



Compound DRC-1339 Concentrate- Feedlots

(EPA Reg. No. 56228-10)

DRC-1339 is a slow-acting avicide registered by the Animal and Plant Health Inspection Service's (APHIS) Wildlife Services (WS) program for the control of blackbirds, starlings, pigeons, crows, ravens, magpies, and gulls. Only WS certified applicators, or persons working under their direct supervision, can apply this avicide. WS has five DRC-1339 products registered with the U.S. Environmental Protection Agency (EPA) to use for bird problems that cannot be resolved by Starlicide Complete (EPA Reg. No. 67517-8) or other commercially available products. The Compound DRC-1339 Concentrate-Feedlots (1339-FL) registration provides alternate baits for controlling blackbird and starling problems at feedlots and allows baits to be prepared at the use site.

Acute Toxicity to Birds and Mammals

DRC-1339 is highly toxic to many birds that are considered as pests but is much less toxic to many nonpest species, including raptors, and to most mammals. Baits prepared with 1339-FL are treated with from 0.2 percent to 2.0 percent DRC-1339 and contain a lethal dose of DRC-1339 for blackbirds, cowbirds, grackles, or starlings on a single bait. The actual amount of DRC-1339 on a single bait ranges from 0.5 mg to 2.5 mg. Bait dilution factors limit the ingestion of DRC-1339 by target birds to about 10mg/kg.

Potential Nontarget Hazards

Numerous studies conducted by APHIS, WS, have shown that 1339-FL poses little acute

hazard to nontarget animals when used according to label directions. Risks to nontarget species are site specific and can be controlled by the choice of bait and bait site and by careful prebaiting and observation. To lessen the potential of poisoning nontarget birds with 1339-FL baits, dilution with untreated bait is required. Dilution factors were developed by determining the amount of bait that could be ingested by target birds at a single feeding.

Birds that may be at risk of acute poisoning in feedlots include mourning doves, pigeons, magpies, flickers, cardinals, blue jays, and small gallinaceous species. The presence of these nontarget birds on bait sites during prebaiting-unless they can be excluded by bait selection or placement-may be sufficient reason to cancel or delay 1339-FL bait applications. The acute poisoning risk to mammals, such as dogs, cats, foxes, raccoons, and skunks, is minimal because the recommended baits are not readily accepted by these species.

There have been no documented secondary poisonings of mammalian or avian scavengers or of predators with 1339-FL even though WS has been monitoring its use for more than 25 years. Dead target birds should be retrieved, burned, or buried whenever possible when cats or owls might be exposed to them. A cat or owl could be poisoned with DRC-1339 if it fed exclusively on birds poisoned with DRC-1339 for more than 100 days; however, the risk is minimal because use and exposure to bird carcasses occurs for just a few weeks.

Toxicity and Stability in the Environment

DRC-1339 is unstable in the environment and degrades rapidly when exposed to sunlight, heat, or ultraviolet radiation. DRC-1339 is also highly soluble in water but does not hydrolyze.

Baits treated with 1339-FL have a short useful life when exposed to the elements. The

baits discolor rapidly in direct sunlight and degrade when exposed to moisture. The useful life of exposed baits can vary from a few hours under high humidity and direct sunlight conditions to more than a week under dry, dark conditions.

Although rain can leach DRC-1339 from baits, DRC-1339 binds very tightly to soils, has low mobility, degrades rapidly, and will not migrate. DRC-1339 is moderately toxic to fish, but some invertebrates are sensitive to it, so direct or indirect application to water is prohibited.

Bait Selection

DRC 1339-1339-FL should be used when blackbirds, cowbirds, or grackles are problems in feedlots, when starlings cannot be effectively baited with Starlicide Complete, or when other commercially available products fail. Baits and treatment rates allowed for starlings include french fries and whole raisins (0.2 percent), rolled whole corn and pig starter pellets (1.0 percent), and rolled barley and poultry pellets (2.0 percent). For blackbirds, cowbirds, and grackles, the baits and treatment rates allowed include rolled barley, cracked corn, rolled or whole milo, hen or chicken scratch, and oat groats (2.0 percent). Rolled whole corn (1.0 percent) may be also be used for grackles.

The selection of baits should be based on observations of acceptability by target species, availability of similar foods or feeds in the diet of target birds, rejection of baits by nontarget birds, or the absence of nontarget species. Pellets are the bait of choice for starlings and cracked corn for blackbirds; however, it may be necessary to select a less preferred bait to avoid attracting nontarget species to the baits.

Prebaiting

Prebaiting (placing untreated baits at the site) is recommended before treating with DRC-1339-FL unless a bait site has consistent use by target birds and unless the birds are accustomed to feeding on foods that are the same as the bait selected for treatment. Prebaiting by WS personnel or others can establish and maintain a bait site while nontarget observations are being conducted.

Bait Formulation, Preparation, and Dilution

Baits can be prepared from 1339-FL in

cement mixers, in plastic bags, or on plastic drop-cloths. Place the required amount of bait in or on the mixing location and slowly add the appropriate amount of DRC-1339/water or DRC-1339/oil to the bait while mixing thoroughly. The addition of an adhesive or binding agent, such as corn syrup, molasses, starch, lecithin oil, or malt, to the formulation at rates of 1 to 2 oz per 10 lb of total mixture may enhance retention and reduce aversion to DRC-1339. Treated baits should be dried at ambient temperature (between 32 °F and 90 °F) without direct exposure to sunlight and should be stored in a cool, dry, dark location until used. All treated baits, except for raisins and french fries, must be used within 7 days of preparation due to the degradation of DRC-1339 and bait mix; raisins and french fries must be used within 24 hours.

The minimum dilution ratio for 1339-FL-treated baits varies from 1:2 (1 part treated to 2 parts untreated) for french fries and whole raisins, to 1:5 for rolled whole corn and poultry pellets, to 1:10 for rolled barley, cracked corn, and whole or rolled milo. Dilution reduces bait aversion, lessens the possibility that individual birds will consume more than a single treated bait, allows reduced application rates, and keeps bait sites active.

Endangered Species Considerations

There is no evidence that the use of 1339-FL at feedlots will have an impact on any threatened or endangered species. Before authorized handlers use 1339-FL, they should contact local, State, and Federal wildlife agencies to ensure that no threatened or endangered species are present that could be affected by baiting.

Sources of Information

Additional information on this product can be found in the April 1994 ADC Final Environmental Impact Statement (Appendix P), in Material Safety Data Sheets supplied by the Pocatello Supply Depot, and in the 1995 Handbook on Prevention and Control of Wildlife Damage. Specific information on this product can be obtained through the National Wildlife Research Center (NWRC) (970-266-6000) or through the NWRC web site <http://www.aphis.usda.gov/ws/nwrc>. For further information about the availability of this product, contact your WS State Director, or the Pocatello Supply Depot.