



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (H7505C)
401 "M" St., S.W.
Washington, D.C. 20460

EPA Reg. Number

4691-133

Date of Issuance:

JUL - 7 1999

NOTICE OF PESTICIDE:

☐ Registration☒ Reregistration

(under FIFRA, as amended)

Term of Issuance: Unconditional

Name of Pesticide Product:

Rabon® 97.3 Oral Larvicide

Name and Address of Registrant (include ZIP Code):

Boehringer Ingelheim Animal Health, Inc.
2621 North Belt Highway
St. Joseph, Missouri 64506-2002

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

Based on your response to the Reregistration Eligibility Documents, EPA has reregistered the product listed above. This action is taken under the authority of section 4 (g) (2) (c) of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended. Registration under this section does not eliminate the need for control reassessment of pesticides. EPA may require submission of data at any time to maintain the registration of your product. With regards to labeling, you must make the labeling changes listed below:

- 1) Based on your Tox categories, you must have a "Statement of Practical Treatment" or "First Aid" Statement. It should be located under your "Precautionary Statements" and state the following:

IF SWALLOWED: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting or if available by administering syrup of ipecac. If person is unconscious, do not give anything by mouth and do not induce vomiting.

IF ON SKIN: Wash with plenty of soap and water. Get medical attention if irritation persists.

IF IN EYES: Flush eyes with plenty of water. Call a physician if irritation persists.

Signature of Approving Official

George T. LaRocca
for George T. LaRocca

Date:

JUL - 7 1999

Your product is also required to have a "Note to Physician". The Note to Physician should be located directly below your Statement of Practical Treatment and should contain the following information:

- Technical information on symptomatology;
- Use of supportive treatments to maintain life functions;
- Medicine that will counteract the specific physiological effects of the pesticide;
- Company telephone number to specific medical personnel who can provide specialized medical advice.

- 2) Please revise your "Hazards to Humans" heading to read "Hazards to Humans and Domestic Animals. It should read the following:

CAUTION

Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Prolonged or frequent contact may cause allergic reaction in some individuals. Wash thoroughly with soap and water after handling.

Personal Protective Equipment (PPE)

Handlers must wear:

- Long sleeved shirt and pants
- Shoes and socks
- Chemical resistant gloves

USER SAFETY REQUIREMENTS

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

- 3) Under your "Directions for Use", please add the subheading "Application Restrictions" and the following language:

"Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application". Feeds prepared using this product should not be pelleted unless tests are conducted to assure adequate RABON levels after pelleting. Do not mix this product with feeds containing predominantly pellets due to particle size differences and potential segregation."

- 4) Enclosed is a copy of your label stamped "Accepted with Comments". Please submit two (2) copies of your final printed label before you release the product for shipment. Please refer to the A-79 enclosure for a further description of final printed labeling.

Your corrected CSF, submitted on 11/10/98 and dated 6/17/98 has been approved. If you have any questions regarding this action, please contact me at (703) 305-6100 or Tracy Keigwin of my team at (703) 305-6605.

Sincerely,

George T. LaRocca
Product Manager (13)
Insecticide Branch
Registration Division (7505C)

Enclosure



Boehringer Ingelheim

Precautionary Statements

Hazards to Humans

Caution

Harmful if swallowed. Avoid contact with skin and eyes. Avoid breathing dust. Wash thoroughly with soap and water after handling and before eating or smoking. If in eyes, wash with plenty of water. If irritation persists, get medical attention. Wear long-sleeved shirt and pants; chemical resistant gloves; shoes and socks for protection when handling. This product may cause skin sensitization reactions in certain individuals.

Environmental Hazards

This pesticide is toxic to fish. Do not contaminate water when disposing of equipment wash waters.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Storage: Store in a dry place in original container.

Container Disposal: Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into mixing equipment. Then offer for recycling or reconditioning, or puncture and dispose of with liner in a sanitary landfill or by incineration, if allowed by State and local authorities. If burned, stay out of smoke.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility.

Warranty and Limitation of Damages

Seller warrants that this material conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use and Buyer assumes the risk of any use contrary to such directions. Seller makes no other express or implied warranty, including any other express or implied warranty of Fitness or of Merchantability, and no agent of Seller is authorized to do so except in writing and with specific reference to this warranty. In no event shall Seller's liability for any breach of warranty exceed the purchase price of the material as to which a claim is made.

RABON® 97.3 Oral Larvicide

For Use In Cattle Feeds

To prevent the development of Horn Flies, Face Flies, House Flies and Stable Flies in the manure of treated cattle.

