FOR ANIMAL USE ONLY

BRAVECTO®

For Miniature Dogs (2 - 4,5 kg)
For Small Dogs (> 4,5 - 10 kg)
For Medium Dogs (> 10 - 20 kg)
For Large Dogs (> 20 - 40 kg)
For Extra-Large Dogs (> 40 - 56 kg)

Reg. No. G4083 (Act 36/1947)
Namibia Reg. No. V14/18.3.10/1259 NS0
NAFDAC Reg. No. A9-100511, A9-100512, A9-100513, A9-100514, A9-100515

INDICATIONS
For the treatment and prevention of tick, flea and mite infestations in dogs. **Bravecto®** kills adult, and juvenile ticks (larvae and nymphs). **Bravecto®** can be used as part of a treatment strategy for flea allergy dermatitis (FAD). For the treatment of Demodicosis caused by *Demodex* spp. and Sarcoptic mange mites. In a controlled trial, treatment with fluralaner resulted in the complete removal of *Demodex* spp. mites from treated dogs.
For the treatment of *Otodectes* spp. ear mite infestations.

The flea insecticidal efficacy of **Bravecto®** (fluralaner) significantly reduces the likelihood of *Dipylidium caninum* (tapeworm) transmission from fleas to susceptible dogs throughout the 84 days following a single treatment, by controlling fleas on dogs and lowering the flea burden in the dog's immediate environment.

COMPOSITION
Contains fluralaner equivalent to 25 to 56 mg/kg body weight.
Each chewable tablet contains:
Miniature Dogs: 112,5 mg
Small Dogs: 250 mg
Medium Dogs: 500 mg
Large Dogs: 1 000 mg
Extra-Large Dogs: 1 400 mg

Excipients: aspartame, disodium embonate monohydrate, glycerol, liver flavour, Macrogol 3350, magnesium stearate, maize starch, sodium lauryl sulphate, soyabean oil, sucrose.

CAUTION

STORAGE
- Store at or below 30 °C in a cool, dry place.
- Store in the original package in order to protect from light.
- Do not use this veterinary medicinal product after the expiry date which is stated on the container label.

PHARMACOLOGICAL ACTION

Pharmacodynamic properties

Fluralaner is an acaricide and insecticide. It is efficacious against ticks (*Ixodes* spp., *Dermacentor* spp., *Haemaphysalis elliptica* and *Rhipicephalus sanguineus*) and fleas (*Ctenocephalides* spp.) and mites (*Demodex* spp., *Sarcoptes* spp., *Otodectes* spp.) on dogs. Fluralaner is systemically active on target parasites. Contact activity against ticks and fleas is of minor relevance. Fluralaner is a potent inhibitor of parts of the arthropod nervous system by acting antagonistically on ligand-gated chloride channels (GABA-receptor and glutamate-receptor). In a molecular on target study, fluralaner is not affected by dieldrin resistance.
In vitro, fluralaner overcomes resistance against amidines, organophosphates, cyclodienes, macrocyclic lactones, phenylpyrazoles, benzophenyl ureas, pyrethroids and carbamates.
In vivo, fluralaner is highly effective against fleas proven to be less susceptible to phenylpyrazole insecticides.

Pharmacokinetic properties

Following oral administration, fluralaner is readily absorbed reaching maximum plasma concentrations within 1 day. Food enhances the absorption. Fluralaner is systemically distributed and reaches the highest concentrations in the visceral fat, followed by liver, kidney and muscle. The prolonged persistence and slow elimination from plasma ($t_{½}$ = 12 days) and the lack of extensive metabolism provide effective concentrations of fluralaner for the duration of the inter-dosing interval, ensuring efficacy for 12 weeks. The major route of elimination is the excretion of unchanged fluralaner in faeces (~ 90 % of the dose). Renal clearance is the minor route of elimination.

WARNINGS

- **Use with caution in dogs with pre-existing epilepsy.**
- Safety in puppies less than 8 weeks of age and/or dogs weighing less than 2 kg has not been established.
- For dogs infected with tapeworm, it is recommended that a suitable tapeworm treatment be used.
- Keep **Bravecto®** in the original packaging until use.
- Do not use in case of hypersensitivity to fluralaner or to any of the excipients.
- KEEP OUT OF REACH OF CHILDREN, UNINFORMED PERSONS AND ANIMALS.
- Can be used in breeding, pregnant and lactating dogs.
- **Bravecto® is well tolerated in MDR1 dogs following oral administration.**
- Although this remedy has been extensively tested under a large variety of conditions, failure thereof may ensue as a result of a wide range of reasons. If this is suspected, seek veterinary advice and notify the registration holder.

PRECAUTIONS

- Do not eat, drink or smoke while handling the product.
- Wash hands thoroughly with soap and water immediately after use of the product.
- Do not store with food, drinks, medication or household products.
- Do not administer at intervals shorter than 8 weeks as the safety for shorter intervals has not been tested.

ADVERSE REACTIONS

Commonly observed adverse reactions in clinical trials (1,6 % of treated dogs) were mild and transient gastrointestinal effects such as diarrhoea, vomiting, inappetence, and drooling.
Lethargy, muscle tremor, ataxia and convulsion have been reported very rarely in spontaneous reports. Most reported adverse reactions were self-limiting and of short duration.

