



FRONTLINE PLUS SPOT-ON DOG

Qualitative and quantitative composition

Frontline Plus Spot-On Dog	Small	Medium	Large	X-Large
Weight (kg)	2–10	> 10–20	> 20–40	> 40
Volume of unit dose (ml)	0.67	1.34	2.68	4.02
Fipronil (mg)	67	134	268	402
(S)-methoprene (mg)	60.30	120.60	241.20	361.80
Butylhydroxytoluene (E321) (mg)	0.07	0.13	0.27	0.4
Butylhydroxyanisole (E320) (mg)	0.13	0.27	0.54	0.8

Pharmaceutical form Spot-on solution. Clear amber solution.

Clinical particulars *Target species:* Dogs

Indications for use:

- To be used against infestations with fleas, alone or in association with ticks and/or biting lice.
- Treatment of flea infestations (*Ctenocephalides* spp.). Insecticidal efficacy against new infestations with adult fleas persist for 8 weeks. Prevention of the multiplication of fleas by inhibiting the development of eggs (ovicidal activity) and larvae and pupae (larvicidal activity) originating from eggs laid by adult fleas for eight weeks after application.
- Treatment of tick infestations (*Ixodes ricinus*, *Dermacentor variabilis*, *Dermacentor reticulatus*, *Rhipicephalus sanguineus*). The product has a persistent acaricidal efficacy for up to 4 weeks against ticks.
- Treatment of infestations with biting lice (*Trichodectes canis*).

Contra-indications: In the absence of available data, the product should not be used on puppies less than 8 weeks old.

Do not use on sick (e.g. systemic diseases, fever) or convalescent animals.

Do not use in rabbits, as adverse reactions with even mortality could occur. In the absence of studies, the use of the product is not recommended in non-target species. This product is specifically developed for dogs. Do not use in cats and ferrets, as this could lead to overdosing.

Special warnings for each target species: Bathing/immersion in water within 2 days after application of the product and more frequent bathing than once a week should be avoided, as no study has been performed to investigate how this affects the efficacy of the product. Emollient shampoos can be used prior to treatment, but reduce the duration of protection against fleas to approximately 5 weeks when used weekly after application of

the product. Weekly bathing with a 2% chlorhexidine medicated shampoo did not affect efficacy against fleas during a 6-week-long study.

Dogs should not be allowed to swim in watercourses for 2 days after application (See "Special precautions for disposal" section).

There may be an attachment of a few ticks. For this reason a transmission of infectious diseases cannot be completely excluded if conditions are unfavourable.

Fleas from pets often infest the animal's basket, bedding and regular resting areas such as carpets and soft furnishings, which should be treated, in case of massive infestation and at the beginning of the control measures, with a suitable insecticide and vacuumed regularly.

When treating infestations of parasites, all in-contact animals should be treated with an appropriate product at the same time.

Special precautions for use in animals: Avoid contact with the animal's eyes.

It is important to make sure that the product is applied to an area where the animal cannot lick it off and to make sure that animals do not lick each other following treatment.

Animals should be weighed accurately prior to treatment.

Special precautions to be taken by the person administering the product to animals: Keep pipettes in original packaging until ready to use.

This product can cause mucous membrane, skin and eye irritation. Therefore, contact of the product with mouth, skin and eyes should be avoided.

If the product is accidentally swallowed, seek medical advice immediately and show the package leaflet to the physician.

Animals or operators with a known hypersensitivity (allergy) to insecticides or alcohol should avoid contact with this product. Avoid contents coming into contact with the fingers. If this occurs, wash hands with soap and water.

After accidental ocular exposure the eye should be rinsed carefully with pure water. Wash hands after use.

Treated animals should not be handled until the application site is dry, and children should not be allowed to play with treated animals until the application site is dry. It is therefore recommended that animals are not treated during the day, should be treated during the early evening, and that recently treated animals are not allowed to sleep with owners, especially children.

Do not smoke, drink or eat during application.

Adverse reactions: Among the very rare suspected adverse reactions, transient skin reactions on the application site (skin discoloration, local hair loss, itching, redness) and general itching or hair loss have been reported after use. Excessive

salivation, reversible nervous signs (increased sensitivity to stimulation, depression, other nervous signs), vomiting or respiratory symptoms have also been observed after use.

If licking occurs, a brief period of excessive salivation may be observed due mainly to the nature of the carrier.

Do not overdose.

Use during pregnancy, lactation or lay: The product can be used during pregnancy and lactation.

Interactions: Do not use simultaneously with other flea products which are applied directly onto the animal.

Amounts to be administered and administration route: By topical application to the skin. In the absence of safety studies, the minimum treatment interval is 4 weeks.