Active Ingredient	By Weight
Tetrachlorvinphos (CAS No. 22248-79-9).....	97.3%*
Inert Ingredients.....	2.7%
TOTAL	100.0%

*RABON Insecticide - 442 grams per pound

KEEP OUT OF REACH OF CHILDREN
CAUTION

Net Weight 24 Pounds

EPA Reg. No. 4691-133

ACCEPTED
with COMMENTS
by EPA Letter Dated

JUL - 7 1999

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended. For the pesticide
registered under EPA Reg. No.

4691-133

Boehringer Ingelheim Vetmedica, Inc.
St. Joseph, Missouri 64506-2002

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DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

RABON Oral Larvicide (ROL) prevents the development of horn flies, face flies, house flies and stable flies in the manure of treated cattle when used as directed. Rations containing this product may be fed up to slaughter and to lactating dairy cows without withholding the milk from market during or after treatment.

Start feeding this product early in the spring before flies begin to appear and continue feeding throughout the summer and into the fall until cold weather restricts fly activity. When fed, this product passes through the digestive system into the animal's manure where it kills fly larvae on contact shortly after fly eggs hatch. It prevents the development of fly larvae in the manure of treated animals, but is not effective against existing adult flies.

Supplemental fly control measures may be needed in and around cattle lots and barns to control adult house flies and stable flies which can breed not only in manure but in other decaying vegetable matter or silage on the premises. In order to achieve optimum fly control, this product should be used in conjunction with other good management and sanitation practices. All potential fly breeding material such as manure, old hay and silage which contains overwintering fly pupae should be removed from the premises. Manure should not be allowed to accumulate around barns, fences or under bunks during the fly breeding season. Supplemental fly control is also recommended for pastured cattle to control adult flies migrating in from neighboring herds and untreated manure. When starting a feeding program during the fly season, it is necessary to use other control measures to reduce the population of existing adult flies. For effective fly control it is important to ensure that all cattle on the premises receive adequate levels of RABON Oral Larvicide on a daily basis.

DIRECTIONS FOR MIXING LARVICIDAL FEEDS

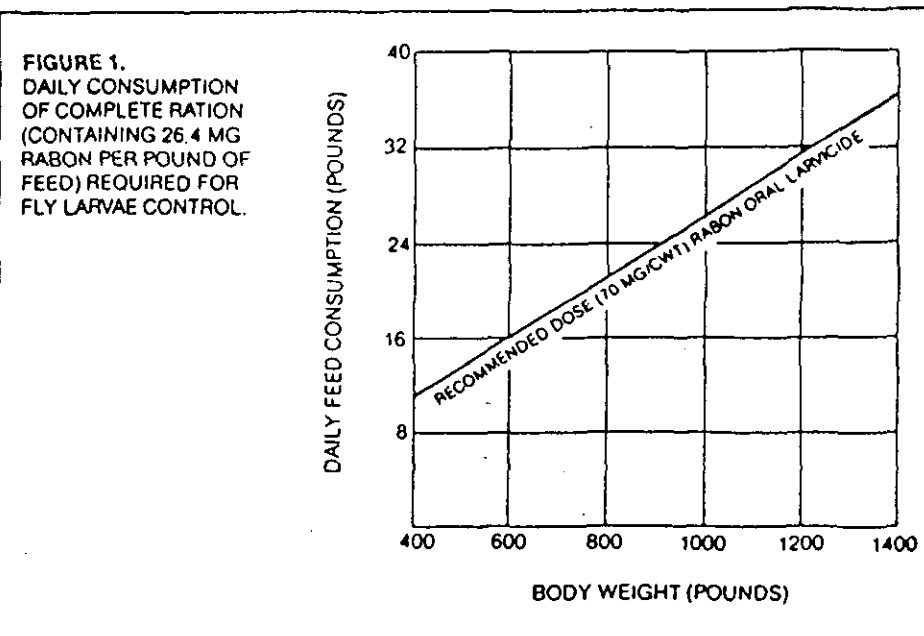
This product is a specially prepared granulated material designed for use in cattle feeds. It will mix uniformly in feeds when good blending procedures are followed. Equipment must be capable of mixing as little as 0.3 pounds of this product per ton of feed (when feeding 1 pound of mix per 100 pounds of body weight daily as in TABLE 1 Mixing Guide). (Feeds prepared using this product should not be pelleted unless tests are conducted to assure adequate RABON levels after pelleting. Do not mix this product with feeds containing predominantly pellets due to particle size differences and potential segregation. This product can be used in liquid feed supplements (LFS) provided recommended guidelines are followed.

