

11556-23

10/08/1974

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C-7314

Best Available copy

U.S. LABEL

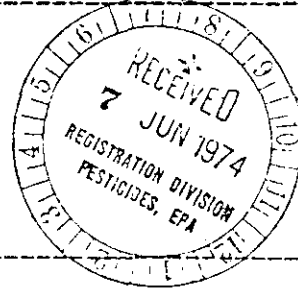
Reason to Issue: To add lice control on swine.

Date of Draft: 5/28/74 (Pre-Reg.)

TAKE TIME



OBSERVE LABEL DIRECTIONS



CO-RAL (coumaphos)

EMULSIFIABLE LIVESTOCK INSECTICIDE FOR CONTROL OF GRUBS, HORN FLIES, FACE FLIES, LICE, AND TICKS

GUARANTEE: Contains 1.0 lb. O,O-Diethyl O-(3-chloro-4-methyl-2-oxo-(2H)-1-benzopyran-7-yl) phosphorothioate per gallon.

ACTIVE INGREDIENTS:

O,O-Diethyl O-(3-chloro-4-methyl-2-oxo-(2H)-1-benzopyran-7-yl) phosphorothioate	11.6%
Aromatic Petroleum Distillate	83.4%
INERT INGREDIENTS:	5.0%
	100.0%

Batch No. See Bottom of Can

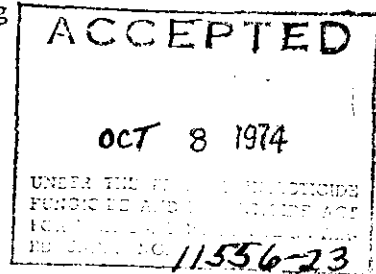
Protect from freezing.

EPA Reg. No. 11556-23-AA
EPA Est. 3125-MO-1

WARNING

KEEP OUT OF REACH OF CHILDREN (See [designate panel] for warning statements)

NET CONTENTS GALLONS



Note: Underlined letters in chemical nomenclature should be italicized when printed, not underlined.

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CO-RAL Livestock Insecticide

DIRECTIONS FOR USE

IMPORTANT: Read these entire Directions and Conditions of Sale, including the Warranty and Limitation of Damages provision, before using CO-RAL (coumaphos) Emulsifiable Livestock Insecticide.

CONDITIONS OF SALE: These Directions for Use reflect the opinion of experts based on tests of effectiveness, of toxicity to laboratory animals and of residues on or in food and feed under normal conditions of use. However, because of the wide range of conditions under which this product may be used, even though label directions are followed, it is impossible to eliminate all risks associated with its use because of abnormal conditions beyond the control of the seller. Chemagro and the Seller offer, and the Buyer uses, this product subject to the understanding that the Buyer assumes all such risks.

CO-RAL Emulsifiable Livestock Insecticide mixes easily with water to form an emulsion which is easily applied with ordinary spray equipment. One spray treatment is highly effective for control of flies, lice, and ticks and provides residual control for several weeks.

Spray Treatment for Specified Ectoparasites, Except Cattle Grubs:

Operate spray equipment so as to thoroughly penetrate the hair coat. Re-treatment will be necessary only when insects reappear and constitute a problem.

Backrubber Application for Horn Flies and Face Flies:

CO-RAL Emulsifiable Livestock Insecticide has proved to be ideal for backrubber application. When properly mixed and applied, excellent control of horn flies and face flies will be achieved. Best control is obtained when backrubbers are strategically located and properly treated. No. 2 furnace oil (fuel oil) or No. 2 diesel fuel oil is recommended for mixing with CO-RAL Emulsifiable Livestock Insecticide for use in backrubbers. Use of other oils may result in sludge formation that will prevent proper distribution in the reservoir-type backrubber.

Spray Treatment for Cattle Grub Control:

Spray treatment(s) should be applied in such a manner that the skin, not just the hair, becomes thoroughly wet. Spray pressures of 250 to 350 pounds per square inch are recommended. Operate box-type spray chutes at maximum pressure for thorough overall wetting and penetration.

Timing of Applications for Cattle Grub Control:

Proper timing of treatment is important. For most effective results, cattle should be treated as soon as possible after hee fly activity ceases. Host parasite reactions such as bloat, salivation, staggering and paralysis may sometimes occur when cattle are treated while the common cattle grub (*Hypoderma lineatum*) is in the gullet, or while the northern cattle grub (*H. bovis*) is in the area of the spinal cord. Cattle should be treated either before or after these stages of grub development. Consult your veterinarian, extension livestock specialist, or extension entomologist regarding the timing of treatment.

Timing of Applications for Cattle Grub Control: (Cont.)

NOTE: If it is impossible to determine the origin of the cattle, and thus the exact stage of the grubs is unknown, it is recommended that the cattle receive only a maintenance ration of low energy feed during the treatment period. This lessens the likelihood of severe bloat which may occur in cattle on full feed when the common grub is killed while in the gullet.

For the most effective reduction of carcass damage and trim loss in cattle to be slaughtered, treatment should be applied at least 6 weeks before the expected appearance of grubs in the back.

