

NOV 30 2001

Display Copy

Date of Approval: \_\_\_\_\_

**FREEDOM OF INFORMATION SUMMARY**

**ORIGINAL NEW ANIMAL DRUG APPLICATION**

**ANADA 200-270**

Iverhart<sup>TM</sup> Tablets

For the prevention of canine heartworm (*Dirofilaria immitis*) disease.

Sponsored by:

Blue Ridge Pharmaceuticals, Inc.,  
A Subsidiary of Idexx Laboratories, Inc.  
4249 Piedmont Parkway  
Greensboro, North Carolina 27410

## FREEDOM OF INFORMATION SUMMARY

### 1. GENERAL INFORMATION:

ANADA: 200-270

Sponsor: Blue Ridge Pharmaceuticals, Inc.<sup>TM</sup>  
4249-105 Piedmont Parkway  
Greensboro, NC 27410

Generic Name: Ivermectin Tablets

Trade Name: Iverhart<sup>TM</sup>

Dosage Form: Tablets

How Supplied: Three tablet sizes – 68 mcg tablet for dogs up to 25 lbs; 136 mcg tablet for dogs 26 to 50 lbs; 272 mcg tablet for dogs 51 to 100 lbs. Each tablet size packaged in blisters (6 tablets per card)

How Dispensed: Rx

Amount of Active Ingredients: Small tablet contains 68 mcg of ivermectin; medium tablet contains 136 mcg of ivermectin; large tablet contains 272 mcg of ivermectin

Route of Administration: Oral

Species: Canine

Labeled Dosage: 6 mcg/kg of body weight

Indications for Use: Iverhart is indicated for the prevention of canine heartworm (*Dirofilaria immitis*) disease

Pioneer Product: Heartgard<sup>TM</sup> Tablets, NADA 138-412, Merial Ltd.

### 2. TARGET ANIMAL SAFETY AND DRUG EFFECTIVENESS:

Under the provisions of the Federal Food, Drug, and Cosmetic Act, as amended by the Generic Animal Drug and Patent Restoration Act (53 FR 50460, December 15, 1988, First GADPTRA Policy Letter) an Abbreviated New Animal Drug Application (ANADA) may be submitted for a generic version of an approved new animal drug (pioneer product). Under the Act, approval of a generic product requires a demonstration of bioequivalence to the pioneer product. Bioequivalence of the generic and pioneer products can be demonstrated by

a clinical end-point study (55 FR 24645, June 18, 1990, Fifth GADPTRA Policy Letter; Bioequivalence Guidance, October 2000). The ANADA relies on the target animal safety and drug effectiveness data in the pioneer's New Animal Drug Application (NADA).

***Effectiveness:***

The effectiveness of ivermectin for the claim of the prevention of heartworm disease in dogs has been established by data contained in the approved NADA 138-412 for Heartgard™ Tablets, sponsored by Merial, Ltd. The following clinical end-point study establishes the bioequivalence of the generic Blue Ridge Pharmaceuticals' product to Heartgard™ Tablets.

**Clinical Endpoint Bioequivalence for Canine Heartworm Disease Prevention**

The following study was conducted to determine the clinical endpoint bioequivalence of the two products, Iverhart™ and Heartgard™ for the claim of heartworm prevention (*Dirofilaria immitis*) in dogs. Blood-level bioequivalence studies were not required for this approval because blood levels of ivermectin at the approved dose in dogs are too low for accurate measurement throughout the pharmacokinetic profile of the drug.

Testing Facility: TRS Labs, Inc.  
295 Research Drive  
Athens, GA 30605

Investigator: Dr. John W. McCall

Thirty-six beagle dogs (18 males and 18 females), ranging between 4.7 and 7.1 months of age and weighing between 16 to 33 pounds, were obtained from a USDA licensed supplier. All dogs were inoculated subcutaneously with 50 *D. immitis* L3 larvae thirty days prior to the first treatment. All of the infective larvae were from the same source, of the same age, and handled in the same manner for this study. The dogs were stratified by weight and gender, and randomly assigned to one of three treatment groups (6 males and 6 females per group). Dogs receiving the generic product (Group 1) and the pioneer product (Group 2) were treated every thirty days, for a total of four treatments. The dogs received a minimum dose of 6 mcg ivermectin/kg of body weight. The negative control group (Group 3) received no treatment. All individuals responsible for making study observations, including worm counts, were masked to the treatment groups. All dogs were necropsied 149 days post-inoculation. The heart and lungs of each dog were removed and carefully examined to collect all *D. immitis* adults or macroscopic larvae. Recovered worms were recorded as dead or alive, sexed, counted, and preserved in 10% buffered formalin for retention.

Percent efficacy was calculated using the following formula:

$$\frac{\text{mean \# of parasites in control dogs} - \text{mean \# of parasites in treated dogs}}{\text{mean \# of parasites in control dogs}} \times 100 = \% \text{ efficacy}$$

**Results and Conclusions:** The worm counts for both treated groups (Iverhart and Heartgard) were 0 and the mean worm count for the negative control group was 30.9, with all control animals having heartworm infections (range 22 to 43 worms). Thus, the generic product and the pioneer product were considered equivalent with efficacies of 100% for the prevention of heartworm disease, and no additional analysis was needed.

**3. HUMAN SAFETY:**

Human Safety Relative to Food Consumption:

None required as Iverhart is intended for use only in dogs.

Human Safety Relative to Possession, Handling, and Administration:

Labeling contains adequate caution/warning statements.

**4. AGENCY CONCLUSIONS:**

This is an Abbreviated New Animal Drug Application (ANADA) filed under section 512(b)(2) of the Federal, Food, Drug and Cosmetic (FFD&C) Act.

Safety and effectiveness for this generic animal drug, Iverhart™ Tablets, were established by demonstration of clinical end-point bioequivalence to the pioneer product, Heartgard™ Tablets, NADA 138-412.

The generic product and the pioneer product have identical labeling indications for use in dogs. The route and method of administration of the two drugs are identical. Both drugs are administered orally. The generic and pioneer products contain the same active ingredients.

This ANADA satisfies the requirements of section 512 of the Act and demonstrates that Iverhart™ is safe and effective for its labeled indications, when used under the proposed conditions of use.

Attachments:

1. Generic Labeling:

Package Insert

Blister label

Reminder stickers

Dispensing envelopes for bulk cards

Box Label for 68, 136, & 272mcg tablets

Display Carton Label for 68, 136, & 272mcg bulk tablet strips

Shipper Label for 68, 136, & 272mcg tablets

2. Pioneer Labeling:

Package Insert

Box label

Blister label

# IVERHART™

(ivermectin)

## Tablets

**Caution:** Federal (U.S.A.) law restricts this drug to use by or on the order of a licensed veterinarian.

**INDICATION:** For use in dogs to prevent canine heartworm disease. IVERHART tablets prevent heartworm disease by eliminating the tissue stage of heartworm larvae (*Dirofilaria immitis*) for one month (30 days) after infection.

**DOSAGE:** IVERHART tablets should be administered orally at monthly intervals at the recommended minimum dose level of 6mcg of ivermectin per kilogram (2.72 mcg/lb.) of body weight. (See ADMINISTRATION). The recommended dosage schedule for prevention of canine heartworm disease is as follows:

Dog Weight	Tablets Per Month	Ivermectin Per Tablet	Color on Carton
Up to 25 lbs.	1	68 mcg	Blue
26 to 50 lbs.	1	136 mcg	Green
51 to 100 lbs.	1	272 mcg	Brown

Give dogs over 100 lbs. the appropriate combination of tablets. IVERHART tablets are recommended for use in dogs 6 weeks of age and older.

