3883-225

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460



APR 0 8 2009

PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

**Control Solutions** c/o Don O'Shaughnessy, PhD 427 Hide Away Circle Cub Run, KY 42729

Dear Dr. O'Shaughnessy,

Subject:

EPA initiated action to amend the final submitted label for mandatory language

Dominion 4LB Flowable Insecticide EPA Registration No. 53883-225

The labeling referred to above submitted in connection with the Federal Insecticide, Fungicide and Rodenticide, as amended is acceptable. Thank you for the timely revisions as requested.

Submit two copies of your final printed label before you release the product for shipment.

A stamped copy of the labeling is enclosed for your records. If you have any questions regarding this label, please contact Autumn Metzger at (703) 305-5314.

Sincerely,

Venus Eagle

Product Manager 01

Insecticide-Rodenticide Branch Registration Division (7505P)

Eagle

# **DOMINION 4LB**

Flowable Insecticide

ACTIVE INGREDIENT	% BY WT.
lmidacloprid; 1-[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine	42.3%
OTHER INGREDIENTS:	57.7%
	TAL 100.0%

Contains 4 lbs. of active ingredient per gallon

# KEEP OUT OF REACH OF CHILDREN CAUTION

	CAUTION
FIRST AID	
IF SWALLOWED:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
IF ON SKIN OR CLOTHING:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
IF INHALED:	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.     Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.     Call a poison control center or doctor for treatment advice.
Have the product conta	ainer or label with you when calling a poison control center or doctor or going for treatment. You may at 1-877-250-9291 for emergency medical treatment information.
	specific antidote is available. Treat the patient symptomatically.

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed, absorbed through skin, or inhaled. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### Applicators and other handlers must wear:

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category C on an EPA chemical-resistance category selection chart.

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC), or Viton
- · Shoes plus socks

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

NET CONTENTS:	GALLON(S)
NET CONTENTS:	GALLON(S)

EPA Reg. No. 53883-225

EPA Est. No. XXXXX-XX-XXX

Manufactured By: Control Solutions, Inc. 5903 Genoa-Red Bluff Pasadena, TX 77507

APR 0 8 2009
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under:

ACCEPTED

EPA. Reg. No: 53883-225

1 -

#### **ENGINEERING CONTROLS STATEMENT**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

#### **USER SAFETY RECOMMENDATIONS**

#### **Users** should:

- · Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- · Remove clothing/PPE 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.

#### **ENVIRONMENTAL HAZARDS**

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. This product is toxic to wildlife and highly toxic to aquatic invertebrates.

This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

OBSERVE THE FOLLOWING PRECAUTIONS WHEN MIXING AND APPLYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES, RESERVOIRS, RIVERS, PERMANENT STREAMS, MARSHES OR NATURAL PONDS, ESTUARIES, AND COMMERCIAL FISH FARM PONDS.

#### SPRAY DRIFT MANAGEMENT

The interaction of many equipment- and weather-related factors determine the potential for spray drift. The applicator is responsible for considering all of these factors when making application decisions. Avoiding spray drift is the responsibility of the applicator.

#### Importance of Droplet Size

An important factor influencing drift is droplet size. Small droplets (<150-200 microns) drift to a greater extent than large droplets. Within typical equipment specifications, applications should be made to deliver the largest droplet spectrum that provides sufficient control and coverage. Formation of very small droplets may be minimized by appropriate nozzle selection.

## Wind Speed Restrictions

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size, canopy, and equipment specifications determine drift potential at any given wind speed. Do not apply when winds are greater than 15 mph and avoid gusty and windless conditions. Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.

## **Restrictions During Temperature Inversions**

Do not make aerial or ground applications during temperature inversions. Drift potential is high during temperature inversions. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however if fog is not present, inversions can also be identified by the movement of smoke from a ground source. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical mixing.

## No-Spray Zone Requirements for Soil and Foliar Applications

Do not apply by ground within 25 feet or by air within 150 feet of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds.

#### **Runoff Management**

Do not cultivate within 10 feet of the aquatic areas to allow growth of a vegetative filter strip. When using Dominion 4lb on erodible soils, Best Management Practice for minimizing runoff should be employed. Consult your local Natural Resources Conservation Service for recommendations in your use area.

## **Endangered Species Notice**

Under the Endangered Species Act, it is a federal offense to use any pesticide in a manner that results in the death of a member of an endangered species. Consult your local county bulletin, County Extension Agent, or Pesticide State Lead Agency for information concerning endangered species in your area.

## **Resistance Management**

Some insects are known to develop resistance to insecticides after repeated use. As with any insecticide, the use of this product should conform to resistance management strategies established for the use area.

Dominion 4lb contains a Group 4A insecticide. Insect biotypes with acquired or inherent tolerance to Group 4A insecticides may eventually dominate the insect population if Group 4A insecticides are used repeatedly as the predominant method of

4/22

control for targeted species. This may eventually result in partial or total loss of control of those species by Dominion 4lb and to other Group 4A insecticides.

The active ingredient in Dominion 4lb is a member of the neonicotinoid chemical class. Insect pests resistant to other chemical classes have not shown cross-resistance to Dominion 4lb. In order to maintain susceptibility to this class of chemistry in insect species with high resistance development potential, it is recommended that for each crop season: 1) only a single, soil application of Dominion 4lb be made; 2) foliar applications of products from the same class not be made following a long residual, soil application of Dominion 4lb, or other neonicotinoid products.

If a soil application of Dominion 4lb has not been made during a crop season and foliar applications are to be made, avoid using a block of more than three consecutive applications of Dominion 4lb and/or other Group 4A products having the same or similar mode of action. Following a neonicotinoid block of treatments, Control Solutions, Inc. strongly encourages the rotation to a block of applications with effective products with a different mode of action before using additional applications of neonicotinoid products. Using a block rotation or windowed approach, along with other IPM practices, is considered an effective use strategy for preventing or delaying an insect's ability to develop resistance to this class of chemistry.

