Rx — For Veterinary Use Only

ALCOAT-Z

Omega 3-6-9, Biotin & Zinc Skin & Coat Supplement

Class: Nutritional Dermatological Adjunct **Protocol:** Skin Barrier Support **Species:** Canine & Feline

1. DESCRIPTION

Alcoat-Z provides a targeted nutritional platform to restore epidermal lipids, reinforce keratin structures, and promote healthy sebum production. It supports sustained skin barrier integrity and coat quality across both short-term intensive protocols and long-term maintenance in dermatologically compromised companion animals.

2. QUALITATIVE & QUANTITATIVE COMPOSITION

Format: Palatable Oral Syrup | **Pack Size:** 250 ml Bottle

Active Ingredient	Clinical Function
Omega-3 (EPA & DHA)	Anti-inflammatory; epidermal lipid & ceramide restoration. Reduces pruritus severity in atopy.
Omega-6 (GLA & Linoleic Acid)	Linoleic acid is an essential structural component of skin ceramides required for barrier maintenance.
Omega-9 (Oleic Acid)	Enhances skin hydration, provides emollient properties, and supports lipid fluidity without pro-inflammatory effects.
Biotin (Vitamin B7)	Essential cofactor for fatty acid synthesis. Supports keratin protein synthesis for coat strength and elasticity.
Zinc (Chelated)	Critical for DNA synthesis in keratinocytes. Regulates wound healing and cutaneous immune responses. Chelated for superior GI absorption.

**Excipients and exact quantitative assays available upon specific veterinary request.*

3. CLINICAL PHARMACOLOGY & MECHANISM OF ACTION

Alcoat-Z utilizes a **Three-Pillar Dermatological Approach:**

- **Membrane Lipid Structure (Omega 3-6-9):** Omega fatty acids modulate eicosanoid synthesis to reduce pro-inflammatory cytokine production while restoring ceramide balance in the stratum corneum.
- **Protein Scaffolding (Biotin):** Supports keratin biosynthesis and fatty acid metabolism at the cellular level.
- **Cellular Regulation (Zinc):** Regulates epidermal proliferation, wound repair, and cutaneous immune responses — three interdependent processes that cannot be optimised in isolation.

4. CLINICAL INDICATIONS

Alcoat-Z is indicated as nutritional support under veterinary direction in the following clinical scenarios:

- **Canine and feline atopic dermatitis:** Adjunct nutritional therapy during the maintenance phase to support the skin barrier and reduce pruritus.
- **Chronic pruritus:** With a nutritional or inflammatory component.
- **Post-demodicosis or ringworm recovery:** Coat restoration support following treatment.
- **Dull, dry or brittle coat:** In dogs and cats, including cases of nutritional aetiology.
- **Zinc-responsive dermatoses:** Particularly in Nordic breeds prone to zinc malabsorption.
- **High-shedding breeds:** Preventive skin barrier and coat maintenance.

5. CONTRAINDICATIONS & WARNINGS

Use With Caution or Seek Veterinary Assessment:

- **Anticoagulant therapy:** High-dose Omega-3 supplementation may potentiate effects of anticoagulants; veterinary monitoring required.
- **Pancreatitis-prone patients:** High-fat supplements should be used cautiously.
- **Acute or diagnostic skin conditions:** Nutritional support does not replace investigation; use alongside, not instead of, diagnostic work-up.
- **Zinc toxicity:** Do not exceed recommended dose; excess zinc supplementation is toxic in dogs and cats.

6. DOSAGE & ADMINISTRATION

Route of Administration: Oral Syrup. Administer directly or mix into food.

Administration Guidelines:

- Dosage and duration must be individualised by species, body weight, and clinical presentation per product labelling.
- Visible coat and skin improvements typically develop over **4–8 weeks** of consistent administration. Continued use through full coat cycling is recommended for optimal outcomes.
- Suitable for both short-term intensive support and long-term maintenance protocols.

7. SELECTED CLINICAL REFERENCES

- Bauer JE. Therapeutic use of fish oils in companion animals. *J Am Vet Med Assoc.* 2011;239(11):1441–1451.
- Marsh KA, Ruedisueli FL, Coe SL, Watson TDG. Effects of zinc and linoleic acid supplementation on the skin and coat quality of dogs receiving a complete and balanced diet. *Vet Dermatol.* 2000;11(4):277–284.
- Hensel P, Santoro D, Favrot C, Hill P, Griffin C. Canine atopic dermatitis: detailed guidelines for diagnosis and allergen identification. *BMC Vet Res.* 2015;11:196.
- Scott DW, Miller WH, Griffin CE. *Muller & Kirk's Small Animal Dermatology.* 6th ed. Philadelphia: WB Saunders; 2001.
- Olivry T, DeBoer DJ, Favrot C, et al. Treatment of canine atopic dermatitis: 2010 clinical practice guidelines from the International Task Force on Canine Atopic Dermatitis. *Vet Dermatol.* 2010;21(3):233–248.