**ADMINISTRATION:** The IVERHART tablets should be given so that dogs swallow the whole tablet. (The tablet may be wrapped in food to encourage consumption.) Care should be taken to see that the dog consumes the complete dose, and treated animals should be observed for a few minutes after administration to ensure that part of the dose is not lost or rejected. If it is suspected that any of the dose has been lost, redosing is recommended. IVERHART tablets should be given at monthly intervals during the period of the year when mosquitoes (vectors), potentially carrying infective heartworm larvae, are active. The initial dose must be given within one month (30 days) after the first exposure to mosquitoes. The final dose must be given within one month (30 days) after the last exposure to mosquitoes.

When replacing another heartworm preventive in a heartworm disease preventive program, the first dose of IVERHART tablets must be given within one month (30 days) after the last dose of the former medication.

If the interval between doses exceeds one month (30 days), the efficacy of ivermectin can be reduced. For optimal performance, the tablet must be given once a month on or about the same day of the month. If treatment is delayed, whether by a few days or many, immediate treatment with IVERHART tablets and resumption of the recommended dosing regimen minimizes the opportunity for the development of adult heartworms.

**EFFICACY:** IVERHART tablets, given orally using the recommended dose and regimen, are effective against the tissue larval stage of *Dirofilaria immitis* for a month (30 days) after infection and, as a result, prevent the development of the adult stage.

**PRECAUTIONS:** All dogs should be tested for existing heartworm infection before starting treatment with IVERHART tablets, which is not effective against adult *D. immitis*. Infected dogs must be treated to remove adult heartworms and microfilariae prior to initiating a program with IVERHART tablets.

While some microfilariae may be killed by the ivermectin in IVERHART tablets at the recommended dose level, ivermectin tablets are not effective for microfilariae clearance. A mild hypersensitivity-type reaction, presumably due to dead or dying microfilariae and particularly involving a transient diarrhea, has been observed in clinical trials with ivermectin after the treatment of some dogs that have circulating microfilariae.

**Keep this and all drugs out of the reach of children.** In case of ingestion by humans, clients should be advised to contact a physician immediately. Physicians may contact a Poison Control Center for advice concerning cases of ingestion by humans.

For technical assistance or to report adverse drug reactions, please call 1-800-338-3659.

**ADVERSE REACTIONS:** The following adverse reactions have been reported following the use of ivermectin tablets: Depression/lethargy, vomiting, anorexia, diarrhea, mydriasis, ataxia, staggering, convulsions and hypersalivation.

**SAFETY:** Ivermectin tablets have shown a wide margin of safety at the recommended dose level in dogs, (see PRECAUTIONS for exceptions) including pregnant or breeding bitches, stud dogs and puppies aged 6 or more weeks. In clinical trials, many commonly used flea collars, dips, shampoos, anthelmintics, antibiotics, vaccines and steroid preparations have been administered with ivermectin in a heartworm disease preventative program.

Studies with ivermectin indicate that certain dogs of the Collie breed are more sensitive to the effects of ivermectin administered at elevated dose levels (more than 16 times the target use level) than dogs of other breeds. At elevated doses, sensitive dogs showed adverse reactions which included mydriasis, depression, ataxia, tremors, drooling, paresis, recumbency, excitability, stupor, coma and death. Ivermectin tablets demonstrated no signs of toxicity at 10 times the recommended dose (60 mcg/kg) in sensitive Collies. Results of these trials support the safety of ivermectin products in dogs, including Collies, when used as recommended.

**HOW SUPPLIED:** IVERHART tablets are available in three dosage strengths (See DOSAGE section) for dogs of different weights. Each strength comes in a box of 6 tablets, packed 10 boxes per display box or in a bulk dispenser containing 20 cards of 6 tablets per card.

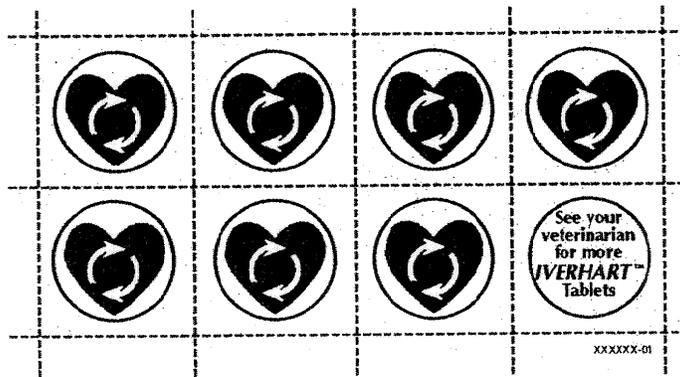
Store IVERHART at controlled room temperature of 68°–77°F (20°–25°C).

ANADA 200-270, Approved by FDA.

Manufactured for: Virbac AH, Inc.  
Fort Worth, TX 76137, USA

For technical assistance or to report adverse drug reactions, please call 1-800-338-3659.

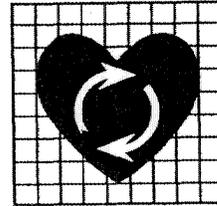
XXXXXX-01



Pink dashed line indicates where individual reminder stickers will be perforated to facilitate the dispensing of the appropriate number of stickers for the number of tablets dispensed.

Dispensing Envelope

**IVERHART™**  
(ivermectin)  
ANADA 200-270



Administer once a month to prevent  
heartworm disease in dogs

XXXXXX-01

**virbac**

Iverhart Envelope Color: Pantone 186CV (Red)  
120mm x 80mm  
XXXXXX

**IVERHART™**

68 mcg ivermectin

Up to 25 lbs

Lot Exp. FPO

**IVERHART™**

68 mcg ivermectin

Up to 25 lbs

Lot Exp. FPO

**IVERHART™**

68 mcg ivermectin

Up to 25 lbs

Lot Exp. FPO

**IVERHART™**

68 mcg ivermectin

Up to 25 lbs

Lot Exp. FPO

**IVERHART™**

68 mcg ivermectin

Up to 25 lbs

Lot Exp. FPO

**IVERHART™**

68 mcg ivermectin

Up to 25 lbs

Lot Exp. FPO

XXXXXX-01

verhart Blister Card Small Dogs Colors: Pantone 661 CV (Blue)

XXXXXX-01

Dotted Lines and Magenta does not print, shows perforation and for placement only.

1.7286" X 3.1538"

120mm X 80mm

Box

Box

**IVERHART™**  
(ivermectin)  
up to 25 lbs

**6**

---

**IVERHART™**  
(ivermectin)

**Tablets**

Each tablet contains 68 mcg ivermectin

**Keep this and all drugs out of the reach of children.**

Recommended for dogs  
up to 25 lbs body weight

Contains 6 Tablets





*Administer once a month to  
prevent heartworm disease  
in dogs*

ANADA 200-270, Approved by FDA

CAUTION: Federal (U.S.A.) law restricts this drug to use by or on the order of a licensed veterinarian.



**IVERHART™**  
(ivermectin)  
up to 25 lbs  
Contains 6 Tablets

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**IVERHART™**  
(ivermectin)

**Tablets**

Store at controlled room temperature of 68°–77°F (20°–25°C).

ANADA 200-270, Approved by FDA.

Manufactured for: Virbac AH, Inc.  
Fort Worth, TX 76137, USA

For technical assistance or to report adverse drug reactions,  
please call 1-800-338-3659

Made in the USA.