Foliar applications of Dominion 4lb or other Group 4A products from the neonicotinoid chemical class should not be used on crops previously treated with a long-residual, soil-applied products from the neonicotinoid chemical class.

Other Group 4A, neonicotinoid products used as foliar treatments include: Actara, Assail, Calypso, Centric, Clutch, Couraze, Galiant, Impulse, Intruder, Leverage, Nuprid, Pasada, Provado, Trimax Pro, and Venom.

Other Group 4A, neonicotinoid products used as soil/seed treatments include Admire Pro, Advise, Alias, Belay, Couraze, Cruiser, Gaucho, Macho, Macho,

Contact your Cooperative Extension specialist, certified crop advisor, and/or product manufacturer for additional insect resistance management recommendations. Also, for more information on Insect Resistance Management (IRM), visit the Insecticide Resistance Action Committee (IRAC) on the web at <a href="http://www.irac-online.org/">http://www.irac-online.org/</a>.

#### **DIRECTIONS FOR USE**

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

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. For any requirements specific to your State or Tribe, consult the Agency responsible for pesticide regulation.

## AGRICULTURAL USE REQUIREMENTS

Use this product in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours. Exception: If the product is soil injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Chemical resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC), or Viton
- Shoes plus socks

## **APPLICATION INSTRUCTIONS**

Dominion 4lb is a flowable insecticide for the control and suppression of a variety of listed insect pests. Dominion 4lb may be applied as a soil treatment to cotton, tobacco, cucurbit vegetables, greenhouse vegetables, head, stem and brassica vegetables, leafy vegetables, legume vegetables, root and tuberous vegetables, strawberries, sugarbeets, bushberries, citrus, grapes, hops, pome fruit, stone fruit, tropical fruit, tree nuts, and other listed crops, Dominion 4lb may also be applied as a foliar treatment on cotton, soybeans and tree nuts, and a seed piece treatment for potatoes.

Do not apply more than 0.5 lb. active ingredient per acre per crop season regardless of formulation or method of application, unless specified within a crop-specific, recommended application section for a given crop.

#### **MIXING INSTRUCTIONS**

To prepare the application mixture, add a portion of the required amount of water to the spray tank and with agitation, add Dominion 4lb. Complete filling tank with balance of water needed. Maintain sufficient agitation during both mixing and application. Dominion 4lb may also be used with other pesticides and/or fertilizer solutions. Please see "Compatibility" section

8/22

of this label. When tank mixtures of Dominion 4lb and other pesticides are involved, prepare the tank mixture as recommended above and follow suggested "Mixing Order" below.

#### Mixing Order

When pesticide mixtures are needed, add wettable powders or wettable granules first, Dominion 4lb and other suspension concentrate (flowable) products second, and emulsifiable concentrates last. Ensure good agitation as each component is added. Do not add an additional component until the previous is thoroughly mixed. If a fertilizer solution is added, a fertilizer/pesticide compatibility agent may be needed. Maintain constant agitation during both mixing and application to ensure uniformity of spray mixture.

#### Compatibility

Test compatibility of the intended mixture before adding Dominion 4lb to the spray or mix tank. Add proportionate amounts of each ingredient in the appropriate order to a pint or quart jar, cap, shake for 5 minutes, and let set for 5 minutes. Poor mixing or formation of precipitates that do not readily redisperse indicates an incompatible mixture that should not be used.

#### CHEMIGATION

**Types of Irrigation Systems:** Chemigation applications of Dominion 4lb may be made to crops through chemigation systems if specified in crop-specific recommended application sections. Applications of Dominion 4lb may only be made to crops through low-pressure systems. Do not apply Dominion 4lb through any other type of irrigation system.

**Uniform Water Distribution and System Calibration:** The irrigation system must provide uniform distribution of treated water. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. The system must be calibrated to uniformly apply the rates specified. If you have questions about calibration, you should contact Cooperative Extension Service specialists, equipment manufacturers, or other experts.

Chemigation Monitoring: A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Drift: Do not apply when wind speed favors drift beyond the area intended for treatment.

Required System Safety Devices: The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Using Water from Public Water Systems: Public water systems means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Chemigation systems connected to public water systems must contain a functional reduced-pressure zone, back flow preventer (RPZ), or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and to top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. The pesticide injection pipeline must contain a functional normally closed solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

## **ROTATIONAL CROPS\***

Treated areas may be replanted with any crop specified on an imidacloprid label, or any crop for which a tolerance exists for the active ingredient, as soon as practical following the last application. For crops not listed on an imidacloprid label, or for crops for which no tolerances for the active ingredient have been established, a 12-month plant-back interval must be observed.

## **IMMEDIATE PLANT-BACK:**

All crops on this label plus the following crops not on this label: barley, canola, corn (field, pop, and sweet), rapeseed, sorghum, sugarbeet, and wheat

## 30-DAY PLANT-BACK:

Cereals (including buckwheat, millet, oats, rice, rye, and triticale), soybeans, and safflower

10-MONTH PLANT-BACK		
Onion and bulb vegetables	•	
12-MONTH PLANT-BACK:		
All Other Crops		
* Cover crops for soil building or erosion	control may be planted any time, but do not graze or harvest for food or feed.	

## **FOLIAR APPLICATION**

Apply Dominion 4lb with properly calibrated ground or aerial application equipment. Minimum required spray volumes are 10 gallons per acre by ground application and 5 gallons per acre through aerial equipment. As pest pressure develops, apply the appropriate rate as a broadcast or directed spray to the target pest. For best control, ensure thorough coverage of entire plant. Retreat if needed.

Use lower rates early in the season when pest pressure is low or when tank-mixing with other insect control products. The level of control or suppression is determined by the stage of pest development and infestation level at the time of application. Dominion 4lb is most effective against insects in the early instar and early nymphal stages, as well as bollworm/budworm eggs. If coverage is not thorough, activity and control will be diminished. To ensure faster activity and optimum overall control, apply at the higher gallonage. To enhance coverage, use an organosilicone-based spray additive.

