POWERFUL 3 month protection to fight paralysis ticks
Scalibor® - 3 Month Paralysis Tick Collar for Dogs

The paralysis tick (*Ixodes holocyclus*) is the most dangerous tick species infesting domestic animals, producing a potentially fatal ascending flaccid paralysis. Found in eastern Australia, paralysis ticks cause serious morbidity and mortality in thousands of domestic animals each year, particularly dogs, most commonly in the warmer months when there is an abundance of adult female ticks.

Control of paralysis tick infestations for dogs in affected areas is best achieved by using a product that is not only efficacious, but also provides the longest duration of activity to improve convenience and compliance for dog owners.

Scalibor® is a major advance in the control of paralysis ticks as a single collar provides control for up to 14 weeks, providing Australian dog owners with a convenient, long term treatment option for the control of paralysis tick infestations.

Scalibor® - Unique patented release technology

Scalibor® contains deltamethrin - a second generation synthetic pyrethroid and highly potent insecticide. Slow release of the active ingredient directly to the skin for a sustained period controls paralysis ticks (*Ixodes holocyclus*) for up to 14 weeks and brown dog ticks (*Rhipicephalus sanguineus*) for up to 26 weeks.

How Scalibor® works

The progressive release of deltamethrin from the collar is facilitated by a unique carrier process (see Figure 1). Once the deltamethrin is removed from the outer surface of the collar, it is immediately replaced.

*Figure 1. Deltamethrin (DTM) is highly attracted to the excipient, triphenyl phosphate (TPP). Together they form a complex, DTM + TPP, which saturates the polymer matrix of Scalibor® and results in a regular release of the complex.*

Under normal conditions, deltamethrin is continuously released by friction between the collar and the hair coat after it is fitted correctly to a dog. Since deltamethrin is highly lipophilic, it gradually spreads over the total body surface of the dog through the lipid layer on the skin surface. Scalibor® exerts optimal control of paralysis and brown dog ticks commencing 2-3 weeks after it is applied to a dog that has not been treated previously with Scalibor®. Hence, Scalibor® should be applied approximately 2-3 weeks before the dog is likely to be exposed to infestation.
**Scalibor® and tick control**

Deltamethrin is a second generation synthetic pyrethroid with proven acaricidal action against various tick species. Even in cases of repeated and heavy infestations, Scalibor® has been proven to be highly effective.¹,²

**Efficacy against paralysis ticks**  
(*Ixodes holocyclus*)

- A recent Australian study¹ was performed to determine the duration of efficacy of Scalibor® against paralysis ticks.
- Dogs were artificially infested at 14-day intervals with unfed adult female paralysis ticks (30 ticks each time) for up to 140 days following application of the collar to the dogs.
- The results (see Figure 2) demonstrated that Scalibor® gave greater than 90% control of paralysis ticks for at least 14 weeks.

![Figure 2. Efficacy of Scalibor® against repeated infestations with paralysis ticks](image)

**Efficacy against brown dog ticks**  
(*Rhipicephalus sanguineus*)

- The efficacy of Scalibor® against brown dog ticks was tested in a controlled laboratory trial where dogs were artificially infested at 10 different times with adult brown dog ticks, and also in a field study with exposure to ticks by natural infestation.²
- The laboratory trial demonstrated >90% efficacy of Scalibor® for 6 months, with the subsequent field study indicating a duration of efficacy between 5 and 6 months.

![Figure 3. Efficacy of Scalibor® against repeated infestations with brown dog ticks](image)

**Safety**

- Deltamethrin is a well-known active ingredient with high inherent safety and widely accepted as having an excellent safety profile in mammalian species.
- No evaporation of the active ingredient — deltamethrin is delivered to the dog only.
Using the collar