XXXXXXXX-01





**IVERHART™**  
(ivermectin)  
up to 25 lbs  
Contains 6 Tablets

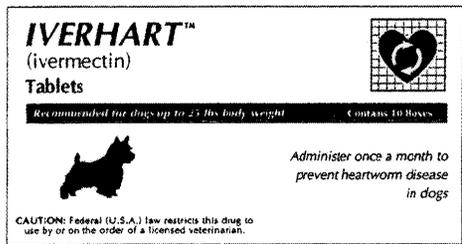
**IVERHART™**  
(ivermectin)  
up to 25 lbs  
Contains 6 Tablets

Pantone 661 CV
  Black

Iverhart IFC (Medium Dogs 26-50 lbs.)

Display Carton

Display Carton  
Front and Sides



**IVERHART™**  
(ivermectin)  
Tablets  
up to 25 lbs



ANADA 200-270, Approved by FDA  
Manufacturer: Virbac AH, Inc.  
Fort Worth, TX 76117, USA

For the full directions of use or a complete list of  
conditions, please call 1-800-345-1100  
Made in the USA  
XXXXXX  
XXXXXX-01  
Lot & Exp



**IVERHART™**  
(ivermectin)  
Tablets  
up to 25 lbs  
Contains 10 Boxes, each containing  
a blister card of 6 Tablets



**IVERHART™**  
(ivermectin)  
Tablets

Each tablet contains 66 mcg ivermectin

Keep this and all drugs out of the reach of children.

**Recommended for dogs**  
up to 25 lbs body weight

Contains 10 Boxes



Administer once a month to  
prevent heartworm disease  
in dogs

ANADA 200-270, Approved by FDA  
CAUTION: Federal (U.S.A.) law restricts this drug to  
use by or on the order of a licensed veterinarian.



Display Carton

Display Carton  
Top and Back

**IVERHART™**

136 mcg ivermectin

26 to 50 lbs

Lot Exp. FPO

**IVERHART™**

136 mcg ivermectin

26 to 50 lbs

Lot Exp. FPO

**IVERHART™**

136 mcg ivermectin

26 to 50 lbs

Lot Exp. FPO

**IVERHART™**

136 mcg ivermectin

26 to 50 lbs

Lot Exp. FPO

**IVERHART™**

136 mcg ivermectin

26 to 50 lbs

Lot Exp. FPO

**IVERHART™**

136 mcg ivermectin

26 to 50 lbs

Lot Exp. FPO

XXXXXX-01

verhart Blister Card Medium Dogs Colors: Pantone 356 CV (Green)

XXXXXX-01

Dotted Lines and Magenta does not print, shows perforation and for placement only.

1.7286" X 3.1538"

120mm X 80mm

Box

Box

**IVERHART™**  
(ivermectin)  
26 to 50 lbs

**6**

---

**IVERHART™**  
(ivermectin)

**Tablets**

Each tablet contains 136 mcg ivermectin.

**Keep this and all drugs out of the reach of children.**

Recommended for dogs  
**26 to 50 lbs body weight**

Contains 6 Tablets

*Administer once a month to  
prevent heartworm disease  
in dogs*

ANADA 200-270, Approved by FDA  
CAUTION: Federal (U.S.A.) law restricts this drug to  
use by or on the order of a licensed veterinarian.

**virbac**

**IVERHART™**  
(ivermectin)

**Tablets**

Store at controlled room temperature of 68°- 77°F (20°- 25°C).

ANADA 200-270, Approved by FDA.  
Manufactured for: Virbac AH, Inc.  
Fort Worth, TX 76137, USA

For technical assistance or to report adverse drug reactions,  
please call 1-800-338-3659

Made in the USA

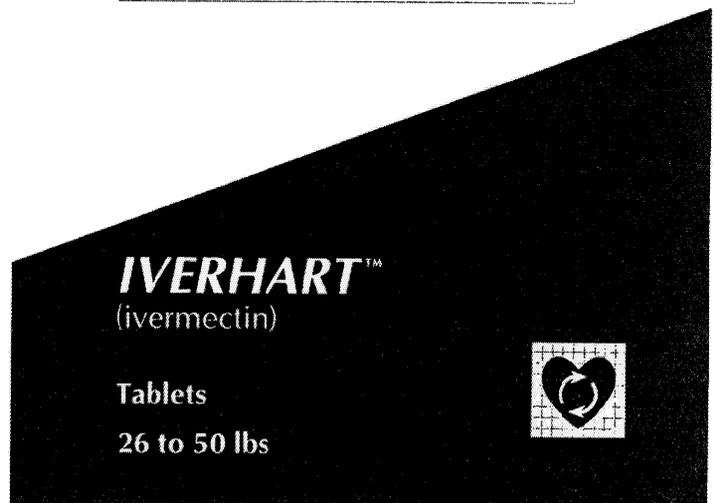
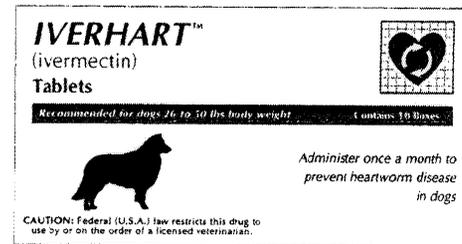
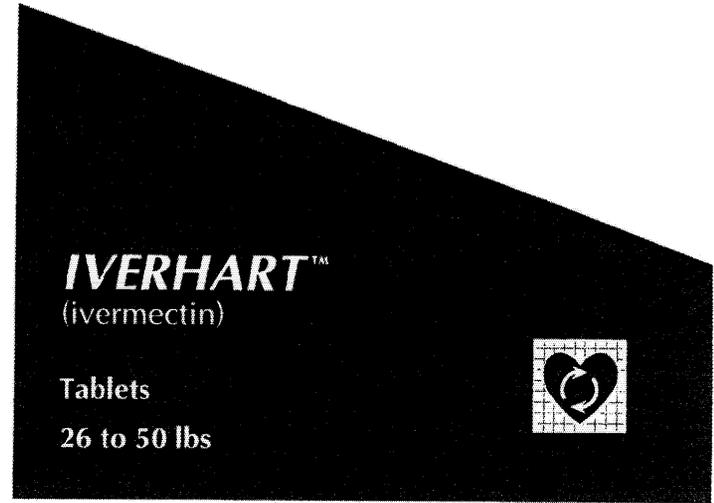
**virbac**

XXXXXX-01

Pantone 356 CV
  Black

Iverhart IFC (Medium Dogs 26-50 lbs.)

Display Carton  
Front and Sides



Display Carton

Display

Carton

**virbac**

Lot & Exp

XXXXXXXXXX  
XXXXXXXXXX

Made in the USA

For the best assistance or to report adverse drug reactions, please call 1-800-543-6639

Manufactured for Virbac AH, Inc.  
Fort Worth, TX 76117 USA

ANADA 200-276, Approved by FDA

Store at controlled room temperature of 20° to 25°C (68° to 77°F)

**IVERHART™**  
(ivermectin)

Tablets

26 to 50 lbs



**IVERHART™**  
(ivermectin)

Tablets



26 to 50 lbs

Contains 10 Boxes, each containing  
a blister card of 6 Tablets

**IVERHART™**  
(ivermectin)

Tablets



Each tablet contains 136 mcg ivermectin

Keep this and all drugs out of the reach of children.

**Recommended for dogs**  
26 to 50 lbs body weight

Contains 10 Boxes



Administer once a month to  
prevent heartworm disease  
in dogs

ANADA 200-276, Approved by FDA  
CAUTION: Federal (U.S.A.) law restricts this drug to  
use by or on the order of a licensed veterinarian.