Regardless of formulation or method of application, do not apply more than 0.5 lb. of active ingredient per acre per season, including seed treatment, soil and foliar uses.

## **FIELD CROPS**

#### COTTON

Pests Controlled	Rate: Fluid ounces per acre
Cotton aphid, Cotton fleahopper, Bandedwinged whitefly, Plant bugs (excludes <i>Lygus hesperus</i> ), Green Stink bug, Southern green stink bug, Bollworm/Budworm (ovicidal effect)	0.9 – 1.8
Pests Suppressed	
Lygus bug ((Lygus hesperus), Whiteflies (other than bandedwinged whitefly)	1.35 – 1.8

## Restrictions:

- Pre-Harvest Interval (PHI): 14 days
- Minimum interval between applications: 7 days
- Maximum Dominion 4lb allowed per season: 8.9 fluid ounces/Acre (0.31 lb Al/Acre)
- Do not graze treated fields after application of Dominion 4lb

Pests Controlled (In Addition to Pests Listed Above)	Dominion 4LB Rate fluid ounces per acre	Bidrin® 8 Rate fluid ounces per acre
Early Season Control:		
Thrips	0.9 – 1.35	1.6 – 3.2
Mid to Late Season Control: Plant bugs, Stink bugs (including Brown stink bug), Grasshoppers, Saltmarsh caterpillar, Cotton leafperforator	0.9 – 1.35	4.0 - 8.0

# Note: Refer to the Bidrin® 8 product label for specific use instructions; observe all restrictions and precautions that appear on

## SOYBEAN1

the label.

ate: Fluid ounces per acre
35

#### Restrictions

- Pre-Harvest Interval (PHI): 7 days
- · Minimum interval between applications: 7 days
- Maximum Dominion 4lb allowed per season: 4.05 fluid ounces/Acre (0.14 lb Al/Acre)

## TREE NUTS1

Crop of Crop Group 14 including: Almond, Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert, Hickory nut, Macadamia nut, Pecan, Pistachio, Walnut (black and English)

Tiut, Macadamia nut, Fecan, Fistachio, Wainut (black and English)	
Pests Controlled	Rate: Fluid ounces per acre
Aphids (except Black pecan aphid), Leafhoppers/Sharpshooters,	
Phylloxera spp. (leaf infestations), Spittlebugs, Whiteflies	1.3 – 2.6
Black pecan aphid, Mealybugs, San Jose scale	2.9

#### Restrictions:

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 6 days
- Maximum Dominion 4lb allowed per season: 10.4 fluid ounces/Acre (0.36 lb Al/Acre)
- Minimum application volume (water): 50 GPA ground application, 25 GPA aerial application
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

#### Applications:

Applications for San Jose scale should be timed according to crawler stage, treating each successive generation. Two applications on a 10 to 14-day interval may be required to achieve control.

## **SOIL APPLICATION**

For soil applications of Dominion 4lb, direct product into the seed or root-zone of crop. Failure to place Dominion 4lb into root-zone may result in loss of control or delay in onset of activity. Dominion 4lb may be applied with ground or chemigation application equipment.

Use only broadcast foliar application to seedling flats or trays, or where product is intended to be washed from foliage to soil prior to drying on foliage.

Optimum activity of Dominion 4lb results from application to the root-zone of plants to be protected. The earlier Dominion 4lb is available to a developing plant, the earlier the protection begins. Dominion 4lb is continuously taken into the roots over a long period of time and the systemic nature of Dominion 4lb allows movement from roots though the xylem tissue to all vegetative parts of the plant. This results in extended residual activity of Dominion 4lb, the control of insects, and the prevention and/or reduction of insects that may carry viruses. The rate of Dominion 4lb applied affects the length of the plant protection period. Higher rates are recommended when infestations occur later in crop development or where pest pressure is continuous. Dominion 4lb will generally not control insects infesting flowers, blooms, or fruit. Additional crop protection may be required for insects feeding in, or on these plant parts, and for insects not listed in the crop-specific, pests-controlled sections of this label. Additional, specific Dominion 4lb application instructions are also provided in the crop-specific sections of this label.

Suppression, or less than complete control of certain diseases and insect pests including reduced feeding may also result from a Dominion 4lb application. Refer to the following crop use tables for specific pests controlled or suppressed. Control of these pests/diseases may require supplemental control measures.

**Restriction:** Do not use Dominion 4lb on crops grown for production of true seed intended for private or commercial planting unless allowed under state specific, supplemental labeling

As with any insecticide, care must be taken to minimize exposure of Dominion 4lb to honey bees and other pollinators. Consult Cooperative Extension Service, PCAs, consultants, or local Control Solutions, Inc. representatives for application on these types of crops..

Do not apply more than 0.5 lb. active ingredient per acre per crop season regardless of formulation or method of application.

## **FIELD CROPS**

## COTTON

Pests Controlled	Rate: Fluid ounces per 1000 row-feet	Rate: Fluid ounces per acre
Cotton aphid, Plant bugs, Thrips,	0.65	8.5 –10.55
Whiteflies	·	(depending on row-spacing)

#### Restrictions:

- Maximum Dominion 4lb allowed per crop season when making soil applications: 10.55 fluid ounces/Acre (0.33 lb Al/Acre).
- Maximum number of Dominion 4LB applications per year is 6, up to 10.55 fl oz / acre / year or 0.33 lb ai / acre per year
- Do not graze treated fields after any application of Dominion 4lb See Resistance Management Section of this label.

## Applications: Apply specified dosage in one of the following methods:

- In-furrow spray during planting directed on or below seed.
- In a narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting.
- Chemigation into root-zone through low-pressure drip or trickle irrigation.

