



Temik 10G: A Valuable Pest Control Weapon if Properly Handled

Condensed from a news release by J. A. Wichtrich, Union Carbide Corp. 1976.

Temik 10G aldicarb has become a standard pest control weapon. Properly applied, it provides outstanding pest control that results in improved plant vigor and vitality. But only by handling and using Temik in a recommended and proven manner will growers achieve superior pest control results and reduce the risk in handling a toxic material.

Temik is a granular carbamate insecticide, miticide and nematocide. It is a true systemic pesticide. Temik is registered for control of aphids, thrips, spider mites, whiteflies, mealy bugs, nematodes, leafhoppers, and leafminers. In greenhouses, Temik has United States registration for commercial use on chrysanthemums, cymbidium orchids, Easter lilies, poinsettias, gerbera, carnations, roses, and snapdragons. One-sixteenth of a teaspoon in a six-inch pot is all that is required to control spider mites on a rose plant for six to eight weeks. This is the equivalent of using 100 pounds of Temik 10G per acre on field grown roses.

The simplest and most commonly used applicator is the teaspoon. When a full teaspoon of Temik is called for, this means filling the measure with Temik until granules spill off the edges. The shaker bottle is also widely used. The gun powder measure is effective for treating pots and cans and allows you to calibrate more precisely the amount discharged on each application. Be careful, however, to avoid using powder measures that grind the Temik granules, as this can create dust which can be hazardous. For flower beds on greenhouse benches or tables, many growers like the hand-held Ortho Whirlybird spreader. These

devices hold approximately two pounds of material and operate by continuous rotation of a handle. Some growers block off part of the Whirlybird applicator opening with a piece of tape in order to limit the broadcast pattern to a 90 degree angle, instead of the 180 degree pattern for which the applicator is designed. This directs the Temik granules into the flower bed and away from the operator. For larger scale greenhouse or outdoor applications of Temik, dusters such as the Hatsuta Golden Duster or Hudson Duster find favor with many growers. These are hand-operated broadcast spreaders with a capacity of about 5 pounds. A neck strap permits the operator to carry the unit in front of him, rotate the handle with one hand and direct the applicator tube for accurate placement of granules with the other hand.

When treating plants in small containers, distribute the granules uniformly around the plant. Uneven distribution can result in phytotoxicity to the plant. If beds or pots are covered with leaf or compost type mulch, remove or lift the mulch and place Temik underneath. The Temik granules should be watered in as soon as possible. Use overhead irrigation to remove any granules that may have become lodged in the foliage of the plants.

Temik is a toxic material. It must be handled properly. Be sure to wear the proper clothing. This includes long-sleeved clothing, goggles and protective gloves. Rubber boots also are recommended. A respirator mask and rubber gloves are recom-

mended while filling or cleaning equipment. Be careful not to allow Temik granules to be trapped in close contact with skin or to become lodged in clothing. Shirt sleeves should extend over the gloves to the wrist, and pants without cuffs should fit outside of boots. If clothing should become contaminated with Temik, remove and wash them as soon as possible. Do not allow any work clothing that has been contaminated to accumulate. Temik should always be stored in a secured area. When transferring Temik from bag to applicator, be sure it is in areas or on surfaces that are dry. Wash face and hands before eating or smoking during working hours. In case of known skin contact with Temik, wash immediately and thoroughly with soap and water and rinse well. Should Temik come into contact with the eyes, flush continuously with water for 15 minutes. Immediately after the contents of a container of Temik pesticide are used, it is important that the containers be destroyed. Either burn them or bury the containers a minimum of 18 inches deep in soil that is isolated from water, supplies and crops. When the packages are burned, stay away from the smoke. The fumes may be dangerous if inhaled. Spills and exposed areas of granules are a distinct hazard. Minor field spills should be immediately covered with soil. Larger spills must be collected and buried. If the spills should occur indoors, the exposed area must be flooded with a solution containing one-half pound lye and two gallons of water. Allow the solution to sit for at least four hours. Then, rinse well with fresh water. Be sure it is known where leaching water will run from containers treated with Temik so you can avoid contamination of non-target areas such as walkways and work areas.

Never mix Temik with irrigation water. The resulting solution may be very hazardous. **Don't** mix Temik in advance with potting soil. **Don't** allow eating or drinking in areas where Temik is being applied. It's a good idea never to use Temik where visitors or untrained personnel will come in contact with it. Keep unauthorized personnel out of treated areas. Do not use plant parts for food or feed purposes if the plants have been

treated with Temik. Food crops should not be planted in soil previously treated with Temik for at least 100 days. Temik should not be used in the house or the home garden, or stored at home. And, of course, it cannot be used on any crop not listed on the label. Although rooted cuttings and potted plants may not be sold before a four week waiting period following a Temik application, many normal working procedures need not be interrupted. Workers can stay on the job as usual. There is no need to quarantine the greenhouse for hours after spraying or fogging as with foliar pesticides. Flowering crops can be disbudded, cut, suckered, tied-up, etc., at anytime after treatment when label rates are followed. Also, pots containing plants can be handled anytime. There are also no re-entry time limitations with Temik, but, still it is a good idea to schedule Temik applications at the end of the day. Preferably, the best time would be at the end of the work week or just prior to vacations or holidays. Be sure signs are posted in the treated areas cautioning employees and visitors of the potential danger.

Anyone who works with Temik and other pesticides should be familiar with these signs and symptoms of pesticide poisoning: headache, giddiness, nervousness, blurred vision, weakness, nausea, colic, chest discomfort, sweating, pinpoint pupils, tears, salivation, excessive respiratory secretions, vomiting, impaired breathing, muscle twitches, and coma. First aid procedures and information for physicians are listed on the Temik label. Anyone who may be overexposed to Temik should be taken immediately to a physician or hospital. A copy of the label should be taken along, also. For Temik poisoning, the antidote is atropine sulfate. Because the Temik label "directions for use" are found on the Temik carton, not on the bag, do not buy or sell the bags separately. Cartons must be intact when purchased or sold. Union Carbide Corporation maintains an emergency assistance number which is (304) 744-3487. This phone line is open 24 hours per day. All over exposures and incidents involving Temik should be reported to Union Carbide. Be sure this number is posted in a prominent place along with other emergency numbers.