**virbac**

Display Carton  
Top and Back

**IVERHART™**

272 mcg ivermectin

51 to 100 lbs

Lot  
Exp. FPO

**IVERHART™**

272 mcg ivermectin

51 to 100 lbs

Lot  
Exp. FPO

**IVERHART™**

272 mcg ivermectin

51 to 100 lbs

Lot  
Exp. FPO

**IVERHART™**

272 mcg ivermectin

51 to 100 lbs

Lot  
Exp. FPO

**IVERHART™**

272 mcg ivermectin

51 to 100 lbs

Lot  
Exp. FPO

**IVERHART™**

272 mcg ivermectin

51 to 100 lbs

Lot  
Exp. FPO

XXXXXX-01

Iverhart Blister Card Large Dogs Colors: Pantone 4635 CV (Brown)

XXXXXX-01

Dotted Lines and Magenta does not print, shows perforation and for placement only.

4.7286" X 3.1538"

120mm X 80mm

Box

Box

**IVERHART™**  
(ivermectin)  
51 to 100 lbs

**6**

**IVERHART™**  
(ivermectin)

**Tablets**

Each tablet contains 272 mcg ivermectin.

Keep this and all drugs out of the reach of children.

*Recommended for dogs*  
51 to 100 lbs body weight

Contains 6 Tablets



Administer once a month to prevent heartworm disease in dogs.

ANADA 200-270, Approved by FDA  
CAUTION: Federal (U.S.A.) law restricts this drug to use by or on the order of a licensed veterinarian.

**virbac**

**IVERHART™**  
(ivermectin)

**Tablets**

Store at controlled room temperature of 68°- 77°F (20°- 25°C).

ANADA 200-270, Approved by FDA.  
Manufactured for: Virbac AH, Inc.  
Fort Worth, TX 76137, USA

For technical assistance or to report adverse drug reactions, please call 1-800-338-3659

Made in the USA.

XXXXXXXX01

**virbac**

Contains 6 Tablets

51 to 100 lbs

Contains 6 Tablets

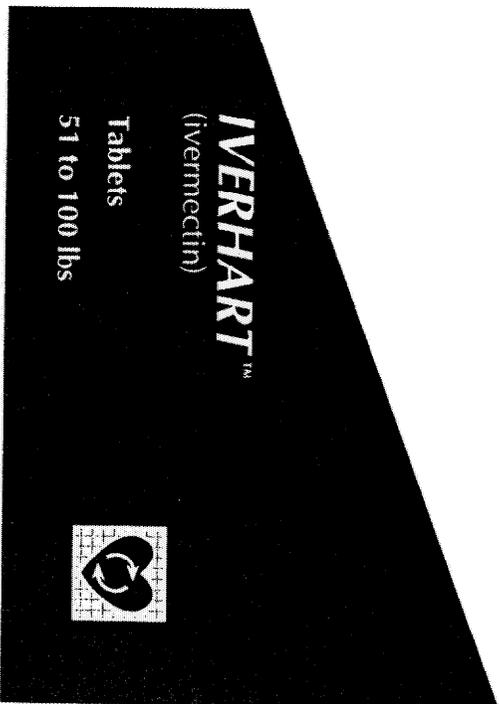
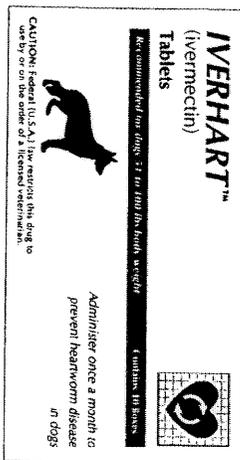
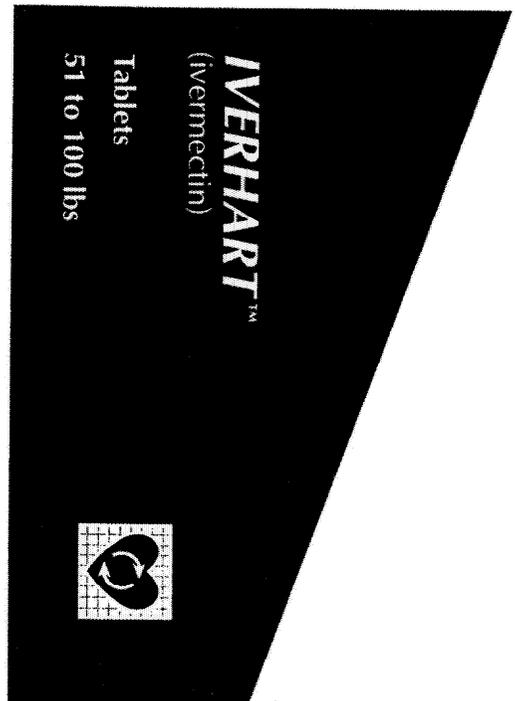
51 to 100 lbs

 Pantone 4635 CV  Black

Iverhart IFC (Large Dogs 51-100 lbs.)

# Display Carton

Display Carton  
Front and Sides



**virbac**

lot & exp

XXXXXX

Made in the USA

For technical assistance or to report adverse drug reactions, please call 1-800-343-3670

Manufactured by Virbac, Inc. Fort Worth, TX 76112, USA

ANADA 200-270, Approved by FDA

Store at controlled room temperature of 68° - 77° F (20° - 25° C)

**IVERHART™**  
(ivermectin)  
Tablets  
51 to 100 lbs



**IVERHART™**  
(ivermectin)

Tablets

51 to 100 lbs

Contains 10 Boxes, each containing a blister card of 6 Tablets



**IVERHART™**  
(ivermectin)

Tablets

Each tablet contains 272 mcg ivermectin

Keep this and all drugs out of the reach of children.

**Recommended for dogs**  
51 to 100 lbs body weight

Contains 10 Boxes



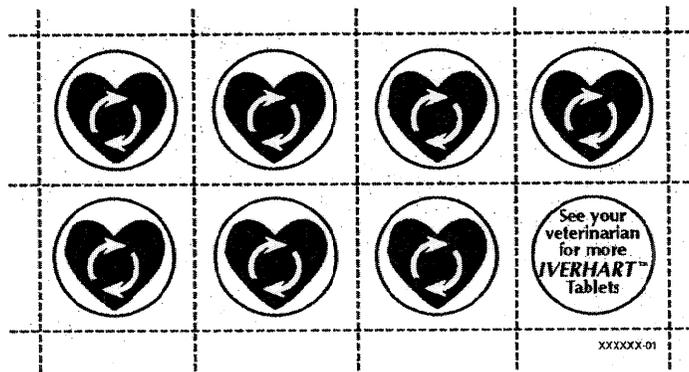
Administer once a month to prevent heartworm disease in dogs

ANADA 200-270, Approved by FDA  
CAUTION: Federal (U.S.A.) law restricts this drug to use by or on the order of a licensed veterinarian.

**virbac**

Display Carton

Display Carton  
Top and Back



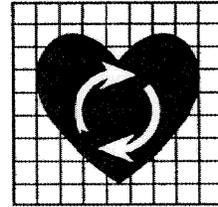
Pink dashed line indicates where individual reminder stickers will be perforated to facilitate the dispensing of the appropriate number of stickers for the number of tablets dispensed.

