



Compound DRC-1339 Concentrate-Livestock, Nest, and Fodder Depredations

(EPA Reg. No. 56228-29)

DRC-1339 is an 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 certified applicators working for WS, or persons under their direct supervision, can apply this avicide. APHIS/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 other commercially available products. The Compound DRC-1339 Concentrate-Livestock, Nest, and Fodder Depredations registration (1339-COR) provides for the use of egg or meat baits to control damage to livestock, wildlife nests, and fodder tubes caused by ravens, crows, and magpies (corvids).

Acute Toxicity to Birds and Mammals

DRC-1339 is highly toxic to many birds that are considered pests but is much less toxic to many nonpest species, including raptors and most mammals. Hard-boiled egg baits are prepared as single lethal baits containing about 20 mg of 1339-COR. Meat-cube baits are prepared with 0.75 g of 1339-COR. Five meat-cube baits contain the same amount of 1339-COR as a single egg bait.

Potential Hazards to Nontarget Species

Numerous studies and observations conducted by WS have shown that baits prepared with 1339-COR pose 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 prebaiting and observation. The presence of 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-COR bait applications. The acute-poisoning risk to mammals, such as dogs, cats, foxes, raccoons, and skunks, is minimal because the concentration of 1339-COR required to harm these species is substantially higher than the amount of pesticide exposed in egg or meat baits. Nontarget birds that may be at risk from baiting operations include bluejays, gulls, meadowlarks, roadrunners, vultures, grackles, and some species of large wading birds. There is more risk when using meat baits because of their acceptability to some raptors, eagles, and mammalian scavengers and predators; therefore, strict adherence to the observations and hazing requirements specified in label instructions is important.

There have been no documented secondary poisonings of mammalian or avian scavengers or predators with 1339-COR, even though WS has been monitoring this use for more than 15 years. If there is a possibility of owls' or cats' feeding on corvids killed by 1339-COR, the dead birds should be retrieved, burned, or buried whenever possible. A cat or owl could potentially be poisoned by consuming 1339-COR-killed corvids if it fed exclusively on them for more than 100 days; however, the risk is minimal because use and exposure to corvid carcasses occurs over a period of less than a

few weeks and the carcasses will be very widely scattered.

Toxicity and Stability in the Environment

DRC-1339 is unstable in the environment and degrades rapidly when exposed to sunlight, heat, and ultraviolet radiation. This compound is also highly soluble in water but does not hydrolyze. Baits treated with 1339-COR have a short but useful life when exposed to the elements. Meat baits degrade when exposed to moisture, and their useful life is less than 12 hours under dry humidity and direct sunlight. Egg baits have a useful life of up to 7 days if sun and heat conditions are not too harsh. Prepared egg baits will retain their effectiveness for over 2 weeks at temperatures up to 24°C (75 °F), if stored in dry, dark conditions. Refrigerated egg baits are effective for over 6 weeks. Rain can leach 1339-COR from meat baits but not from egg baits; however, DRC-1339 binds very tightly to soils, has low mobility, degrades rapidly, and will not migrate. DRC-1339 is moderately toxic to fish, and also toxic to some invertebrates, so direct or indirect application to water is prohibited.

Bait Selection

When corvids create excessive problems on livestock birthing grounds or around livestock-feed storage areas, prey on the eggs or young of threatened or endangered species, or prey on other nesting birds, particularly waterfowl, and cannot be controlled by other means, 1339-COR-treated baits should be used. Only egg baits (preferably hard-boiled chicken eggs) and cubed-meat baits are approved for corvid control. Final baits selected should be based on observations of acceptability by target corvids and an evaluation of the risks involved for nontarget species.

Bait Site Selection

Most corvid-control operations will occur on livestock birthing grounds or near colonies of nesting birds. Sites should be selected carefully for their closeness to sites where damage is occurring and for habitat that is suitable for egg- or meat-bait placement.

Prebaiting

Prebaiting (placing untreated eggs or meat cubes at a site) is recommended before treating a

site with 1339-COR baits to establish and maintain the site, to develop a consistent feeding pattern for corvids, and to observe nontarget species. Care should be taken to observe the number of birds involved in the problem because corvids are notorious for caching excess food items. Place only the minimal number of treated eggs or meat baits to accomplish control. Cached baits may create a hazard for nontarget species.

Bait Formulation and Preparation

Baits should be prepared with 1339-COR according to label instructions. When preparing (injecting) egg baits, all of the 1339-COR solution should be placed in the yolk of the egg, which is the first part of the egg consumed by corvids. It is recommended that 0.5 mL of a 4 percent solution, one of two choices on the label, be used so the injected solution will be more easily retained in the yolk.

Bait Dilution

No dilution of treated baits is required or practical for this product.

Endangered Species Considerations

There is no evidence that the use of 1339-COR will have an impact on threatened or endangered species. Before authorized applicators use 1339-COR, they should contact local, State, and Federal wildlife agencies to verify that no threatened or endangered species are present that could be harmed 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.