#### PEANUT

ILANOI		
Pests Controlled	Rate: Fluid ounces per acre	
Aphids, Leafhoppers, Whiteflies	8.0 – 12.0	
Pests Suppressed	Rate: Fluid ounces per acre	
Thrips	8.0 – 12.0	

#### Restrictions:

- Pre-Harvest Interval (PHI): 14 days
- Maximum Dominion 4lb allowed per season: 12.0 fluid ounces/Acre (0.38 lb Al/Acre)

Applications: Apply specified dosage in one of the following methods:

- In-furrow spray during planting directed on or below seed.
- · Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment

#### **Important Note**

Increases in Tomato spotted wilt virus (TSWV) incidence have been observed with application of imidacloprid flowable products on multiple varieties of peanut. This may also be the case with other tospovirus, or other viruses transmitted by various thrips species or perhaps, other pests. Prior to application of Dominion 4lb to peanuts, consult with the State Cooperative Extension Service representative for recommendations. Growers are advised to weigh insect control benefits against potential increase in viral disease levels. In areas where TSWV or tospovirus are epidemic, growers are encouraged to use virus resistant varieties and consult the University of Georgia Tomato spotted wilt virus index before applying Dominion 4lb

#### POTATO

Pests Controlled	Rate: Fluid ounces per 1000 row-feet	Rate: Fluid ounces per acre
Aphids, Colorado potato beetle, Flea beetles, Leafhoppers, Potato psyllid	0.45-0.65	6.5-10.0
Pests/Diseases Suppressed	Rate: Fluid ounces per 1000 row-feet	Rate: Fluid ounces per acre
Symptoms of: Potato leaf roll virus (PLRV), Potato yellows, Net necrosis, Wireworms (with in-furrow spray atplanting	0.45-0.65	6.5-10.0

#### Restrictions:

Maximum Dominion 4lb allowed per crop season: 10.0 fluid ounces/Acre (0.31 lb Al/Acre)

Applications: Apply specified dosage in one of the following methods:

- In-furrow spray during planting directed on seed pieces or seed potatoes.
- Subsurface side-dress on both sides of the row covered with 3 or more inches of soil.
- · Narrow band spray at ground cracking directly over the row during hilling covered with 3 or more inches of soil.
- Narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting. For effective
  pest control or suppression, Dominion 4lb applications must be placed below soil-surface and in contact with seed piece
  or within root-zone. For potatoes grown on highly permeable soils with shallow water table, at-plant applications of
  Dominion 4lb may be made in a 2 to 4 inch band (width of planter shoe opening) and completely covered.

## **TOBACCO**

Pests Controlled	Rate: Fluid ounces per 1000 plants (as seedling tray drench)	Rate: Fluid ounces per 1000 plants (in-furrow or transplant-water)
Aphids, Flea beetles	0.5	0.7
Mole crickets, Whiteflies, Wireworms	0.7-1.4	0.9-1.4
Pests/Disease Suppressed		
Cutworms Symptoms of: Tomato spotted wilt virus (TSWV)	0.7-1.4	0.9-1.4

## Restrictions:

- · Pre-Harvest Interval (PHI): 14 days
- Maximum Dominion 4lb allowed per crop season: 16.0 fluid ounces/Acre (0.5 lb. Al/Acre)

Applications: Apply specified dosage in one of the following methods:

- Uniform, broadcast foliar spray to seedlings in trays (tray drench) not more than 7 days prior to transplanting followed immediately by overhead irrigation to wash Dominion 4lb from foliage into potting media. Failure to wash Dominion 4lb from foliage may result in a reduction in pest control. Transplants should be handled carefully during setting to avoid dislodging treated potting media from roots.
- In-furrow spray or transplant-water drench during setting.
- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.

**Important Note:** Proper tray drench applications of Dominion 4lb have been shown to be the most efficacious method of application. However, the specified rate of Dominion 4lb may be applied as combination of the tray drench in the planthouse and/or transplant-water drench in field. Adverse growing conditions may cause a delay in uptake of Dominion 4lb into the plant and a delay in control.

#### **VEGETABLE AND SMALL FRUIT CROPS**

## **CUCURBIT VEGETABLES**

Crops of Crop Group 9 Including: Chayote (fruit), Chinese waxgourd (Chinese preserving melon), Citron melon, Cuban pumpkin, Cucumber, Gherkin, Gourd (edible, includes hyotan, cucuzza, hechima, Chinese okra), *Momordica* spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber), Muskmelon (hybrids and/or cultivars of *Cucumis melo* including true cantaloupe, cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, snake melon, and Winter melon), Pumpkin, Squash (includes summer squash types such as: butternut squash, calabaza, crookneck squash, Hubbard squash, scallop squash, straightneck squash, vegetable marrow and zucchini, and winter squash types such as acorn squash and spaghetti squash), Watermelon (includes hybrids and/or varieties of Citrullus lanatus)

Pests Controlled	Rate: Fluid ounces per acre	
Aphids, Cucumber beetles, Leafhoppers, Thrips (foliage feeding thrips only), Whiteflies	8.0-12.0	
Pests/ Diseases Suppressed		
Bacterial wilt (as vectored by various cucumber beetles), Leaf silvering resulting from whitefly feeding	8.0-12.0	

#### Restrictions:

- Pre-Harvest Interval (PHI): 21days
- Maximum Dominion 4lb allowed per application: 12.0 fluid ounces/Acre (0.38 lb Al/Acre)

Applications: Apply the specified dosage in one of the following methods:

- Chemigation into root-zone through low- pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- In-furrow spray directed on or below seed.
- Narrow (2" or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1 ½ inches with sufficient irrigation within 24 hours of application.
- Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting.
- Post-seeding drench, transplant-water drench, or hill drench.
- Subsurface side-dress on both sides of each row. Dominion 4lb must be incorporated into root-zone.

Planthouse Application Instructions	
Pest Controlled	Rate: Fluid ounces per 1000 plants
Aphids, Whiteflies	0.05

## Restrictions:

- Maximum amount Dominion 4lb applied in the planthouse: 0.05 fluid ounces (0.00156 lb Al) per 1000 plants
- Maximum number Dominion 4lb applications in planthouse: 1
- · Not for use on crops grown for seed.