RABON Oral Larvicide, when mixed with several typical cattle rations in stability tests, was found to be stable (<10% decomposition) for up to 3 months in complete feeds, for up to 6 months in protein supplements, and for a year in mineral mixes when stored under normal conditions. Storage of feedstuffs containing ROL at elevated temperatures (ca 100°F) for an extended period does have a detrimental effect on the stability of RABON; therefore, complete feeds, protein supplements and liquid feeds stored under such conditions should be fed within 4 to 8 weeks of formulating. Analytical methods, sampling procedures and standards used for determining RABON in various feed products are available.

RECOMMENDED FEEDING LEVELS

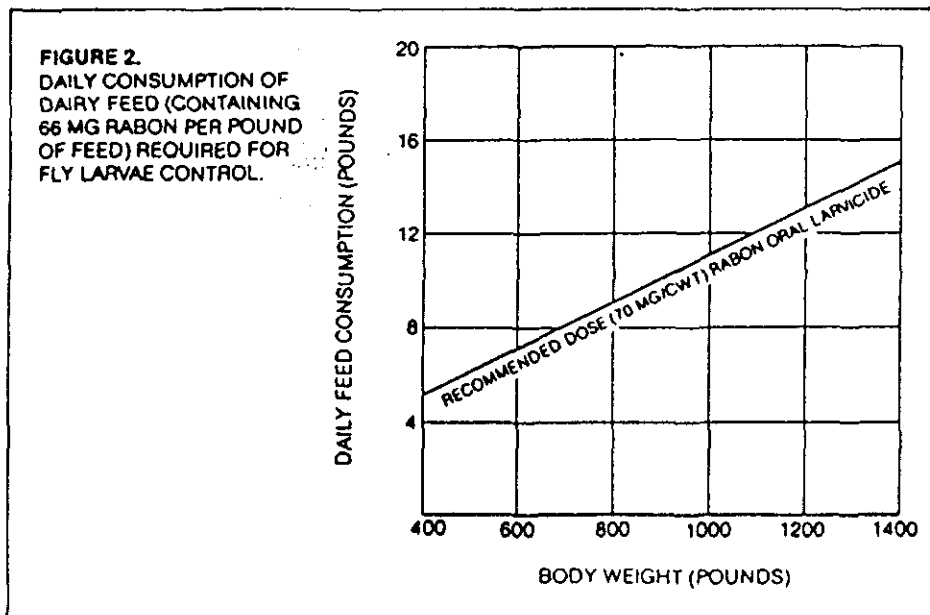
The recommended feeding level is 70 mg of ROL per 100 pounds of body weight daily. A practical feeding regimen can be planned whereby a single feed can be fed to all animals within a like group. Examples are illustrated below.

FIGURE 1 is an example of a single complete feed for growing-finishing beef cattle mixed to contain 26.4 mg of RABON per pound of feed for feeding to animals weighing from 400 to 1400 pounds within a group. As long as the daily feed consumption of the larvicidal feed approximates that shown in Figure 1 the cattle will be receiving RABON at an acceptable level. Adjust the 26.4 mg per pound quantity if the average daily recommended dose differs from that shown. See TABLE 1 MIXING GUIDE also.



RECOMMENDED FEEDING LEVELS (Continued)

FIGURE 2 is an example of a single feed containing 66 mg of RABON per pound of feed to be fed daily along with roughage to dairy cattle (including lactating). As long as the daily feed consumption of the larvicidal feed approximates that shown in Figure 2 the cattle will be receiving RABON at an acceptable level. Adjust the 66 mg per pound quantity if the average daily recommended dose differs from that shown. See TABLE 1 MIXING GUIDE also.



Rabon Oral Larvicide can be added to MINERAL MIXES for use in cattle self-feeding stations or it can be added to mineral mixes for use in ground grain or complete rations. The average daily consumption and average weight of the cattle being fed should be used to calculate the feeding of 70 mg of this product daily per 100 pounds of body weight. For example: Mix 3.1 pounds of this product per ton of total minerals when 1000 pound cattle are consuming 1 pound daily of the mineral mix with RABON or 12.4 pound/ton if daily consumption per 1000 pounds is 4 ounces. Mix proportionally for other weights and consumptions. See TABLE 1 MIXING GUIDE also.

Cattle should not be starved for minerals before initiation of the self-feeding program. OMIT all salt from other feed after the program is started. Do not feed other free choice sources of salt or mineral containing salt in any form as they may alter the calculated consumption level. Allow one mineral feeder for each 15-20 head and place near watering and loafing areas. Put out no more than one month's supply at a time. Protect mineral mixes from rain.

