

KLISE® Ear Therapy

Natural Cleansing Otic, with Antimicrobial and Calming Activity for the Advanced Care and Maintenance of the Ear Canal in Dogs

Routine **ear cleaning** of our dogs is essential to ensure the hygiene of the ear canal and avoid the appearance of otitis externa, one of the most common diseases in dogs.

To properly clean the ear, suitable ear washing solutions must be used, avoiding the use of antibiotic or anti-inflammatory products, except in the presence of disease. When an animal has otitis, the ear must be cleansed prior to the application of a topical antibiotic/antifungal to maximise its efficacy.

Composition:

Extract of <i>Hamamelis</i>	10,0 %
Tea Tree Oil	0,5 %
Chlorhexidine Gluconate	0,2 %

Properties and Mechanism of Action:

KLISE® Ear Therapy is a natural, aqueous cleansing otic solution, with antimicrobial and calming action for the advanced care and maintenance of the ear canal in dogs from twelve weeks of age.

Its advanced formula and properties allow it to be used as a frequent-use cleanser in the daily hygiene of healthy ears and, also as a cleanser and adjuvant treatment in bacterial or fungal otitis.

- **Witch-Hazel (*Hamamelis virginiana*)** is a shrub native to the humid forests of eastern North America (Canada and the United States). Witch-Hazel leaves contain a high percentage of tannins and flavonoids. It has been traditionally used for its drying, vasoconstrictive and anti-inflammatory properties. The drying effect of the tannins promotes a healing and anti-haemorrhaging action. Witch-Hazel extract has been observed to inhibit some enzymes *in vivo* that contribute to the degradation of connective tissue (when the activity of these enzymes increases, vascular integrity is compromised). The anti-inflammatory effect seems to be related to the inhibition of mediators involved in inflammatory processes. In addition, it contains other natural compounds such as proanthocyanidins, which confer antioxidant properties. One study showed the benefits of applying Witch-Hazel to skin with eczema, observing a reduction in inflammation and associated pruritus.

- **Tea Tree (*Melaleuca alternifolia*)** is native to Australia. Its oil has been used for many years for its antiseptic and anti-inflammatory properties and is currently found on the market in several products with prophylactic and therapeutic purposes. Its oil can be extracted from the leaves, branches and stalk. Its antibacterial activity appears to be due to a direct action on the phospholipid bilayer of bacteria, producing an increase in the permeability of the cell wall and the loss of cellular structures that intervene in energy production processes and the synthesis of structural components (Kim et al., 1995). Different studies have shown its efficacy in dermatological problems and as a mouthwash, reducing the number of microorganisms and associated clinical signs. Some *in vitro* studies show that Tea Tree Oil can be a good alternative to antifungals like ketoconazole for the treatment of *Malassezia* infections (Hammer et al. 2000). Favourable results were also obtained in the evaluation of its *in vivo* effect for the treatment of superficial fungal infections such as oral candidiasis (Jandourek et al., 1998) or onychomycosis (Buck et al., 1994). No evidence has been reported of the appearance of resistance despite wide use of the product in Australia since 1920.

- **Chlorhexidine** is a disinfectant used for the treatment of environmental surfaces and, in less concentrated forms, for the treatment of the skin, ears and oral cavity. It was discovered in late 1940 and later found to have an antiseptic action on skin (Haugen & Johansen, 1974). It has a broad spectrum of action on both bacteria and fungi. It acts against gram positive and gram negative bacteria



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Recommended for daily hygiene and as a cleanser/adjuvant treatment in otitis.



Features

Natural protection based on Witch-Hazel and Tea Tree.

Reinforced with Chlorhexadine to prevent chronic otitis.

Prevents and eliminates accumulation of wax.

Antimicrobial and antifungal effect – Helps prevent otitis.

Calming action – Reduces pruritus and discomfort.

Cleansing prior to medication to maximise efficacy of the antibiotic/antifungal.

Suitable for frequent use – Indicated for daily hygiene of the ear canal and pinnae.

Versatile: Cleans, deodorises, protects.

Effective and very safe. Not suitable for use in cats.

Aqueous, colourless solution – Does not stain surfaces or fabrics in the home.

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with few exceptions. The antiseptic activity of Chlorhexidine is due to its action on the cellular membrane. It alters membrane permeability and, in consequence, causes protein precipitation and disturbs osmotic balance and normal cellular metabolism (Estrella et al., 2003). It is widely used for its high residual activity following application. Dermal absorption is minimal, so there is little risk of systemic toxicity. It is non-irritating and hypersensitivity reactions are very rare. Some studies have shown that long-term treatment with Chlorhexidine does not significantly increase the appearance of bacterial resistance or opportunistic infections.

Indications:

- Cleanser for the daily care and maintenance of hygienic and physiological conditions of the ear canal.
- Antiseptic agent for the preventive maintenance of bacterial otitis.
- Antiseptic agent for the preventive maintenance of fungal otitis.
- Cleanser prior to treatment with topical antibiotics and/or antifungals.
- Helps reduce pruritus or discomfort associated with otitis.
- Prevention of recurrent chronic otitis.
- Ideal for ulcerated or inflamed mucosa.

Target Species: Dogs over 12 weeks of age.

Directions of Use:

- Fill the ear canal with the product: Apply between 1-5 ml depending on the breed.
- Softly but firmly massage the base of the ear for several seconds.
- Allow the pet to shake its head.
- Carefully clean excess solution inside the ears with gauze or other non-abrasive material.

- ✓ For maintenance, apply 1-2 times a week.
- ✓ Suitable for frequent use.

Safety: KLISE[®] Ear Therapy is a very mild, non-irritating solution, even in sensitive or irritated epithelial mucosa or channel.

KLISE[®] Ear Therapy can be used in dogs of any breed from twelve weeks of age. Cats may be more susceptible to intoxication from Tea Tree Oil after topical application than other species, due to their grooming behaviour. However, the risk of ingestion is significantly reduced when applied into the ear. Nevertheless, and although Tea Tree is not excessively toxic when ingested, KLISE[®] Ear Therapy is not suitable for use in cats. Tea Tree Oil (*Melaleuca alternifolia*) has been shown to be non-irritating even when used in concentrations of up to 10% (Altman, 1991) or 25% (Southwell et al., 1997) on healthy skin.

Warnings: Not suitable for use in cats. Avoid contact with the eyes. Keep container tightly closed, in a cool, dry place, protected from direct sunlight and out of the reach and sight of children and animals.

Presentation: 118 ml.

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