The frequency of adverse reactions is defined using the following convention:
- very common (more than 1 in 10 animals displaying adverse reaction(s) during the course of one treatment)
- common (more than 1 but less than 10 animals in 100 animals).
- uncommon (more than 1 but less than 10 animals in 1 000 animals).
- rare (more than 1 but less than 10 animals in 10 000 animals).
- very rare (less than 1 animal in 10 000 animals, including isolated reports).

INTERACTION WITH OTHER MEDICINAL PRODUCTS AND OTHER FORMS OF INTERACTION
None known.
Fluralaner is highly bound to plasma proteins and might compete with other highly bound drugs such as non-steroidal anti-inflammatory drugs (NSAIDs) and the cumarin derivative warfarin. Incubation of fluralaner in the presence of carprofen or warfarin in dog plasma at maximum expected plasma concentrations did not reduce the protein binding of fluralaner carprofen or warfarin. During clinical field testing, no interactions between **Bravecto®** and routinely used veterinary medicinal products were observed.

DIRECTIONS FOR USE – USE ONLY AS DIRECTED
- Administer tablets at or around the time of feeding for maximum effectiveness.
- It can be mixed with food or given by hand since it is very palatable.
- For optimal control of tick and flea infestation, **Bravecto**® should be administered at a 12-week interval.
- **Bravecto**® can be administered all year round.
- The chew tablets should not be broken or divided.

DOSAGE

Weight (kg)	Tablet size
2,0 - 4,5	112,5 mg for miniature dogs
> 4,5 - 10	250 mg for small dogs
> 10 - 20	500 mg for medium dogs
> 20 - 40	1 000 mg for large dogs
> 40 - 56	1 400 mg for extra-large dogs

Within each weight range a whole tablet must be used.
For dogs weighing more than 56 kg, use a combination of 2 tablets that most closely matches the body weight.

OVERDOSE
Bravecto® was well tolerated following oral administration to puppies aged between 8 and 9 weeks and weighing between 2,0 and 3,6 kg at doses of up to 56 mg, 168 mg and 280 mg

fluralaner/kg body weight (equivalent to 1, 3 and 5 times the maximum expected clinical dose) on 3 occasions at 8-week intervals. No treatment-related adverse effects were observed.
There were no findings on reproductive performance and offspring viability when up to 168 mg/kg of fluralaner (equivalent to 3 times the maximum treatment dose) was administered orally to Beagle dogs.
Bravecto® was well tolerated in Collies with MDR1-/1 following a single dose at 3 times the recommended dose.

EFFICACY
Bravecto® was shown to be effective* against fleas and various tick species.
* Efficacy > 90 to 95 %

Bravecto® is indicated for the treatment of the following:
TICKS: (*Ixodes ricinus, Ixodes hexagonus, Ixodus scapularis, Dermacentor reticulatus, Dermacentor variabilis, Haemaphysalis elliptica* and *Rhipicephalus sanguineus.)*
Directly after treatment, at least 90 % of ticks on dogs are killed within 8 hours. During the whole treatment interval, at least 90 % of ticks on dogs are killed within 12 hours.

FLEAS: (*Ctenocephalides felis)*
Directly after treatment, at least 95 % of fleas are killed within 8 hours. During the whole treatment interval, at least 95 % of fleas on dogs are killed within 12 hours.

Fleas and ticks must attach to the host and commence feeding in order to be exposed to the active substance.

Effect on immature stages
Bravecto® kills adult as well as juvenile ticks (larvae, nymphs). Newly emerged fleas on a dog are killed before viable eggs are produced. An *in vitro* study also demonstrated that very low concentrations of fluralaner stops the production of viable eggs by fleas.

Control of flea infestations and flea allergy dermatitis (FAD)
The flea life cycle is broken due to the rapid onset of action and long-lasting efficacy against adult fleas on the animal and the absence of viable egg production. **Bravecto**® effectively controls environmental flea populations in areas to which the dog has access. **Bravecto**® can be used as part of a treatment strategy for flea allergy dermatitis (FAD).

Mites
A single oral administration of **Bravecto**® chewable tablets to dogs with *Sarcoptes* spp. and *Otodectes* spp. infestations showed a 100 % reduction in live mite counts as well as a complete elimination of live mites 28 days after treatment administration. The treatment resulted in a reduction of skin lesions and increase of hair re-growth.
Single oral administration of **Bravecto**® chewable tablets is highly effective against generalised demodicosis caused by *Demodex* spp., with no mites detectable at 56 and 84 days following treatment.

The flea insecticidal efficacy of **Bravecto**® (fluralaner) significantly reduces the likelihood of *Dipylidium caninum* (tapeworm) transmission from fleas to susceptible dogs throughout

the 84 days following a single treatment, by controlling fleas on dogs and lowering the flea burden in the dog's immediate environment.

IDENTIFICATION
Light to dark brown chewable tablet with a smooth or slightly rough surface and circular shape. Some marbling, speckles or both may be visible.

PRESENTATION
Packaged in an aluminium foil blister with aluminium foil lid stock in an outer carton.

REGISTRATION HOLDER
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