Dispensing Envelope

**IVERHART™**

(ivermectin)

ANADA 200-270



Administer once a month to prevent  
heartworm disease in dogs

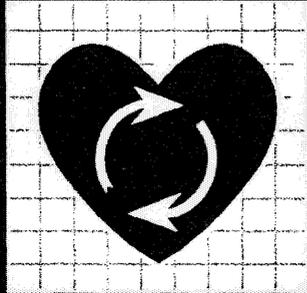
XXXXXX-01

**virbac**

Iverhart Envelope Color: Pantone 186CV (Red)  
120mm x 80mm  
XXXXXX

Front and side

Bulk Dispensing Carton



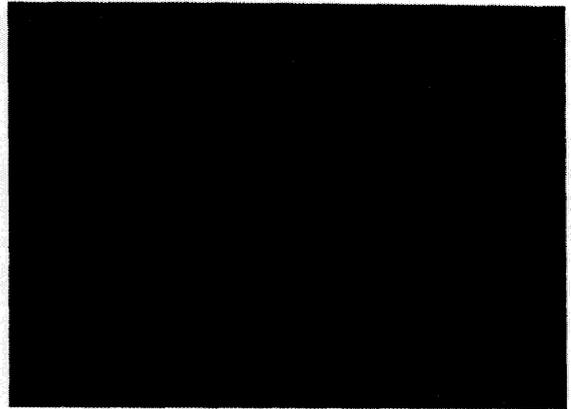
# IVERHART™

(ivermectin)

## Tablets up to 25 lbs

## Contains 20 Blister Cards of 6 Tablets each

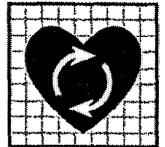
Each tablet contains 68 mcg ivermectin



# IVERHART™

(ivermectin)

## Tablets



Each tablet contains 68 mcg ivermectin

Keep this and all drugs out of the reach of children.

Recommended for dogs  
up to 25 lbs body weight

Contains  
20 Cards

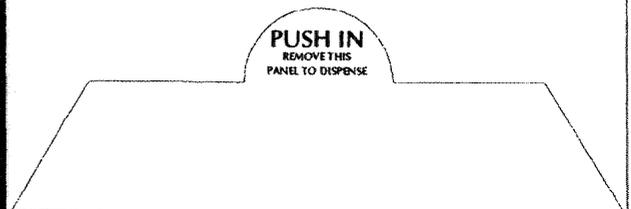


Administer once a  
month to prevent  
heartworm disease  
in dogs

ANADA 200-270, Approved by FDA  
CAUTION: Federal (U.S.A.) law restricts this drug to  
use by or on the order of a licensed veterinarian.

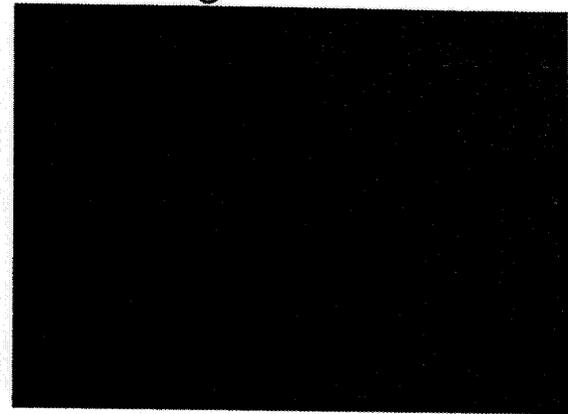
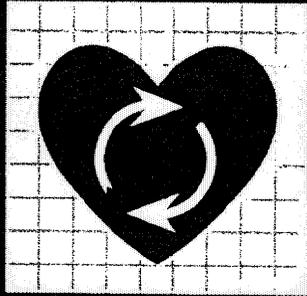
**virbac**

PUSH IN  
REMOVE THIS  
PANEL TO DISPENSE



Back AND Side

Bulk dispensing Carton



# IVERHART™

(ivermectin)

## Tablets up to 25 lbs

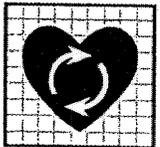
### Contains 20 Blister Cards of 6 Tablets each

Each tablet contains 68 mcg ivermectin

# IVERHART™

(ivermectin)

## Tablets up to 25 lbs



Store at controlled room temperature of  
68°–77°F (20°–25°C).

ANADA 200-270, Approved by FDA.

Manufactured for: Virbac AH, Inc.

Fort Worth, TX 76137, USA

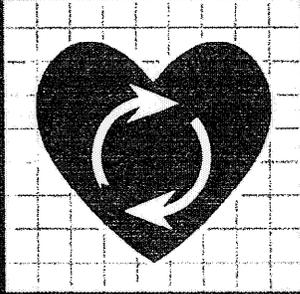
For technical assistance or to report adverse drug  
reactions, please call 1-800-338-3659

Made in the USA.

Lot & Exp

XXXXXX  
XXXXXX-01

Front and Side Bulk dispensing Carton



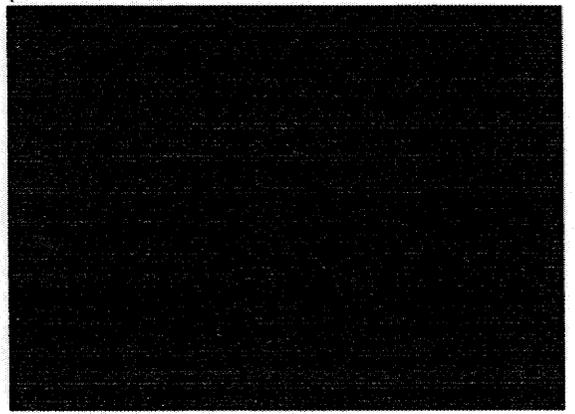
# IVERHART™

(ivermectin)

Tablets  
26 to 50 lbs

Contains 20 Blister Cards of  
6 Tablets each

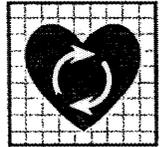
Each tablet contains 1.36 mcg ivermectin



## IVERHART™

(ivermectin)

Tablets

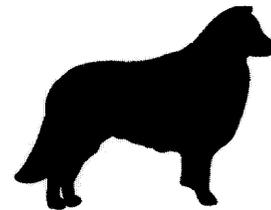


Each tablet contains 1.36 mcg ivermectin

Keep this and all drugs out of the reach of children.

Recommended for dogs  
26 to 50 lbs body weight

Contains  
20 Cards

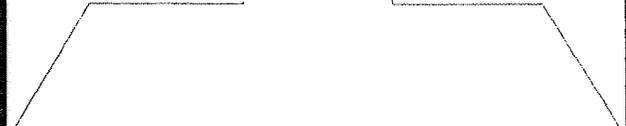


Administer once a  
month to prevent  
heartworm disease  
in dogs

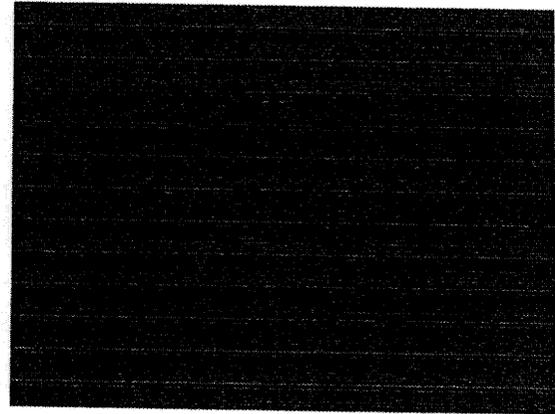
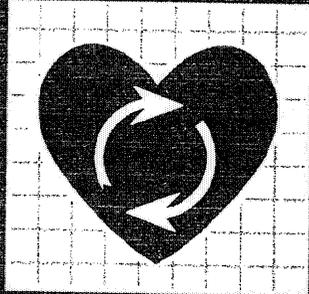
ANADA 200-270, Approved by FDA  
CAUTION: Federal (U.S.A.) law restricts this drug to  
use by or on the order of a licensed veterinarian.

