule.

ZnO: 70% (700 g / kg)

Lipid capsule: 30% (300 g / kg) (Soybean Oil)

Humidity: 1.5%

Ingredients

Zinc - 508 gr / kg

Oxygen - 103 gr / kg

Vegetable Oil - 389 g / kg



PICTURE OF 50 kg DRUM

Appearance: Powder, white



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