- Scalibor® exerts best effect for the control of the named ticks 2-3 weeks after application. The collar should therefore be applied 2-3 weeks before the dog is likely to be exposed to infestation.
- Avoid cutting a dog’s hair for a few days before applying the collar.
- The collar is sealed in a sachet inside the carton and should not be opened until ready for use.
- Sometimes after prolonged storage the collar has a powdery appearance, which is due to release of a limited amount of DTM-TPP complex during transit and/or storage. This powder can be removed with a damp cloth prior to fitting the collar.
- Buckle the collar comfortably around the neck of the dog so two or three fingers can be inserted easily between the collar and the dog’s neck (this step is important because the continued release of deltamethrin from Scalibor® depends on adequate contact between the surface of the collar and the skin of the neck region of the dog).
- The collar, if buckled too tightly, can cause irritation. Trim off any excess length of collar 5cm from the buckle and dispose as instructed on the product leaflet.
- Check the collar every 2-3 weeks to ensure that fitting is still optimal.
- The effect of swimming, bathing or shampooing on efficacy has not been established. The collar should be removed before swimming, bathing or shampooing the dog because the active substance is harmful to fish and other aquatic organisms.
- In rare cases, localized skin lesions, localized dermatitis or erythema, pruritus and hair loss can be observed. In extreme cases of skin lesions remove the collar until symptoms have resolved. Wipe the collar with a damp cloth to remove any excess deltamethrin before reapplying.
Frequently asked questions

1. How is Scalibor® different from other collars?
Many collars have a basic process where the active ingredient evaporates from the surface of a synthetic band. Scalibor® uses a technologically advanced PVC matrix which is saturated with a complex linking deltamethrin (DTM) to triphenyl phosphate (TPP). With time and the movements of the skin and hair (friction), DTM is released constantly from the matrix on a regular basis. The very lipophilic DTM then migrates onto the lipid layer of the skin and also tends to concentrate in hair follicles. This mode of action explains why the onset of action takes 2-3 weeks to reach maximum effect, but also why Scalibor® is so effective for so long (up to 14 weeks for paralysis ticks and up to 26 weeks for brown dog ticks).

2. Can Scalibor® be used in any breed of dog?
Yes. There are no restrictions for the use of Scalibor® in any particular breed of dog, and it can be applied from 8 weeks of age. You just need to ensure that the collar is correctly fitted to suit the size of the dog, so that two or three fingers can be inserted easily between the collar and the dog’s neck - any excess collar should be trimmed off 5cm from the buckle.

3. Why are ticks sometimes seen on treated dogs?
Ticks that are seen in the first 2-3 weeks after applying Scalibor® may be because the deltamethrin has not reached an optimal concentration on all parts of the dog. Because of the unique release system it takes about 2-3 weeks to cover the entire dog. Ticks can also occasionally be found attached to treated dogs because they are not killed immediately by the collar, however, they are generally repelled, knocked down or killed before they can cause paralysis.

4. Can dogs swim or be bathed while wearing the collar?
No. The effect of swimming, bathing or shampooing on efficacy has not been established. The collar should be removed before swimming, bathing or shampooing the dog because the active substance is harmful to fish and other aquatic organisms.

5. Can Scalibor® be used concurrently with other ectoparasiticides?
In certain circumstances, such as for control of paralysis ticks during the period until Scalibor® achieves its optimal efficacy after initial application, or for flea control, a dog owner may wish to use another ectoparasiticide in conjunction with Scalibor®. Scalibor® has been tested with fipronil-(S)-methoprene (Frontline® Plus) in a small study, which demonstrated that the combination was efficacious and well tolerated by dogs. Scalibor® should not be used with other ectoparasiticides containing organophosphates.

6. Can Scalibor® be used in dogs if they are being treated with other medications?
Yes. Deltamethrin has not been found in the circulation of dogs following normal usage of Scalibor® (assay limit of detection 5 ng/ml). The lack of systemic absorption of deltamethrin means there is no risk of interaction with systemic drugs.

7. Can Scalibor® be used in pregnant bitches?
No. The safety of Scalibor® in breeding dogs of both sexes has not been established.

8. Are there any issues for cats that live with treated dogs?
Deltamethrin is released from the Scalibor® collar by friction and circulates in the lipid layer on the surface of the treated dog’s skin; there is no evaporation of the active ingredient, it is delivered only to the dog. Though cats are sensitive to synthetic pyrethroids, the concentrations of deltamethrin on the dog’s skin are relatively low and are more or less constant for the duration of the dosing interval of 14 weeks (paralysis ticks) or 26 weeks (brown dog ticks). Hence, the amount a cat could potentially be exposed to by, for example, grooming a treated dog would be quite small. Additionally, Scalibor® has been available overseas for more than 10 years with no pharmacovigilance reports ever received about problems with cats associated with deltamethrin from Scalibor®-treated dogs.
For more information about Scalibor® please contact your MSD Animal Health Territory Manager or Customer Service on 1800 033 461.


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