**Applications**: Apply specified dosage to seedlings in trays in the planthouse, targeting soil media (tray drench), not more than 7 days prior to transplanting, in one of the following methods:

- Uniform, broadcast high-volume foliar spray, followed immediately by sufficient overhead irrigation to wash Dominion 4lb from foliage into potting media without loss of gravitational liquid from the bottom of the tray. Failure to wash Dominion 4lb from foliage may result in reduced pest control.
- Injection into overhead irrigation system, using adequate volume to thoroughly saturate soil media without loss of gravitational solution from the bottom of the tray.

The application made in the planthouse will only provide short-term protection and is not intended as a substitution for a field application. An additional field application must be made within 2 weeks following transplanting to provide continuous protection. Applications of higher rates or increased number of applications in planthouse may result in significant plant injury. Transplants should be handled carefully during setting to avoid dislodging treated potting media from roots.

**Important Note:** Not all varieties of cucurbit vegetables have been tested for tolerance to Dominion 4lb applied to seedling flats. Therefore treat a small number of plants and confirm tolerance for 7 days prior to treating entire planthouse.

## FRUITING VEGETABLES

Crops of Crop Group 8 plus Okra including: Eggplant, Ground cherry, Okra, Pepper (including bell, chili, cooking, pimento, and sweet) Tomato, Pepinos. Tomatillo

and sweet, remaie, repinee, remaine			
Field Application Instructions. See details below for addit	ional planthouse instructions.		
Pests Controlled Rate: Fluid ounces per Acre			
Aphids, Colorado potato beetle, Flea beetles, Leafhoppers,	Okra and Pepper; 8.0-16.0		
Thrips (foliage feeding thrips, only), Whiteflies	Other Crops; 8.0-12.0		
Diseases Suppressed			
Symptoms of: Tomato mottle virus, Tomato spotted wilt virus,	Okra and Pepper; 8.0-16.0		
Tomato yellow leaf curl virus	Other Crops; 8.0-12.0		

#### Restrictions:

- Pre-Harvest Interval (PHI): 21 days
- Maximum Dominion 4lb allowed on pepper and okra crops per application: 16.0 fluid ounces/Acre (0.5 lb Al/Acre)
- Maximum Dominion 4lb allowed on other fruiting vegetable crops per application: 12.0 fluid ounces/Acre (0.38 lb Al/Acre)

Applications: Apply specified dosage in one of the following methods:

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- In-furrow spray directed on or below seed.
- Narrow (2" or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1 1/2 inches with sufficient irrigation within 24 hours of application.
- Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting.
- Post-seeding drench, transplant-water drench, or hill drench.
- Subsurface side-dress on both sides of each row. Dominion 4lb must be incorporated into root-zone.

Planthouse Application Instructions	
Pests Controlled	Rate: Fluid ounces per 1000 plants
Aphids, Whiteflies	0.05

#### Restrictions:

- Maximum amount Dominion 4lb applied in the planthouse: 0.05 fluid ounces (0.00156 lb Al) per 1000 plants.
- Maximum number Dominion 4lb applications in planthouse: 1
- Not for use on crops grown for seed

Applications: Apply specified dosage to seedlings in trays in the planthouse, targeting soil media (tray drench), not more than 7 days prior to transplanting, in one of the following manners:

- Uniform, broadcast high-volume foliar spray, followed immediately by sufficient overhead irrigation to wash Dominion 4lb from foliage into potting media without loss of gravitational liquid from the bottom of the tray. Failure to wash Dominion 4lb from foliage may result in reduced pest control.
- Injection into overhead irrigation system, using adequate volume to thoroughly saturate soil media without loss of gravitational solution from the bottom of the tray.

The application made in the planthouse will only provide short-term protection and is not intended as a substitution for a field application. An additional field application must be made within 2 weeks following transplanting to provide continuous protection. Applications of higher rates or increased number of applications in planthouse may result in significant plant injury. Transplants should be handled carefully during setting to avoid dislodging treated potting media from roots.

Important Note: Not all varieties of fruiting vegetables have been tested for tolerance to Dominion 4lb applied to seedling flats. Therefore, treat a small number of plants and confirm tolerance for 7 days prior to treating entire planthouse.

#### **GREENHOUSE VEGETABLES**

(Mature plants in production greenhouses); Cucumber, Tomato, only

Pests Controlled	Ra	ate: Fluid ounces per 1000 plants
Aphids, whiteflies	. 0.	.7

#### Restrictions:

- Pre-Harvest Interval (PHI): 0 day
- Maximum number Dominion 4lb applications per crop season: 1
- Maximum allowable rate per year: 0.7 fl oz (0.03 lb ai)
- Not for crops grown for seed

Applications: Apply specified dosage in a minimum of 16 gallons of water for tomatoes and 21 gallons of water for cucumbers using soil drenches, micro-irrigation, drip irrigation, or hand-held or motorized calibrated irrigation equipment. Application should be made only to plants grown in field-type soils, potting media, or mixtures thereof. Do not apply to plants grown in nonsoil medias such as perlite, vermiculite, rock wool or other soil-less media, or plants growing hydroponically. Do not apply to immature plants since phytotoxicity may occur.

Apply when infestation pressure surpasses threshold and beneficials are not able to maintain pest populations below damage thresholds. Repellency of bumble bee pollinators and negative effects on some beneficials (Orius spp.) can occur when Dominion 4lb is applied.

Many varieties of vegetables have been tested for tolerance to Dominion 4lb and show good safety. However, certain varieties may show more sensitivity to Dominion 4lb. Therefore, treat a few plants before treating the whole greenhouse.

GLOBE ARTICHOKE	
Pests Controlled	Rate: Fluid ounces per Acre
Aphids, Leafhoppers	8.0-16.0

#### Restrictions:

- Pre-Harvest Interval (PHI): 7 days
- Maximum Dominion 4lb allowed per season: 16.0 fluid ounces/Acre (0.5 lb Al/Acre)

Applications: Apply specified dosage in one of the following methods:

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.
- In-furrow spray at planting directed on or below seed.