Weight (kg)	Dosage
2–10	1 x 0.67 ml pipette
> 10–20	1 x 1.34 ml pipette
> 20–40	1 x 2.68 ml pipette
> 40	1 x 4.02 ml pipette

Method of administration:

Hold the pipette upright. Tap the narrow part of the pipette to ensure the contents remain within the main body of the pipette. Snap back the tip. Part the coat on the back of the animal at the base of the neck in front of the shoulder blades until the skin is visible. Place the tip of the pipette on the skin and squeeze the pipette several times to empty its contents completely and directly onto the skin in one spot.

Temporary changes to the coat (clumped/greasy hair) may be noted at the application site.

Overdose: No adverse effects were observed in target animal safety studies in 8-week-old puppies, growing dogs and dogs weighing about 2 kg treated once at five times the recommended dose. The risk of experiencing adverse effects (see Adverse Reactions section) may, however, increase when overdosing, so animals should always be treated with the correct pipette size according to bodyweight.

Pharmacological particulars

Pharmacotherapeutic group: Ectoparasitocides for topical use incl. insecticides QP53. The product is an insecticidal and acaricidal solution for topical use, containing an association of an adulticidal active ingredient, fipronil, in combination with an ovicidal and larvicidal active ingredient, (S)-methoprene.

Pharmacodynamic properties: **Fipronil** is an insecticide and acaricide belonging to the phenylpyrazole family. It acts by interacting with ligand-gated chloride channels, in particular those gated by the neurotransmitter gamma-aminobutyric acid (GABA), thereby blocking pre- and post-synaptic transfer of chloride ions across cell membranes. This results in uncontrolled activity of the central nervous system and death of insects or acarines. Fipronil kills fleas within 24 hours and ticks (*Dermacentor reticulatus*, *Dermacentor variabilis*, *Rhipicephalus sanguineus*, *Ixodes scapularis*, *Ixodes ricinus*, *Haemaphysalis longicornis*, *Haemaphysalis flava*, *Haemaphysalis campanulata*) and lice within 48 hours post-exposure.

(S)-methoprene is an insect growth regulator (IGR) of the class of compounds known as juvenile hormone analogues that inhibit the development of immature stages of insects. This compound mimics the action of juvenile hormone and causes impaired development and death of the developing stages of fleas. The on-animal ovicidal activity of (S)-methoprene results from either direct penetration of the eggshell of newly laid eggs or from absorption through the cuticle of the adult fleas. (S)-methoprene is also effective in preventing flea larvae and pupae from developing, which prevents contamination of the environment of treated animals with the immature stages of fleas.

Pharmaceutical particulars

Excipients: Butylhydroxyanisole (E320), Butylhydroxytoluene (E321), Ethanol Polysorbate 80 (E433), Povidone, Diethylene glycol monoethyl ether.

Major incompatibilities: None known.

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

Special precautions for storage: Do not store above 30°C. Store in the original package.

Immediate packaging: Box of 1 or 2 blister card(s) of 3 pipettes, or blister card of 1 pipette, with scored tip, each containing either 0.67 ml, 1.34 ml, 2.68 ml or 4.02ml.

Disposal: Any unused veterinary medicinal product or waste materials derived from such veterinary medicinal product should be disposed of in accordance with local requirements. Fipronil and (S)-methoprene may adversely affect aquatic organisms. Do not contaminate ponds, waterways or ditches with the product or empty containers.

Marketing Authorisation Number Vm 08327/4268-71

Marketing Authorisation Holder Merial Animal Health Ltd
Ellesfield Avenue, Bracknell, RG12 8YS

Manufacturer Merial, 4 chemin du Calquet, 31000 Toulouse (France)

Legal category NFA-VPS

GTIN (Global Trade Item No.)

Frontline Plus Spot-On Dog Small x 3 pipettes 03661103048831
Frontline Plus Spot-On Dog Small x 6 pipettes 03661103048879
Frontline Plus Spot-On Dog Small x 1 pipette 03661103058977
Frontline Plus Spot-On Dog Medium x 3 pipettes 03661103048848
Frontline Plus Spot-On Dog Medium x 6 pipettes 03661103048886
Frontline Plus Spot-On Dog Medium x 1 pipette 03661103058984
Frontline Plus Spot-On Dog Large x 3 pipettes 03661103048855
Frontline Plus Spot-On Dog Large x 6 pipettes 03661103048893
Frontline Plus Spot-On Dog Large x 1 pipette 03661103058991
Frontline Plus Spot-On Dog X-Large x 3 pipettes 03661103048862
Frontline Plus Spot-On Dog X-Large x 6 pipettes 03661103048909
Frontline Plus Spot-On Dog X-Large x 1 pipette 03661103059004

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