

## 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

DACLOTRIX 200 mg/40 mg spot-on solution for dogs up to 4 kg

## 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each 0.4 ml pipette contains:

### Active substances:

Permethrin (40:60)	200.0 mg
Imidacloprid	40.0 mg

### Excipients:

Butylhydroxytoluene (E321)	0.4 mg
N-methylpyrrolidone	80.0 mg

For the full list of excipients, see section 6.1.

## 3. PHARMACEUTICAL FORM

Spot-on solution.

Clear yellowish to brownish solution.

## 4. CLINICAL PARTICULARS

### 4.1 Target species

Dogs

### 4.2 Indications for use, specifying the target species

For the treatment and prevention of flea (*Ctenocephalides felis*) infestation.

Fleas on dogs are killed within one day following treatment. One treatment prevents further flea infestation for four weeks. The product can be used as part of a treatment strategy for flea allergy dermatitis (FAD) where this has been previously diagnosed by a veterinary surgeon.

The product has persistent acaricidal efficacy against tick infestations (*Rhipicephalus sanguineus* and *Ixodes ricinus* for four weeks, and *Dermacentor reticulatus* for three weeks) and persistent repellent efficacy (*Ixodes ricinus*) for three weeks .

Ticks already on the dog may not be killed within two days after treatment and may remain attached and visible. Therefore the removal of ticks already on the dog at the time of treatment is recommended, in order to prevent them from attaching and having a blood meal.

One treatment provides repellent (anti-feeding) activity against the sand fly *Phlebotomus perniciosus* for three weeks and against the mosquito *Aedes aegypti* from 7 days up to 14 days after treatment.

Reduction of the risk of infection with *Leishmania infantum* via transmission by sandflies (*Phlebotomus perniciosus*) for up to 3 weeks. The effect is indirect due to product's activity against the vector.

### 4.3 Contraindications

In the absence of available data do not use the product on puppies of less than 7 weeks of age, or 1.5 kg of weight.

Do not use in known cases of hypersensitivity to the active substances or to any of the excipients.

Do not use on cats. (Refer to section 4.5 – Special precautions for use).

### 4.4 Special warnings for each target species

There may be an attachment of single ticks or bites by single sand flies or mosquitoes. For this reason, a transmission of infectious diseases cannot be excluded if conditions are unfavourable.

As the product exerts a repellent (anti-feeding) activity against *Aedes aegypti* mosquitoes 7 days after treatment, the product should preferably be applied 1 week before animals are likely to become exposed to these mosquitoes.

The product remains effective against fleas if the animal becomes wet. After weekly immersions in water for one minute the period of persistent insecticidal efficacy against fleas was not reduced. However, prolonged, intense exposure to water should be avoided. In cases of frequent and/or prolonged water exposure the persistent efficacy may be reduced. In these cases do not retreat more frequently than once weekly. If a dog requires a shampoo, it should be administered before applying the product or at least 2 weeks after application, to optimise efficacy of the product.

The effectiveness of the product against ticks, and the repellent effectiveness of the product following swimming or shampooing has not been investigated.

Immediate protection against sandflies bites is not documented. Treated dogs for the reduction of the risk of infection with *Leishmania infantum* via transmission by sandflies *P. perniciosus* should be kept in a protected environment during the first 24 hours after the initial treatment application.

### 4.5 Special precautions for use

#### Special precautions for use in animals

Care should be taken to avoid the content of the pipette coming into contact with the eyes or mouth of the recipient dogs.

Care should be taken to administer the product correctly as described under section 4.9. In particular oral uptake due to the licking of the application site by treated or in-contact animals should be avoided.

Do not use on cats.



This product is extremely poisonous to cats and could be fatal due to the unique physiology of cats which is unable to metabolise certain compounds including permethrin. To prevent cats from being accidentally exposed to the product, keep treated dogs away from cats after treatment until the application site is dry. It is important to ensure that cats do not groom the site of application on a dog, which has been treated with this product. Seek veterinary advice immediately if this occurs.

Consult your veterinary surgeon before using the product on sick and debilitated dogs.

Special precautions to be taken by the person administering the veterinary medicinal product to animals

Avoid contact between the product and skin, eyes or mouth.

Do not eat, drink or smoke during application.

Wash hands thoroughly after use.

In case of accidental spillage onto skin, wash off immediately with soap and water.

People with known skin sensitivity may be particularly sensitive to this product.

The predominant clinical symptoms that in extremely rare case may be shown are transient sensory irritations of the skin like tingling, burning sensation or numbness.

If the product gets accidentally into the eyes, they should be thoroughly flushed with water. If skin or if eye irritation persists, seek medical advice immediately and show the package leaflet or the label to the physician.