NOTICE TO VETERINARIAN: If the proper dosage of CO-RAL Emulsifiable Livestock Insecticide has been applied and adverse reactions, such as bloat, excessive salivation, and posterior paralysis occur, it is highly probable that a host parasite reaction exists. Administer symptomatic treatment. Anti-inflammatory agents may be helpful. If necessary, relieve bloat by trocarization, as a stomach tube may traumatize a severely swollen esophagus. Do not administer atropine, as it is contraindicated in host parasite reactions. If toxicity should occur as a result of gross overdosage, atropine is antidotal.

RECOMMENDED APPLICATIONS

DO NOT APPLY MORE THAN 12 QUARTS OF CO-RAL EMULSIFIABLE LIVESTOCK INSECTICIDE PER 100 GALLONS OF WATER. FOR LACTATING DAIRY CATTLE DO NOT APPLY MORE THAN 1 QUART CO-RAL EMULSIFIABLE LIVESTOCK INSECTICIDE PER 100 GALLONS OF WATER.

ANIMAL	PARASITE	Quarts CO-RAL Livestock Insecticide	REMARKS
Beef and Non-Lactating Dairy Cattle	Horn flies Lice	2	SPRAY TREATMENTS: Apply specified dosage in 100 gallons of water for a complete wetting to run-off. Repeat as necessary.
	Ticks	4	SPRAY TREATMENT (S): Apply specified dosage in 100 gallons of water as high pressure spray so as to wet the skin, not just the hair, of the animal. Repeat as necessary.
	Screw-worms	8	SPRAY TREATMENT: Apply specified dosage in 100 gallons of water as a high pressure spray so as to wet the skin, not just the hair, of the animal. See Directions for Use for proper timing of applications.
	Grubs	12	DOUBLE SPRAY TREATMENT: Apply specified dosage in 100 gallons of water as a high pressure spray. Make 2 applications per season, not more than 3 months apart. The second application should be soon after heel fly activity has ceased.
	Grubs	8	

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RECOMMENDED APPLICATIONS (CONT.)

ANIMAL	PARASITE	Quarts CO-RAL Livestock Insecticide	REMARKS
Beef and Lactating Dairy Cattle	Horn flies Face flies	4	CATTLE BACKRUBBERS: Mix specified dosage in 13 gallons of No. 2 furnace oil or No. 2 diesel fuel. Saturate the fiber portion of the back-rubber with this mixture. Place the backrubber where animals congregate or travel regularly. For dairy cattle, suspend at a height that will prevent straddling. Re-saturate back-rubber as needed. <u>Note:</u> For most effective face fly control, the rubber should be constructed so as to permit the animal to rub its face. No. interval is required between treatment and slaughter or use of milk.
	Lice	1	SPRAY TREATMENT (S): Apply specified dosage in 100 gallons of water for a complete wetting to runoff. Repeat as necessary.
Horses	Horn flies	2	SPRAY TREATMENT (S): Apply specified dosage in 100 gallons of water for complete wetting. Treat thoroughly all wounds and injuries. Repeat as necessary.
	Lice	4	
	Ticks	4	
	Screw-worms	8	
Pine	Lice	2	SPRAY TREATMENT (S): Apply specified dosage in 100 gallons of water for a complete wetting to runoff. Repeat as necessary.

RESTRICTIONS

Do not apply as a spray at rates above 1 quart of CO-RAL Emulsifiable Livestock Insecticide per 100 gallons of water to lactating dairy cattle, or to non-lactating dairy cattle within 14 days of freshening. If freshening should occur within this interval after spraying, do not use milk for human food for balance of the 14-day interval.

Do not apply to sick, convalescent, or stressed livestock; or to animals less than 3 months old.

Do not spray animals for 10 days before or after shipped or weaning, or after exposure to contagious and infectious diseases.

Do not spray in a confined, non-ventilated area.

Do not apply in conjunction with oral drenches or other internal medications, such as phenothiazine, nor with natural or synthetic pyrethroids or their synergists, or with other organic phosphates.

WARNING

May be poisonous if swallowed. Harmful if inhaled or absorbed through the skin. Do not get in eyes or on skin. Do not breathe spray mist. Wash thoroughly with soap and warm water after handling. Wash contaminated clothing with soap and hot water before reuse.

Do not contaminate feed or food. Keep out of reach of children.

Do not reuse container. Destroy when empty.

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WARNING (CONT.)

If poisoning occurs, obtain prompt medical aid. prolonged exposure will result in cholinesterase depression. To Physician - Atropine sulfate is antidotal. 2-PAM is also antidotal and may be applied in conjunction with atropine.

WARRANTY AND LIMITATION OF DAMAGES

Chemagro warrants that this material conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use and Conditions of Sale; subject to the risks referred to therein. CHEMAGRO MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY, INCLUDING ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY, and no agent of Chemagro is authorized to do so except in writing, with a specific reference to this warranty. Any damages arising from a breach of this warranty shall be limited to direct damages, and shall not include consequential commercial damages such as loss of profits or values, etc.

CO-RAL is a Reg. TM of the Parent Company of Farbenfabriken Bayer GmbH, Leverkusen.

USE ONLY AS DIRECTED

MANUFACTURED BY

CHEMAGRO
Division of Baychem Corporation

Box 4913, Kansas City, Mo. 64120

Text to be placed on top of container

ATTENTION: Contents Must Be Diluted Before Use