



# LAMINAID

## FOR HORSES WITH METABOLIC PROBLEMS

### 1. RECOMMENDED USE

**Cavalor LaminAid is recommended in cases of sensitive hooves due to metabolic problems.**

Cavalor LaminAid works at various different levels in the body to tackle metabolic disorders in an integral manner that can lead to symptoms of laminitis. It supports the sensitive intestinal flora and brings hormonal and metabolic processes back into balance. Cavalor LaminAid also helps to support blood circulation and thus promote blood flow in the hoof.

### 2. PRODUCT PROPERTIES – KEY INGREDIENTS



Cavalor® LaminAid is a unique, balanced combination of several essential oils including Eucalyptus globulus, Allium sativum and Betula alba. Each oil is characterised by a specific structure, composition and effect. When incorporated into a blend, they complement each other and have a synergistic and highly useful effect.

Although the science of essential oils is still in its infancy, such oils are gaining increasing attention in human and veterinary medicine for their powerful and healing properties. The scope of application of essential oils is very broad. For example, tea tree is often used in disinfectants. Furthermore, clinical studies look at the impact of specific components in essential oils on certain virus and bacterial cultures, as well as their influence on clinical diseases such as diabetes and obesity in vivo. There is scientific evidence that, for example, garlic, ginger, lavender and mint extracts have an “antidiabetic” effect due to their positive effect on fat and carbohydrate metabolism and antioxidant and anti-inflammatory properties.

Despite the often positive results, the underlying physiological mechanisms by which the essential oils exert their effect are still largely unknown. It is known of some essential oils that certain constituents such as monoterpenes and phenolic compounds react with cell membranes and membrane-bound proteins such as transport mechanisms, ion channels and receptors. Others influence cellular signalling pathways and the regulation of the synthesis and functioning of certain proteins such as pro-inflammatory cytokines.

Laminitis is more than a painful hoof. It is a multifactorial disease with a very complex pathophysiology that affects various systems in the body. These range from endotoxin leakage in the digestive system and insulin dysregulation to inflammation and vasoconstriction in the lamellar cells. Most horses that are susceptible to laminitis have systemic metabolic disorders.

This therefore requires a multifaceted therapy that works at different levels to combat the symptoms of this disease holistically. Cavalor LaminAid does just that. It contains a unique combination of essential oils with evidence-based efficacy that not only improves the symptoms of laminitis, but also helps to remedy the underlying causes for a long-lasting effect. Of course, when treating laminitis, we also recommend an appropriate feed ration, care and movement regime for the best result.

The following properties can explain the effects of Cavalor LaminAid as a blend of different essential oils:

- **Analgesic:** Contains monoterpenes such as limonene and linalool that have been described as exerting their action through sensitisation and downregulation of receptors in the nervous system and affecting the Na<sup>+</sup> and/or Ca<sup>++</sup> channels.
- **Antibacterial:** Contains either components with a hydroxyl group (phenolic compounds such as carvacrol, eugenol, thymol, etc.), an ester group (geranyl acetate and bornyl acetate), terpene alcohols (geraniol, citronellol), ketones (carvone), aliphatic hydrocarbon, sesquiterpenes (limonene) or terpene-containing aldehydes (citronellal, neral and geranial). The proposed mechanism of action of these chemical components is by diffusion of the bacterial cell membranes, which increases permeability with leakage of vital intracellular components, finally leading to apoptosis.
- **Antioxidant:** Contains components such as alkaloids, flavonoids and phenols (carvacrol, carvone, caryophyllene limonene, cineole and thymol). These chemical components are powerful free radical scavengers.
- **Supports circulation:** Has a positive effect on circulation by preventing lipid peroxidation and haemolysis and promoting the fluidity of erythrocytes.
- **Supports metabolism:** Has a positive effect on fat and insulin metabolism (lower cholesterol, triglycerides, raised HDL, lower glucose levels, prevention of fat accumulation, etc.).
- **Supports digestion:** Combats the growth of unwanted intestinal bacteria and promotes healthy fermentation.
- **Anti-inflammatory:** Contains components such as terpinen-4-ol, eugenol, neral and geranial that have been reported to have an anti-inflammatory effect by inhibiting the synthesis of certain inflammatory mediators.

Laminitis is a complex disease and often related to digestive problems and impaired metabolism. By combining these properties, we obtain a very extensive effect. Cavalor LaminAid helps keep the intestinal flora in balance, thereby promoting digestion and optimising the metabolism by supporting various essential organs and tissues. In addition, the formula has a stimulating effect on the circulation and the lymphatic system, resulting in improved blood flow to the hoof and faster elimination of waste products. This has a pleasant and soothing effect. Furthermore, the blood pressure is lowered, which also reduces the pressure that causes the pain in the hoof.

The oils in Cavalor LaminAid are also attributed with antioxidant and anti-inflammatory properties, thereby inhibiting the production of free radicals and promoting tissue repair in the hoof.

Cavalor LaminAid is a unique and versatile supplement for horses susceptible to the symptoms of laminitis. The product works in a holistic way to address not only symptoms but also causal factors for a long-lasting effect.

#### **Proven effect during field studies with horses with laminitis**

The oils in Cavalor LaminAid were individually selected based on the above **scientific insights and were subjected to practical tests** that yielded astonishing health results.

By means of visual inspection, 20 horses/ponies with mild to moderate degrees of laminitis (i.e. increased sensitivity and visible lameness) were selected for treatment with LaminAid. The animals received a daily dose of LaminAid (50 mL/day) over four weeks, administered perorally, as well as a hoof oil containing essential oils applied topically to the hooves. Some of the animals also received an adapted feed ration.



# INTERNAL HEALTH

## Field test results:

The results of the field tests are astonishing. On the 2nd visual inspection (after four weeks of treatment), the lameness of 19 out of 20 horses had very clearly improved. None of the horse owners reported an adverse treatment effect.

° The extensive results of the study can always be requested

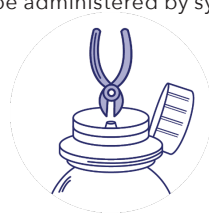
BETULA ALBA L. → 15 ml / L	ALLIUM SATIVUM L. → 5 ml/L
EUCALYPTUS GLOBULUS LABIL → 20 ml / L	

## 3. INSTRUCTIONS FOR USE

It is recommended that Cavalor LaminAid be administered by syringe directly into the mouth.



Step 1: Open the cap



Step 2: Cut the middle part of the plug so that there is an opening for the syringe



Step 3: Using a syringe, draw up the desired quantity

Dose per animal per day:

Day 1: 2 x 50 ml

From day 2: 2 x 25 ml per day.

For proactive or prolonged use (30 days or longer): 2 x 10 ml/day

For optimal results, use in combination with Cavalor PodoSens.

**Cavalor PodoSens is a hoof oil that provides external relief for sensitive hooves and contributes to their faster recovery.**

Cavalor PodoSens contains some essential oils that are also present in LaminAid, including Betula alba and Eucalyptus globulus. Applying the oil twice a day to the hoof and/or the sole of the hoof helps by increasing the circulation and bringing quick relief to sensitive hooves. Betula alba also promotes the elasticity of the hoof and promotes hoof growth.

## 4. PACKAGING AND STORAGE

EANCODE	PACKAGING	# DAYS
 5425016902660	Cavalor® LaminAid 1L - 33.8 fl.oz	19