Do not ingest. In case of accidental ingestion seek medical advice immediately and show the package leaflet or the label to the physician.

Treated dogs should not be handled especially by children until the application site is dry.

This may be ensured by treating the dogs. in the evening. Recently treated dogs should not be allowed to sleep together with their owner, especially children.

Keep the stored pipettes in the original blister. In order to prevent children from getting access to used pipettes, used pipettes should be disposed of immediately.

Other precautions

The solvent in the product may stain certain materials including leather, fabrics, plastics and finished surfaces. Allow the application site to dry before permitting contact with such materials.

The product is toxic for aquatic organisms. Treated dogs must not under any circumstances be allowed into any type of surface water for at least 48 hours after treatment.

**4.6 Adverse reactions (frequency and seriousness)**

Pruritus, hair loss, erythema, oedema, and erosions may occur in very rare cases at the application site and are generally self-resolving.

Behaviour changes (agitation, restlessness, whining or rolling), gastro-intestinal symptoms (vomiting, diarrhoea, hypersalivation, diminished appetite) and neurological signs such as unsteady movement and twitching, or lethargy in dogs susceptible to the ingredient permethrin may be observed in very rare cases. These signs are generally transient and self-resolving.

Accidental oral uptake may result in transient vomiting and neurological signs such as tremor and incoordination. Treatment should be symptomatic. There is no known specific antidote.

The frequency of adverse reactions is defined using the following convention:

- very common (more than 1 in 10 animals treated displaying adverse reaction(s))
- common (more than 1 but less than 10 animals in 100 animals treated)
- uncommon (more than 1 but less than 10 animals in 1,000 animals treated)
- rare (more than 1 but less than 10 animals in 10,000 animals treated)
- very rare (less than 1 animal in 10,000 animals treated, including isolated reports).

#### 4.7 Use during pregnancy, lactation or lay

The safety of the veterinary medicinal product has not been established in dogs during pregnancy, lactation or in animals intended for breeding. Laboratory studies in rabbits and rats with the excipient N-methyl pyrrolidone have shown evidence of foetotoxic effects. Use only according to the benefit-risk assessment by the responsible veterinarian.

#### 4.8 Interaction with other medicinal products and other forms of interaction

None known.

#### 4.9 Amounts to be administered and administration route

Route of administration and dosage:

Spot-on use only. Apply only to undamaged skin.

The recommended minimum dose is:

10 mg/kg body weight (bw) imidacloprid and 50 mg/kg body weight (bw) permethrin.

Administer by topical application to the skin according to the bodyweight as follows:

Dogs (kg body weight)	Strength	Volume (ml)	Imidacloprid (mg/kg body weight)	Permethrin (mg/kg body weight)
≤ 4 kg	200 mg/40 mg spot-on solution for dogs up to 4 kg	0.4 ml	minimum of 10	minimum of 50
>4 kg ≤ 10 kg	500 mg/100 mg spot-on solution for dogs over 4 kg up to 10 kg	1.0 ml	10 - 25	50 - 125
>10 kg ≤ 25 kg	1250 mg/250 mg spot-on solution for dogs over 10 kg up to 25 kg	2.5 ml	10 - 25	50 - 125
>25 kg ≤ 40 kg	2000 mg/400 mg spot-on solution for dogs over 25 kg	4.0 ml	10 - 16	50 - 80

For dogs > 40 kg the appropriate combination of pipettes should be used.

To ensure correct dosage, body weight should be determined as accurately as possible.

To reduce re-infestation from emergence of new fleas, it is recommended to treat all dogs in a household. Other animals living in the same household should also be treated with a suitable product. To aid further in reducing environmental challenge, the additional use of a suitable environmental treatment against adult fleas and their developmental stages is recommended.

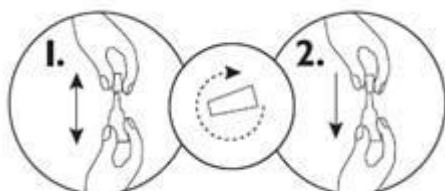
Depending on the ectoparasite challenge, it may be necessary to repeat the treatment. The interval between two treatments should be 4 weeks. However, in cases of frequent and/or prolonged water exposure the persistent efficacy may be reduced. In these cases do not retreat more frequently than once weekly.

To protect a dog over the whole sand fly season, treatment should be compliantly continued throughout.

Transient cosmetic changes (e.g. skin scaling, white deposits and spiking of the hair) may be observed at application sites.

Method of administration:

Remove one pipette from the package. Hold applicator pipette in an upright position. Tap the narrow part of pipette to ensure the contents are within the main body of the pipette, twist and pull cap off. Turn the cap around and place the other end of cap back on pipette. Push and twist the cap to break seal, and then remove the cap from the pipette.



