

## Palatable tablets containing Benazepril and Spironolactone for dogs.

### **Composition:**

- Each 500 mg tablet contains 2.5 mg Benazepril\*, 10 mg Spironolactone and excipients q.s.p. 500 mg.
- Each 1000 mg tablet contains 5 mg Benazepril\*, 20 mg Spironolactone and excipients q.s.p. 1000 mg.
- Each 2000 mg tablet contains 10 mg Benazepril\*, 40 mg Spironolactone and excipients q.s.p. 2000 mg. (\*2.5 mg Benazepril HCl is equivalent to 2.3 mg Benazepril base; 5 mg Benazepril HCl is equivalent to 4.6 mg Benazepril base; 10 mg Benazepril HCl is equivalent to 9.2 mg Benazepril base)

**Indications:** Inhibitor of the Angiotensin I-Converting Enzyme (ACE) and aldosterone antagonist. Mixed Vasodilator.

It is indicated for treating congestive heart failure (CHF) in dogs caused by atrioventricular valve failure or by dilated cardiomyopathy. The association of spironolactone and benazepril is beneficial since both active ingredients act at the level of the renin-angiotensin-aldosterone system (RAAS), at different levels of the cascade. By inhibiting the Angiotensin I-Converting Enzyme, Benazepril produces vasodilation and prevents the release of aldosterone. As an aldosterone antagonist, Spironolactone blocks its release, preventing the appearance of myocardial fibrosis and ventricular arrhythmias.

**Administration and form of use:** The product is administrated exclusively by oral route. The quadrisected tablet can be divided into 4 equal parts, allowing correct adjustment of the dose.

**Dosing:** The product is administrated at the following dose:

- Benazepril hydrochloride: 0.5 mg/kg/day.
- Spironolactone: 2 mg/kg/day

### This is equivalent to:

- 1 x 500 mg tablet (2.5 mg Benazepril and 10 mg Spironolactone) per 5 kg body weight at 24 hour intervals.
- 1 x 1000 mg tablet (5 mg Benazepril and 20 mg Spironolactone) per 10 kg body weight at 24 hour intervals.
- $\bullet$  1 x 2000 mg tablet (10 mg Benazepril and 40 mg Spironolactone) per 20 kg body weight at 24 hour intervals.





Given the type of pathology treated, treatment is usually for life. However, the Veterinary Doctor involved shall establish the duration of treatment based on the specific characteristics of each case.

### Possible side effects:

- Unneutered males treated with spironolactone frequently present reversible prostate atrophy.
- Some dogs may present transitory signs of fatigue or drowsiness.
- The product may produce initial hypotension, kidney failure with increased plasma concentrations of creatinine and hyperkalemia.
- Like other ACE inhibitors, benazepril may produce anorexia, vomiting and diarrhea.

## Contraindications and restrictions on use:

- Do not use in cases of known hypersensitivity to Angiotensin-Converting Enzyme (ACE) inhibitors or to spironolactone.
- Spironolactone has an anti-androgenic effect, therefore, the veterinary product is not recommended for dogs during the growth phase.
- Safety studies have not been carried out in puppies. It is recommended not to use the product in dogs aged less than 4 months or weighing less than 2.5 kg.
- Since the corresponding safety studies have not been carried out, it is recommended not to use the product in dogs used for breeding, or pregnant or lactating bitches.

## **Drug interactions:**

-Furosemide and pimobendan have been used jointly with this combination of benazepril HCl and spironolactone in dogs with heart failure with no clinical evidence of adverse interactions.

- -The concomitant administration of this veterinary medicinal product with other anti-hypertensive agents (e.g.: calcium channel blockers, ß-blockers or diuretics), anesthetics or sedatives may lead to the addition of hypotension.
- -The concomitant administration of this veterinary medicinal product with other potassium-sparing treatments (such as ß-beta blockers, calcium channel blockers, Angiotensin receptor blockers) or with potassium supplements may lead to hyperkalemia. It is recommended not to administrate together with K+ supplements orally.
- Do not administrate together with Non-Steroidal Anti-inflammatory Drugs (NSAIDs) since these act as an antagonist of spironolactone.
- Spironolactone reduces the elimination of digoxin and consequently increases digoxin plasma concentration. Since digoxin has a narrow therapeutic index, it is recommended to carefully monitor dogs receiving digoxin and a combination of benazepril hydrochloride and spironolactone.

#### Overdose:

Symptoms: Accidental overdose may produce transitory and reversible hypotension

Emergency behavior: Carry out symptomatic treatment consisting of intravenous infusion of an isotonic saline solution at body temperature. The patient must be monitored until blood pressure has been restored. Antidote: there is no specific treatment or antidote.

### Special precautions for use in animals:

- Kidney function and serum potassium levels shall be evaluated before and during treatment with benazepril and spironolactone, especially in dogs that may suffer from hypoadrenocorticism, hyperkalemia, hyponatremia or that present some type of kidney failure
- Unlike humans, the use of this combination has not shown a greater incidence of hyperkalemia in clinical trials in dogs
- Since spironolactone is metabolized in the liver, this veterinary medicine should not be administrated to dogs with severe liver failure

### **General precautions:**

- People with a known hypersensitivity to benazepril or spironolactone should avoid contact with the veterinary product.
- Pregnant women should take special precautions to avoid accidental oral exposure, since it has been shown that ACE inhibitors affect the fetus during pregnancy in humans.
- Wash hands after using the product.
- The product should be kept in its original container, perfectly closed to protect from dampness.
- After use, dispose of container as household waste.

Empty containers should be disposed of according to the environmental regulations in force and in line with post-consumption waste collection plans.

Intoxication in humans: In case of accidental ingestion, consult a doctor immediately and show the product packaging or insert.

There is no specific treatment or antidote.

National Toxicology Center: Tel.: 0800-333-0160. Keep away from reach of children and animals.

## **Pharmaceutical forms:**

Box containing 20 palatable tablets in blisters with 4 or 10 tablets.

Keep in original container away from direct sunlight. Do not store above 30 °C.

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Manuf. Plant No. 4384 - Made in Argentina.

# Manufactured by BROUWER S.A.

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