TABLE 1. Mixing Guide*

FEED PRODUCT	DAILY FEEDING RATE	RABON IN SUPPLEMENT		RATIO SUPPLEMENT TO FEEDSTUFFS	USE LEVEL OF RABON IN FEED		POUNDS RABON 97.3 ORAL LARVICIDE/TON PRODUCT
		MG/LB	%		MG/LB	%	
Complete Feed	2.6 lbs/cwt	—	—	—	26.4	0.0059	0.12
Supplement or Premix for Preparing Complete Feeds	—	132	0.029	1:4	26.4	0.0059	0.6
	—	264	0.059	1:9	26.4	0.0059	1.2
	—	528	0.12	1:19	26.4	0.0059	2.4
	—	1056	0.24	1:39	26.4	0.0059	4.8
	—	2112	0.47	1:79	26.4	0.0059	9.6
Concentrate Fed with Roughage	1.0 lbs/cwt	—	—	—	66	0.015	0.3
Supplement or Premix for Preparing Concentrate Feeds	—	330	0.072	1:4	66	0.015	1.5
	—	660	0.15	1:9	66	0.015	3.0
	—	1320	0.29	1:19	66	0.015	6.0
	—	2640	0.59	1:39	66	0.015	12.0
	—	5280	1.17	1:79	66	0.015	24.0
Supplement For Hand Feeding	2.0 lbs/head	396	0.087	—	—	—	1.8
	1.5 lbs/head	528	0.12	—	—	—	2.4
	1.0 lbs/head	792	0.18	—	—	—	3.6
	0.5 lbs/head	1584	0.35	—	—	—	7.2
Mineral Mix	4.0 oz/head	3168	0.71	—	—	—	14.4
	3.0 oz/head	4224	0.93	—	—	—	19.2
	2.0 oz/head	6336	1.40	—	—	—	28.8
	1.0 oz/250 lbs.	2700	0.60	—	—	—	12.3
	1.0 oz/500 lbs.	5400	1.19	—	—	—	24.6
	1.0 oz/750 lbs.	8100	1.79	—	—	—	36.9

* Note: Calculations presented in this table serve as guidelines in preparing feeds which contain RABON Oral Larvicide. Some calculations inconsistencies occur in the table due to rounding. A head weight of 1165 lbs. was used for these calculations.

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DIRECTIONS FOR MIXING IN LIQUID FEED SUPPLEMENTS

This product is a specially prepared granulated material designed for use in cattle Liquid Feed Supplements (LFS). The proper positional and chemical stability of ROL in liquid feeds is dependent upon acceptable physical characteristics and proper blending technique. Depending on the viscosity of the liquid feed, it may be necessary to add xanthan gum. The Liquid Feed Supplement (LFS) plus xanthan gum must be fully hydrated prior to the addition of the RABON Oral Larvicide.

RABON Oral Larvicide should be fed in Liquid Feed Supplements (LFS) for cattle (including lactating dairy cattle) to supply the recommended feeding level of 70 mg of this product per 100 pounds of body weight daily. All cattle in the area should be treated. To prepare a larvicidal liquid feed, mix this product according to the amount of LFS to be fed per animal per day. Use the following tables as a guide, depending on the most convenient method for measurement, for determining the proper mixing rate.

Pounds LFS Consumed/Day	Cattle Weight:	Grams of RABON 97.3 Oral Larvicide/TON of LFS*				
		600 lb	800 lb	1000 lb	1200 lb	1350 lb
1.0		850 g	1134 g	1418 g	1701 g	1928 g
1.5		624 g	850 g	1048 g	1247 g	1418 g
2.0		425 g	567 g	709 g	850 g	964 g

Pounds LFS Consumed/Day	Cattle Weight:	Fluid Ounce Equivalents ^b of RABON 97.3 Oral Larvicide/TON of LFS*				
		600 lb	800 lb	1000 lb	1200 lb	1350 lb
1.0		34 oz	45 oz	56 oz	67 oz	76 oz
1.5		25 oz	34 oz	42 oz	50 oz	56 oz
2.0		17 oz	23 oz	28 oz	34 oz	38 oz

*Mix proportionately for other cattle weights or consumption levels.

^bUse volumetric measuring cup.

"Guidelines for the Successful Use of ROL in Liquid Feed Supplements (LSF)", available from Boehringer Ingelheim Vetmedica, Inc. or your distributor, should be consulted prior to the use of this product in Liquid Feed Supplements.