**virbac**

PUSH IN  
REMOVE THIS  
PANEL TO DISPENSE



*Back and side Bulk dispensing Carton*



**IVERHART™**  
(ivermectin)

**Tablets**  
**26 to 50 lbs**

**Contains 20 Blister Cards of  
6 Tablets each**

Each tablet contains 136 mcg ivermectin

**IVERHART™**  
(ivermectin)

**Tablets**  
26 to 50 lbs



Store at controlled room temperature of  
68°–77°F (20°–25°C).

ANADA 200-270, Approved by FDA.

Manufactured for: Virbac AH, Inc.

Fort Worth, TX 76137, USA

For technical assistance or to report adverse drug  
reactions, please call 1-800-338-3659

Made in the USA.

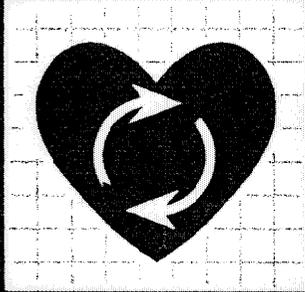
Lot & Exp

XXXXXX  
XXXXXX-01

**virbac**

Back and Side

Bulk dispensing Carton

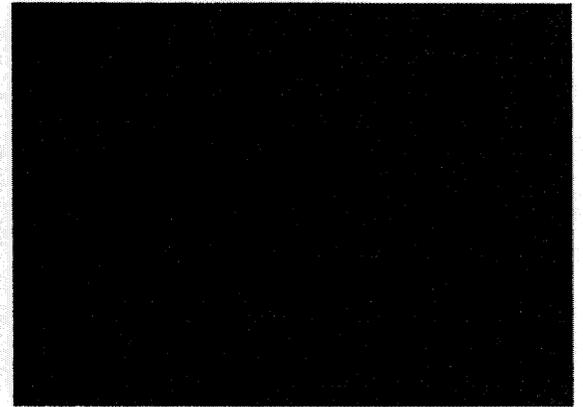


**IVERHART™**  
(ivermectin)

**Tablets**  
**51 to 100 lbs**

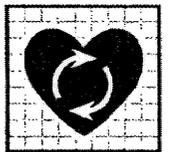
**Contains 20 Blister Cards of  
6 Tablets each**

Each tablet contains 272 mcg ivermectin



**IVERHART™**  
(ivermectin)

**Tablets**  
**51 to 100 lbs**



Store at controlled room temperature of  
68°–77°F (20°–25°C).

ANADA 200-270, Approved by FDA.

Manufactured for: Virbac AH, Inc.

Fort Worth, TX 76137, USA

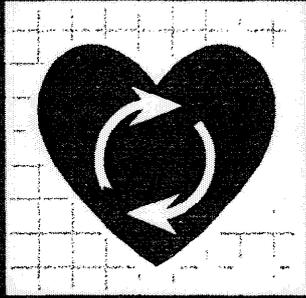
For technical assistance or to report adverse drug  
reactions, please call 1-800-338-3659

Made in the USA.

Lot & Exp

XXXXXX  
XXXXXX-01

**virbac**



# IVERHART™

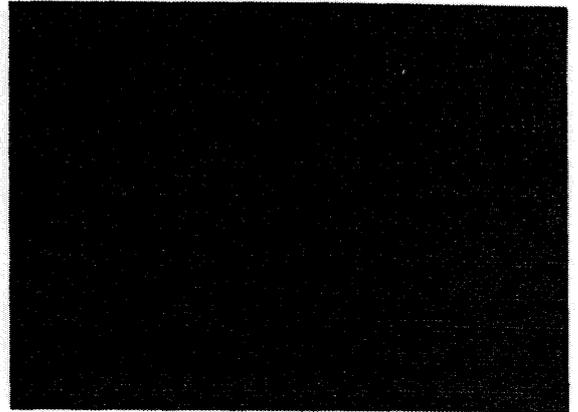
(ivermectin)

## Tablets

51 to 100 lbs

### Contains 20 Blister Cards of 6 Tablets each

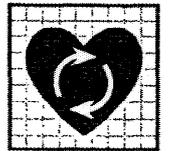
Each tablet contains 272 mcg ivermectin



# IVERHART™

(ivermectin)

## Tablets



Each tablet contains 272 mcg ivermectin

Keep this and all drugs out of the reach of children.

Recommended for dogs  
51 to 100 lbs body weight

Contains  
20 Cards



Administer once a month to prevent heartworm disease in dogs

ANADA 200-270, Approved by FDA  
CAUTION: Federal (U.S.A.) law restricts this drug to use by or on the order of a licensed veterinarian.

# virbac

PUSH IN  
REMOVETHIS  
PANEL TO DISPENSE

*Bulk dispensing Carton FRONT AND SIDE*



SPECIMEN



# Heartgard™ (ivermectin)

8828306

## Tablets

**Caution:** Federal (U.S.A.) law restricts this drug to use by or on the order of a licensed veterinarian.

**INDICATION:** For use in dogs to prevent canine heartworm disease. HEARTGARD™ prevents heartworm disease by eliminating the tissue stage of heartworm larvae (*Dirofilaria immitis*) for a month (30 days) after infection.

**DOSAGE:** HEARTGARD Tablets should be administered orally at monthly intervals at the recommended minimum dose level of 6 mcg of ivermectin per kilogram (2.72 mcg/lb) of body weight. (See ADMINISTRATION). The recommended dosage schedule for prevention of canine heartworm disease is as follows:

Dog Weight	Tablets Per Month	Ivermectin Per Tablet	Color on Carton
Up to 25 lb	1	68 mcg	Blue
26 to 50 lb	1	136 mcg	Green
51 to 100 lb	1	272 mcg	Brown

Give dogs over 100 lb the appropriate combination of tablets.

HEARTGARD is recommended for use in dogs 6 weeks of age and older.

**ADMINISTRATION:** The HEARTGARD tablet should be given so that dogs swallow the whole tablet. (The tablet may be wrapped in food to encourage consumption.) Care should be taken to see that the dog consumes the complete dose, and treated animals should be observed for a few minutes after administration to ensure that part of the dose is not lost or rejected. If it is suspected that any of the dose has been lost, redosing is recommended. HEARTGARD Tablets should be given at monthly intervals during the period of the year when mosquitoes (vectors), potentially carrying infective heartworm larvae, are active. The initial dose must be given within a month (30 days) after the first exposure to mosquitoes. The final dose must be given within a month (30 days) after the last exposure to mosquitoes.

When replacing another heartworm preventive in a heartworm disease preventive program, the first dose of HEARTGARD must be given within a month (30 days) after the last dose of the former medication.

If the interval between doses exceeds a month (30 days), the efficacy of ivermectin can be reduced. For optimal performance, the tablet must be given once a month on or about the same day of the month. If treatment is delayed, whether by a few days or many, immediate treatment with HEARTGARD and resumption of the recommended dosing regimen minimizes the opportunity for the development of adult heartworms.

**EFFICACY:** HEARTGARD Tablets, given orally using the recommended dose and regimen, are effective against the tissue larval stage of *Dirofilaria immitis* for a month (30 days) after infection and, as a result, prevent the development of the adult stage.

\*HEARTGARD is a trademark of Merck & Co., Inc., Whitehouse Station, N.J., U.S.A.