#### **HERBS**

Crops of Crop Subgroup 19A including: Angelica, Balm (lemon balm), Basil (fresh and dried), Borage, Burnet, Chamomile, Catnip, Chervil (dried), Chinese chive, Chive, Clary, Coriander, (cilantro or Chinese parsley leaves), Costmary, Cilantro (leaf), Curry (leaf), Dillweed, Horehound, Hyssop, Lavender, Lemongrass, Lovage (leaf), Marigold, Marjoram, Nasturtium, Parsley (dried), Pennyroyal, Rosemary, Rue, Sage, Savory (summer and winter), Sweet bay (bay leaf), Tansy, Tarragon, Thyme, Wintergreen, Woodruff.

Pests Controlled	Rate: Fluid ounces per Acre
Aphids, Flea beetles, Leafhoppers, Whiteflies	8.0-12.0
Pests Suppressed	Rate: Fluid ounces per Acre
Thrips (foliage feeding thrips only)	8.0-12.0

#### Restrictions:

- Pre-Harvest Interval (PHI): 14 days
- Maximum Dominion 4lb allowed per season: 12.0 fluid ounces/Acre (0.38 lb Al/Acre)

Applications: Apply specified dosage in one of the following methods:

- · In-furrow spray during planting directed on or below seed.
- In-furrow spray or transplant-water drench during setting or transplanting.
- · Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

**Note:** Not all crops and/or varieties listed above have been tested for phytotoxic effects. Without specific knowledge about a particular crop and variety, treat only a small number of plants or a small area be treated and evaluate before commercial use.

## **HEAD and STEM BRASSICA VEGETABLES**

Crops of Crop Group 5 including: Broccoli, Broccoli raab (rapini), Brussels sprouts, Cabbage, Cauliflower, Cavalo broccoli, Chinese (gai lon) broccoli, Chinese (bok choy) cabbage, Chinese (napa) cabbage, Chinese mustard (gai choy) cabbage, Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens.

Pests c	ontrolled					Rate: Fluid ounces per acre	
aphids,	leafhoppers,	thrips	(foliage-feeding	thrips	only)	4.4 - 10.5	•
whiteflie	S						•

#### Restrictions:

- Pre-harvest interval (PHI) 21 days
- Maximum rate per application 10.5 fl oz (0.38 lb / acre
- Not for use on crops grown for seed

Notes: Apply using one of the following methods;

- · Chemigation into root zone through low pressure drip, trickle, micro-sprinkler, or equivalent equipment
- In-furrow spray directed at or below seed
- Surface band spray (2 inches or less wide) over the seed line at planting incorporated to a depth of 1 to 1.5 inches, followed by sufficient irrigation within 24 hr after application
- Surface band spray (2 inches or less wide) directly below the eventual seed row in bedding operation 14 or fewer days before planting
- Post-seeding drench, transplant water drench, or hill drench
- Subsurface side drench on both sides of rows, followed by incorporation into the root zone

#### **LEAFY VEGETABLES**

Crops of Crop Subgroup 4A plus Watercress including: Amaranth (leafy amaranth, Chinese spinach, tampala), Arugula (Roquette), Chervil, Chrysanthemum (edible leaved and garland), Cilantro, Corn salad, Cress (garden), Cress (upland, yellow rocket, winter cress), Dandelion, Dock (sorrel), Endive (escarole), Lettuce (head and leaf), Orach, Parsley, Purslane (garden and winter), Radicchio (red chicory), Spinach (including New Zealand and vine (Malabar spinach, Indian spinach)), Watercress (commercial production only, applications must not be made to native cress growing in streams or other bodies of water), Watercress (upland)

Pests Controlled	Rate: Fluid ounces per acre (on 36 inch rows)
Aphids, Leafhoppers, Thrips (foliage feeding thrips only),	5.0-12.0
Whiteflies	

## Restrictions:

- Pre-Harvest Interval (PHI): 21 days
- Maximum Dominion 4lb allowed per application: 12.0 fluid ounces/Acre (0.38 lb Al/Acre)
- Nor for crops grown for seed

Applications: Apply specified dosage in one of the following methods:

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- In-furrow spray directed on or below seed.
- Narrow (2 inches or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1 ½ inches
  with sufficient irrigation within 24 hours of application.
- Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting.
- Post-seeding drench, transplant-water drench, or hill drench.
- Subsurface side-dress on both sides of each row. Dominion 4lb must be incorporated into root-zone.

#### **LEAFY PETIOLE VEGETABLES**

Crops of Crop Subgroup 4B including: Cardoon, Celery, Celtuce, Chinese celery (fresh leaves and stalk only), Florence fennel (including sweet arise, sweet fennel Finocchio), Rhuharb, Swiss chard

Daib, Swiss Chard	· · ·
Rate: Fluid ounces per acre	
5.0-12.0	

#### Restrictions:

- Pre-Harvest Interval (PHI): 45 days
- Maximum Dominion 4lb allowed per application: 12.0 fluid ounces/Acre (0.38 lb Al/Acre)
- · Not for crops grown for seed

#### Applications: Apply specified dosage in one of the following methods:

- · Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- In-furrow spray directed on or below seed.
- Narrow (2 inches or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1 ½ inches with sufficient irrigation within 24 hours of application.
- · Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting.
- · Post-seeding drench, transplant-water drench, or hill drench.
- · Subsurface side-dress on both sides of each row. Dominion 4lb must be incorporated into root-zone.

