

MOST COMMON QUESTIONS ABOUT MAXI/GUARD® Zn4.5 Otic™

What is Zn4.5 Otic™?

MAXI/GUARD® Zn4.5 Otic™ is the first water soluble ear maintenance topical offering veterinary medicine the essential micronutrient zinc, complexed with two select amino acids, Taurine and L-lysine, in combination with boric acid, a proven anti-Malassezia agent. The patented amino acid complex stabilizes the zinc ion for better topical utility. Veterinary and medical journals offer substantial documentation that zinc has been used from antiquity to the present for its anti-pruritic and healing benefits. Calamine lotion, modern medicine's most popular anti-pruritic, is a zinc-based topical. Zinc oxide, a very popular skin healer and protector, is of course zinc-based, but is only 20% bioavailable and not water-soluble. Zinc is an essential trace element and is a component of about 300 metalloenzymes systems. Many of these enzymes play key roles in extra-cellular matrix remodelling, wound healing, connective tissue repair, inflammation, and cell proliferation.

2. What is unique about Zn4.5 Otic™?

J. Bruce Addison has stated that, "**If, by the use of Zn4.5 Otic™, we are able to restore the integrity of the otic epithelium, will we not provide the patient with a natural means of resisting secondary infections and be able to decrease the use of antibiotics and steroids?**" This is the essence of what we are striving to accomplish and we have demonstrated this phenomenon with related compounds for oral tissue maintenance and dermatological applications. Medicine has drifted into two options: 1) kill the bugs with disinfectants and antibiotics, and 2) stop the host's inflammatory reactions with steroids. Healthy hosts naturally resist disease more effectively than compromised hosts (or tissues)."

3. On what types of ear problems should I use MAXI/GUARD® Zn4.5 Otic™?

Zn4.5 Otic™ is not an ear cleanser. Boric acid combined with amino acid *complexed zinc™*, is very effective for Malassezia otitis typically associated with allergic ear disease. It can be used on acute or chronic ears. Zn4.5 Otic™ offers these positive benefits: 1) calming pruritic and painful ears for 2-3 days prior to cleansing; 2) clinical and home use post-cleaning in dogs affected with otitis externa; and 3) home maintenance after control of chronic, severely affected ears with powerful antibiotics and steroids ('First-Line' therapy). Zn4.5 Otic™ is 'First-Line' for fostering healing or returning the micro-environment of the ear to normality. Chronic Pseudomonas ears require powerful antibiotics and steroids, but Zn4.5 Otic™ can be used as an adjunct in these situations for restoration in a shorter period of time.

4. How do I apply Zn4.5 Otic™?

Please follow the detailed instructions on the bottle. Instill 5-8 drops twice daily into the vertical ear canal, gently massage, then wipe away any excess with a tissue. The ear should be cleansed before a regimen of treatment is started. The attending veterinarian may desire to initially immerse (flood) the ear canal fully in the clinic before sending the product home with the owner.

5. Is Zn4.5 Otic™ safe?

Yes, Zn4.5 Otic™ is a very safe product. Zinc has a wide margin of safety. Due to the zinc and amino acid utility, this product works well without the extremely low pH or higher concentration of boric acid in other ear care products.

**Addison Biological Laboratory, Inc.
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