For dogs 10 kg body weight or less:

With the dog standing still, part the coat between the shoulder blades until the skin is visible. Place the tip of the pipette on the skin and squeeze firmly several times to empty the contents directly onto the skin.



For dogs of more than 10 kg body weight:

With the dog standing still, the entire contents of the pipette should be applied evenly to four spots on the top of the back from the shoulder to the base of the tail. At each spot, part the hair until the skin is visible. Place the tip of the pipette on the skin and gently squeeze to expel a portion of the solution on the skin. Do not apply an excessive amount of solution at any one spot that could cause some of the solution to run off the side of the dog.



**4.10 Overdose (symptoms, emergency procedures, antidotes), if necessary**

No adverse clinical signs were noted in healthy puppies or adult dogs exposed to 5x overdose or for puppies whose mothers were treated with 3x overdose of the combination of imidacloprid and permethrin. The severity of skin erythema, which sometimes occurs at the application site, increases with overdose.

#### **4.11 Withdrawal period(s)**

Not applicable.

### **5. PHARMACOLOGICAL PROPERTIES**

Pharmacotherapeutic group: Ectoparasiticides for topical use, incl. Insecticides, permethrin, combinations.

ATCvet code: QP53AC54.

#### **5.1 Pharmacodynamic properties**

The product is an ectoparasiticide for topical use containing imidacloprid and permethrin. This combination acts as an insecticide and acaricide.

**Imidacloprid** is an ectoparasiticide belonging to the chloronicotinyl group of compounds. Chemically, it can be classified as a chloronicotinyl nitroguanidine. Imidacloprid is effective against adult fleas and larval flea stages. In addition to the adulticide flea efficacy of imidacloprid, a larvicidal flea efficacy in the surroundings of the treated pet has been demonstrated. Larval stages in the dog`s immediate surroundings are killed following contact with a treated animal. It has a high affinity for the nicotinergeric acetylcholine receptors in the post-synaptic region of the central nervous system (CNS) in insects. The ensuing inhibition of cholinergic transmission in insects results in paralysis and death of the parasite.

**Permethrin** belongs to the type I class of pyrethroid acaricides and insecticides. Pyrethroids affect the voltage-gated sodium channels in vertebrates and non-vertebrates. Pyrethroids are so called “open channel blockers” affecting the sodium channel by slowing both the activation and the inactivation properties thus leading to hyperexcitability and death of the parasite.

In the combination of both substances, it has been shown that imidacloprid functions as the activator of arthropod ganglion and therefore increases the efficacy of permethrin.

#### **5.2 Pharmacokinetic particulars**

Following topical application in dogs, the solution distributes over the body surface of the animal. Both active substances remain on the skin and hair of the treated animal for at least 4 weeks. Systemic absorption of the product is sufficiently low so as not to affect efficacy or target species tolerance.

#### **Environmental properties**

The product should not be allowed to enter water courses as this may be dangerous for fish and aquatic organisms. For treated dogs, please see section 4.5.

Imidacloprid and/or permethrin containing products are toxic to honey bees.

### **6. PHARMACEUTICAL PARTICULARS**

#### **6.1 List of excipients**

Butylhydroxytoluene (E321)  
Triglycerides, Medium-Chain

N-methylpyrrolidone  
Citric acid (E330)  
Dimethyl sulfoxide

## **6.2 Major incompatibilities**

None known.

## **6.3 Shelf life**

Shelf life of the veterinary medicinal product as packaged for sale: 3 years.

## **6.4. Special precautions for storage**

Store in the original packaging in order to protect from moisture and light.

## **6.5 Nature and composition of immediate packaging**

White polypropylene pipette closed with a polyethylene (HDPE) cap. Each pipette is packed in a polyethylene terephthalate/aluminium/low density polyethylene triplex bag.

1 ml pipette containing 0.4 ml of solution

Box containing 1, 3, 4, 6, 10 pipettes

Not all pack sizes may be marketed.

## **6.6 Special precautions for the disposal of unused veterinary medicinal product or waste materials derived from the use of such products, if appropriate**

The product should not enter water courses as this may be dangerous for fish and other aquatic organisms.

After use, replace cap on tube. Any unused veterinary medicinal product or waste materials derived from such veterinary medicinal product should be disposed of in accordance with local requirements.

## **7. MARKETING AUTHORISATION HOLDER**

KRKA, d.d., Novo mesto  
Šmarješka cesta 6  
8501 Novo mesto  
Slovenia

## **8. MARKETING AUTHORISATION NUMBER(S)**

## **9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION**

Date of first authorisation:

Date of last renewal:

**10      DATE OF REVISION OF THE TEXT**

**PROHIBITION OF SALE, SUPPLY AND/OR USE**

Not applicable.