#### LEGUME VEGETABLES except soybean, dry-soil treatment

# Crops of Crops Group 6 including: Edible Podded and Succulent Shelled Pea and Bean and Dried Shelled Pea and Bean

Bean (Lupinus spp., includes grain lupin, sweet lupin, white lupin, and white sweet lupin)

Bean (Phaseolus spp., includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean)

Bean (Vigna spp., includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, Southern pea, urd bean, yardlong bean)

Pea (Pisum spp., includes dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snow pea, sugar snap pea)

Other Beans and Peas [Broad bean (fava), Chickpea (garbanzo bean), Guar, Jackbean, Lablab bean (hyacinth bean), Lentil, Pigeon pea, Soybean (immature seed), Sword bean]

Pests Controlled	Rate: Fluid ounces per acre	
Aphids, Leafhoppers, Thrips (foliage feeding thrips only), Whiteflies	8.0-12.0	
Diseases Suppressed		
Symptoms of: Bean common mosaic virus (BCMV), Bean golden mosaic virus (BGMV), Beet curly top hybrigeminivirus (BCTV)	8.0-12.0	

### Restrictions:

- Pre-Harvest Interval (PHI): 21 days
- Maximum Dominion 4lb allowed per crop season: 12.0 fluid ounces/Acre (0.38 lb Al/Acre)
- · Not for crops grown for seed

## Applications: Apply specified dosage in one of the following methods:

- · Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- In-furrow spray at planting directed on or below seed.
- In a narrow (2 inches or less) surface band over seed-line during planting incorporated to a depth of 1 to 1 ½ inches with sufficient irrigation with 24 hours following application.
- In a narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting.
- As a post-seeding drench, transplant drench, or hill drench.

#### **ROOT VEGETABLES**

Crops of Crop Subgroup 1B except Sugarbeet plus Kava including: Beet (garden) 1, Burdock (edible) 1, Carrot 1, Celeriac 1, Chervil (turnip-rooted) 1, Chicory 1 Gingseng, Horseradish, Kava 1, Parsley (turnip-rooted), Parsnip 1, Radish 1 Oriental radish (daikon) 1, Rutabaga 1, Salsify (oyster plant), Salsify (black) 1, Salsify (Spanish), Skirret, and Turnip 1

Pests Controlled	Rate: Fluid ounces per 1000 row-feet	Rate: Fluid ounces per acre
Aphids, Flea beetles, Leafhoppers, Thrips (foliage feeding thrips only), Whiteflies	0.3585	5.0-12.0 (depending on row spacing)

## Restrictions:

- Pre-Harvest Interval (PHI): 21 days
- Maximum Dominion 4lb allowed per crop season: 12.0 fluid ounces/Acre (0.38 lb Al/Acre)
- Maximum Dominion 4lb applications per crop season: 1

· Not for crops grown for seed

Application: Apply specified dosage in one of the following methods:

· Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.

In-furrow spray (rate specified per 1000 row-feet) or, shanked-in 1 to 2 inches below seed depth during planting.

 In a narrow (2 inches or less) band directly (1 to 2 inches) below the eventual seed row in a bedding operation 14 or fewer days before planting.

**Important Note:** The rate applied affects the length of control. Use higher rates where infestations occur later in crop development, or where pest pressure is continuous. Dominion 4lb rates less than 0.7 fluid ounces/1000 row-feet will not provide adequate residual pest control. Dominion 4lb treated crops grown on very high organic matter soils (muck) may also require additional pest management control.

<sup>1</sup>Tops or greens from these crops may be utilized for food or feed.

#### **TUBEROUS and CORM VEGETABLES**

Crops of Crop Subgroup 1C including: Arracacha, Arrowroot, Artichoke (Chinese and Jerusalem), Canna (edible, Queensland arrowroot), Cassava (bitter and sweet)<sup>1</sup>, Chayote (root), Chufa, Dasheen (taro)<sup>1</sup>, Ginger, Leren, Sweet potato, Tanier (cocoyam)<sup>1</sup>, Turmeric, Yam bean (jicama, manioc pea), Yam (true)<sup>1</sup> (For application instructions on potato see Field Crops section)

Pests Controlled	Rate: Fluid ounces per 1000 row-feet	Rate: Fluid ounces per acre
Aphids, Flea beetles, Leafhoppers	0.35-0.85	5.0-12.0 (depending on row spacing)
Thrips (foliage feeding thrips only),	·	
Whiteflies		

#### Restrictions:

- Pre-Harvest Interval (PHI) from planting application: 3 days (leaves); 125 days (corms)
- Maximum Dominion 4lb allowed per crop season: 12.0 fluid ounces/Acre (0.38 lb Al/Acre)
- Maximum Dominion 4lb applications per crop season: 1
- Not for use on crops grown for seed.

Application: Apply specified dosage in one of the following methods:

- In-furrow spray (rate specified per 1000 row-feet) over planting materials (hulis) or shanked-in 1 to 2 inches below hulis
  depth at planting.
- Side-dress not more than 0.3 fluid ounces/1000 row-feet no later than 45 days after planting. Observe the same PHI as above.

**Important Note:** The rate applied affects the length of control. Use higher rates where infestations occur late in crop development, or where pest pressure is continuous. Dominion 4lb rates less than 0.35 fluid ounces/1000 row-feet may not provide adequate residual pest control. Dominion 4lb treated crops grown on very high organic matter soils (muck) may also require additional pest management control.

<sup>1</sup>Tops or greens from these crops may be utilized for food or feed.

#### STRAWBERRY1

Annual And Perennial Crops		 
Pests Controlled	•	Rate: Fluid ounces per acre
Aphids, Whiteflies		 12.0-16.0

## Restrictions:

- Pre-Harvest Interval (PHI): 14 days
- Maximum Dominion 4lb allowed per crop season: 16.0 fluid ounces/Acre (0.50 lb Al/Acre)

Applications: Apply specified dosage in one of the following methods:

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment after plants are established or on perennial crops in early spring prior to bud opening.
- As a plant material or plant hole treatment just prior to, or during transplanting.
- As a band spray over-the-row in a minimum of 20 gallons of water per acre, followed immediately by overhead irrigation
  to incorporate product into root-zone. Do not use plastic or other mulches that limit movement of Dominion 4lb into root
  zone.