**PRECAUTIONS:** All dogs should be tested for existing heartworm before starting treatment with HEARTGARD™ (ivermectin) Tablets, not effective against adult *D. immitis*. Infected dogs must be treated to adult heartworms and microfilariae prior to initiating a program HEARTGARD.

While some microfilariae may be killed by the ivermectin in HEARTGARD the recommended dose level, HEARTGARD is not effective against microfilariae clearance. A mild hypersensitivity-type reaction, presumably to dead or dying microfilariae and particularly involving a transient reaction has been observed in clinical trials with ivermectin after the treatment of dogs that have circulating microfilariae.

**Keep this and all drugs out of the reach of children.** In case of ingestion by humans, clients should be advised to contact a physician immediately. Physicians may contact a Poison Control Center for advice concerning ingestion by humans.

**ADVERSE REACTIONS:** The following adverse reactions have been reported following the use of HEARTGARD: Depression/lethargy, vomiting, anorexia, diarrhea, mydriasis, ataxia, staggering, coordination and hypersalivation.

**SAFETY:** HEARTGARD has shown a wide margin of safety at the recommended dose level in dogs (See PRECAUTIONS for excipients including pregnant or breeding bitches, stud dogs, and puppies at more than 16 weeks. In clinical trials, many commonly used flea collars, dips, slugs, anthelmintics, antibiotics, vaccines, and steroid preparations have been administered with HEARTGARD in a heartworm disease preventive program.

Studies with ivermectin indicate that certain dogs of the Collie breed are more sensitive to the effects of ivermectin administered at elevated levels (more than 16 times the target use level) than dogs of other breeds. In clinical trials, sensitive dogs showed adverse reactions which included mydriasis, depression, ataxia, tremors, drooling, paresis, recumbency, stupor, coma and death. HEARTGARD demonstrated no toxicity at 10 times the recommended dose (60 mcg/kg) in sensitivity studies. Results of these trials support the safety of HEARTGARD product when used as recommended.

**HOW SUPPLIED:** HEARTGARD is available in three dosage strengths (See DOSAGE section) for dogs of different weights. Each strength is available in a convenient carton of 6 or 9 tablets, packed 10 cartons per tray.



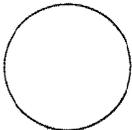
Merck & Co., Inc.  
Rahway, New Jersey 07065-0912, U.S.A.

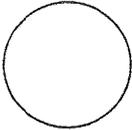
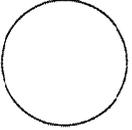
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All Rights Reserved.

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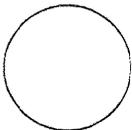
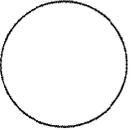
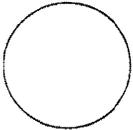
ALL COPY PRINTS BLACK EXCEPT THE CORPORATE  
MARK, "MERCK" AND THE HEART IN THE LETTER "g"  
of the trademark name which prints 70% screen.

6  
2

Product **38171A**  8826702

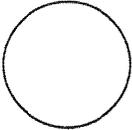
 **Heartgard™**  
(ivermectin)  Tablets

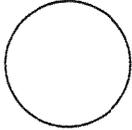
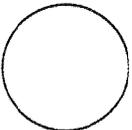
EACH TABLET CONTAINS 68 MCG IVERMECTIN.  
KEEP THIS AND ALL DRUGS OUT OF THE REACH OF CHILDREN.  
CAUTION: FEDERAL (U.S.A.) LAW RESTRICTS  
THIS DRUG TO USE BY OR ON THE  
ORDER OF  
A LICENSED VETERINARIAN.

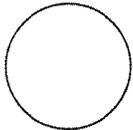
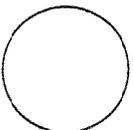
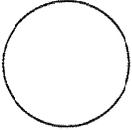
 **MERCK**  
AGVET DIVISION,  
MERCK & CO., INC.  
RAHWAY, N.J. 07065-0912, U.S.A.

1

Product **38171A**  8826702

 **Heartgard™**  
(ivermectin)  Tablets

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 **MERCK**  
AGVET DIVISION,  
MERCK & CO., INC.  
RAHWAY, N.J. 07065-0912, U.S.A.

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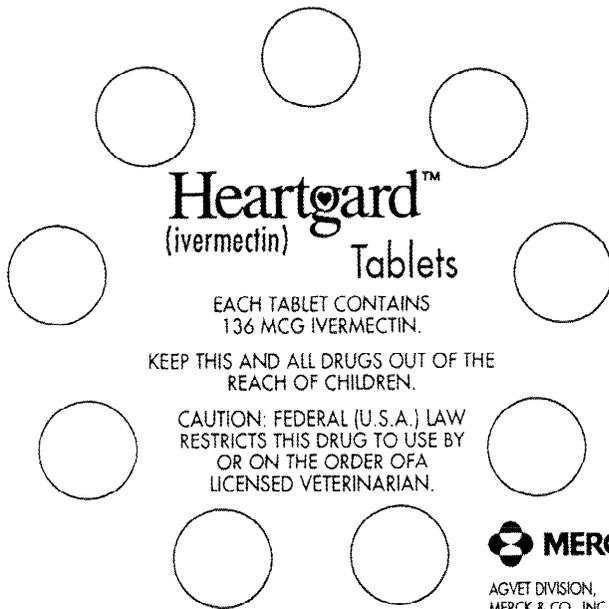
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Product 38172A

8925001



**Heartgard™**  
(ivermectin) Tablets

EACH TABLET CONTAINS  
136 MCG IVERMECTIN.

KEEP THIS AND ALL DRUGS OUT OF THE  
REACH OF CHILDREN.

CAUTION: FEDERAL (U.S.A.) LAW  
RESTRICTS THIS DRUG TO USE BY  
OR ON THE ORDER OF A  
LICENSED VETERINARIAN.



AGVET DIVISION,  
MERCK & CO., INC.  
RAHWAY, N.J. 07065-0912,  
U.S.A.

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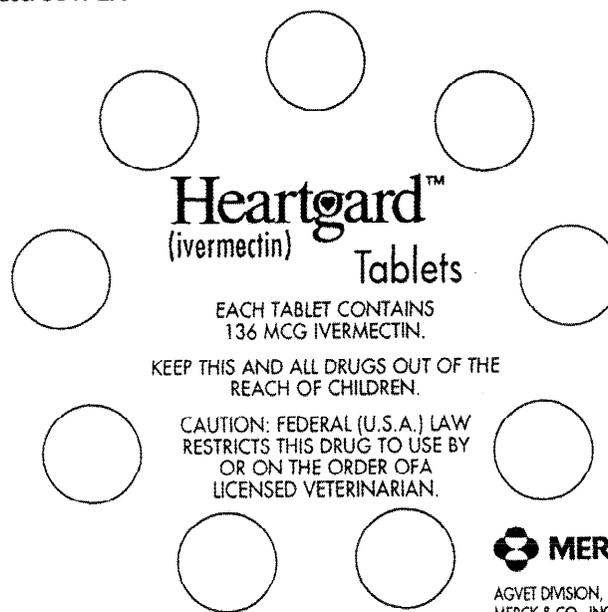
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Product 38172A

8925001



**Heartgard™**  
(ivermectin) Tablets

EACH TABLET CONTAINS  
136 MCG IVERMECTIN.

KEEP THIS AND ALL DRUGS OUT OF THE  
REACH OF CHILDREN.

CAUTION: FEDERAL (U.S.A.) LAW  
RESTRICTS THIS DRUG TO USE BY  
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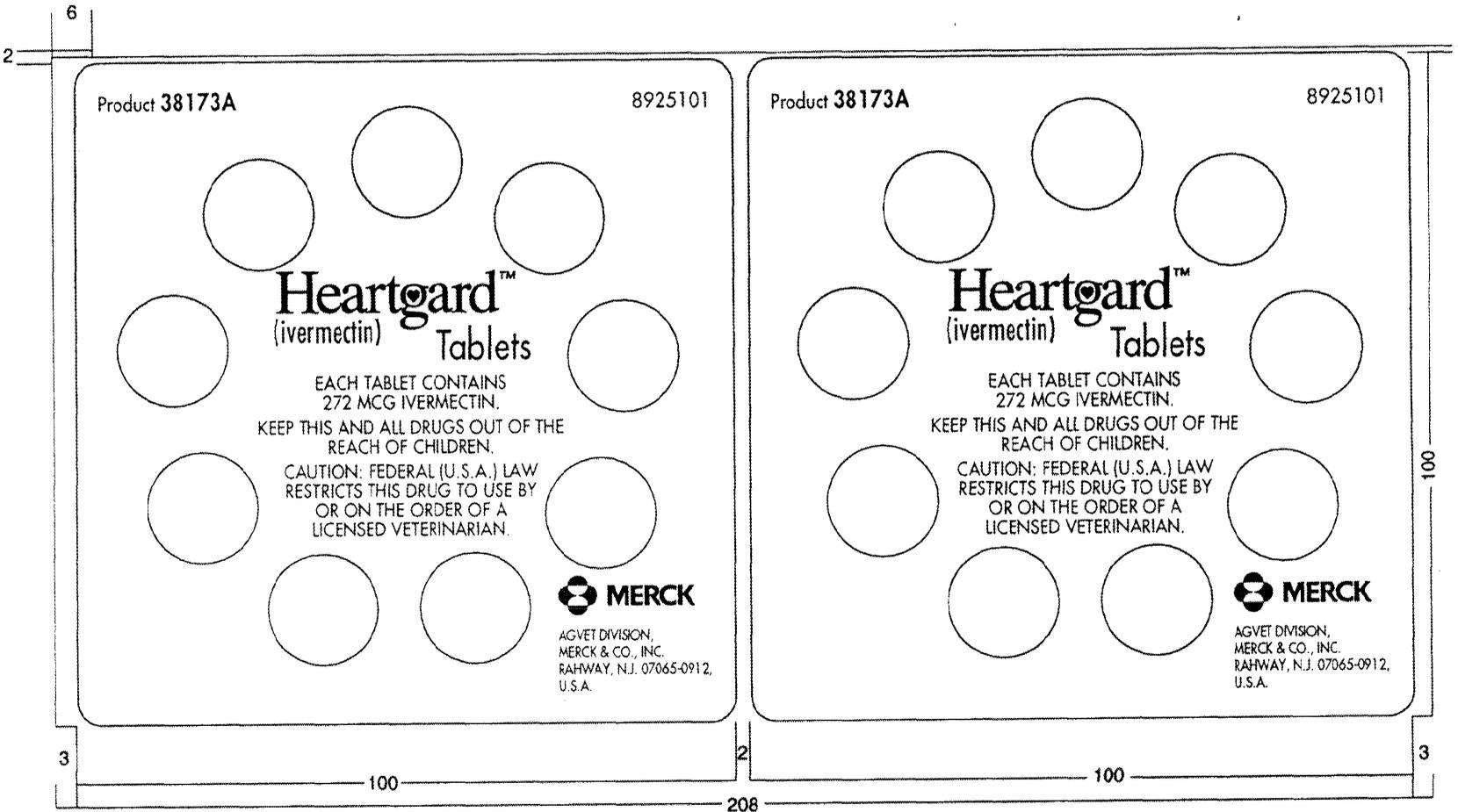


AGVET DIVISION,  
MERCK & CO., INC.  
RAHWAY, N.J. 07065-0912,  
U.S.A.

100

3

100



Product 38173A

8925101

**Heartgard™**  
(ivermectin) Tablets

EACH TABLET CONTAINS  
272 MCG IVERMECTIN.  
KEEP THIS AND ALL DRUGS OUT OF THE  
REACH OF CHILDREN.

CAUTION: FEDERAL (U.S.A.) LAW  
RESTRICTS THIS DRUG TO USE BY  
OR ON THE ORDER OF A  
LICENSED VETERINARIAN.



AGVET DIVISION,  
MERCK & CO., INC.  
RAHWAY, N.J. 07065-0912,  
U.S.A.

Product 38173A

8925101

**Heartgard™**  
(ivermectin) Tablets

EACH TABLET CONTAINS  
272 MCG IVERMECTIN.  
KEEP THIS AND ALL DRUGS OUT OF THE  
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MERCK & CO., INC.  
RAHWAY, N.J. 07065-0912,  
U.S.A.

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Heartgard™  
(ivermectin)



# Heartgard™ (ivermectin)

9  
Tablet  
Pack

Tablets

Each tablet contains 68 mcg of ivermectin.

Treat once a month to prevent heartworm disease in dogs.

Recommended for dogs up to 25 lb body weight.

Keep this and all drugs out of the reach of children.

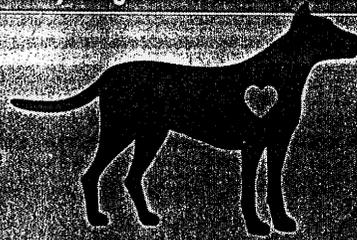
Product 38171A

Common Federal (USA) law restricts this drug to use by or on the order of a licensed veterinarian.

US Pat. 4,995,639

Merck & Co., Inc., Kenilworth, NJ, USA, 07033-0012

HEARTGARD is a trademark of Merck & Co., Inc.  
Whisper, Simon, N.J. USA



Contains 9 Tablets

Up to 25 lb

9  
Tablet  
Pack

Heartgard™  
(ivermectin)

Up to 25 lb

9  
Tablet  
Pack

Heartgard™  
(ivermectin)

9  
Tablet  
Pack



3 0373-381711 3



Heartgard™  
(ivermectin)



# Heartgard™ (ivermectin)

Tablets

Each tablet contains 272 mcg of ivermectin.

Treat once a month to prevent heartworm disease in dogs.

Recommended for dogs 51 to 100 lb body weight.

Keep this and all drugs out of the reach of children.

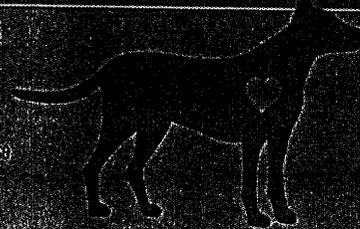
Product 38173A

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US Pat. 4,995,639

Merck & Co., Inc., Kenilworth, NJ, USA, 07033-0012

HEARTGARD is a trademark of Merck & Co., Inc.  
Whisper, Simon, N.J. USA



Contains 6 Tablets

51 to 100 lb

6 Tablets

Heartgard™  
(ivermectin)

51 to 100 lb

6 Tablets

Heartgard™  
(ivermectin)



3 0373-381731 1



Heartgard™  
(ivermectin)

26 to 50 lb  
6 Tablets



# Heartgard™ (ivermectin)

Tablets

Each tablet contains 136 mcg of ivermectin.

Treat once a month to prevent heartworm disease in dogs.

Recommended for dogs 26 to 50 lb body weight.

Keep out of reach of children.

Model 1001722A

For information on how to properly use Heartgard, please contact your veterinarian.

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Heartgard™  
(ivermectin)



3 0373-381721 2

26 to 50 lb  
6 Tablets

Heartgard™  
(ivermectin)