The rate applied affects the length of control. Use higher rates where infestations may occur later in crop development or where pest pressure is continuous.

where pest pressure is continuous.		
Post-harvest Use on Perennial Crops		
Pests Controlled	Rate fluid ounces per acre	
White grub complex (grubs of Asiatic garden beetle,	8.0-12.0	
European and Masked chafer, Japanese beetle, Oriental beetle)		

#### Restrictions:

- Pre-Harvest Interval (PHI): 14 days
- Maximum Dominion 4lb allowed per season: 12.0 fluid ounces per acre (0.38 lb Al/Acre)

Applications: Apply a single application post harvest to coincide with renovation of strawberry fields and during active egglaying period of beetles. Apply specified dosage of Dominion 4lb in one of the following methods:

- As a ground spray via boom or backpack sprayer in a minimum of 20 gallons of water per acre.
- As a row-band spray using an adjusted amount of product based on the treated row band area in proportion to the
  amount required per full acre. Make the bandwidth equivalent to the width of the anticipated fruiting bed.
- As a chemigation application with 600 to 1000 gallons of water followed by 0.1 to 0.25 inches irrigation.

**Important Note:** Follow all soil-surface applications by 0.25 inches overhead irrigation water per acre within 2 hours of application, if at least .25 inches of rain falls within 2 hours of application. Failure to adequately incorporate Dominion 4lb into egg-deposition zone may result in decreased activity.

<sup>1</sup>Use only one of the methods (under "Annual and Perennial Crops" OR "Post-harvest Use on Perennial Crops"). Do not use both methods in the same season.

#### **SUGARBEET**

For use only in CA

Pests Controlled	Rate: Fluid ounces per acre
Aphids, Leafhoppers, Whiteflies, Flea beetles	3.0-6.0
Diseases Suppressed	
Symptoms of: Western yellows/Beet curly top hybrigeminivirus (BCTV)	3.0-6.0

#### Restrictions:

- Maximum Dominion 4lb allowed per crop season: 6.0 fluid ounces/Acre (0.18 lb Al/Acre)
- Do not apply immediately prior to bud opening or during bloom or when bees are actively foraging.
- Not for use on crops grown for seed.

Applications: Apply specified dosage in the following method:

 Apply specified dosage in sufficient carrier volume to insure uniform application. Apply directly below each seed furrow either during the bedding operation immediately prior to planting or at the time of planting.

The low rate may be applied to aid establishment of stands in whitefly areas, or for early season control of the other pests listed.

RATE fluid ounces/ Acre	RATE fluid ounces Based on <u>average</u> row							
	10	15	20	25	30	35	40	45
. 5	0.0475	0.07125	0.095	0.11875	0.1425	0.16625	0.19	0.21375
6	0.057	0.0855	0.114	0.1425	0.171	0.1995	0.228	0.2565
7	0.0665	0.09975	0.133	0.16625	0.1995	0.23275	0.266	0.29925
8	0.076	0.114	0.152	0.19	0.228	0.266	0.304	0.342
9	0.0855	0.12825	0.171	0.21375	0.2565	0.29925	0.342	0.38475
10	0.095	0.145	. 0.19	0.24	0.285	0.335	0.38	0.43
12	0.115	0.17	0.23	0.285	0.345	0.4	0.46	0.515
14	0.135	0.02	0.27	0.335	0.4	0.47	0.535	0.605
16	0.155	0.23	0.305	0.385	0.46	0.535	0.61	0.69
18	0.17	0.26	0.345	0.43	0.515	0.605	0.69	0.775
20	0.19	0.285	0.38	0.48	0.575	0.67	0.765	0.86
22	0.21	0.315	0.42	0.525	0.63	0.735	0.84	0.945
24	0.23	0.345	0.46	0.575	0.69	0.805	0.92	1.035
26	0.25	0.375	0.495	0.62	0.745	0.87	0.995	1!12
28	0.27	0.4	0.535	0.67	0.805	0.935	. 1.07	1.205
30	0.285	0.43	0.575	0.715	0.86	1.005	1.145	1.29
32	0.305	0.46	0.61	0.76	0.92	1.07	1.225	1.375

**NOTE**: The rate applied of Dominion 4lb will affect the length of control as well as the degree and effect of control. Use higher labeled rates where infestations may occur later in crop development or where there is continuous pest pressure. Except as otherwise directed on this label, do not use at application rates lower than 0.7 fluid ounces/1000 row-feet.

## TREE, BUSH AND VINE CROPS

## **BANANA AND PLANTAIN**

27.447.		
Pests Controlled	Rate: Fluid ounces per Acre	· ·

Aphids, Leafhoppers	8.0-16.0
Pests Suppressed	Rate: Fluid ounces per Acre
Scales	8.0-16.0

#### Restrictions:

- Pre-Harvest Interval (PHI): 0 days
- Maximum Dominion 4lb allowed per crop season: 16.0 fluid ounces/Acre (0.5 lb Al/Acre)

Applications: Apply specified dosage in the following method:

· Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

#### BUSHBERRY

Crops of Crop Subgroup 13B Including: Blueberry, Currant, Elderberry, Gooseberry, Huckleberry, Juneberry, Ligonberry, Salal

Pests Controlled	Rate: Fluid ounces per acre	
Japanese beetle: (adults, feeding on foliage)	8.0-16.0	
White grub complex: (grubs of Asiatic garden beetle,	·	
European and Masked chafer, Japanese beetle and Oriental		
beetle)	·	

#### Restrictions:

- Pre-Harvest Interval (PHI): 7 days
- Maximum Dominion 4lb allowed per season: 16.0 fluid ounces/Acre (0.5 lb Al/Acre)
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Apply specified dosage in one of the following methods:

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.

 18-inch band on each side of the row followed by irrigation immediately after application.
 For optimal grub control, apply Dominion 4lb to control 1<sup>st</sup> or 2<sup>nd</sup> instar larvae. Application may be made post-bloom up to 7 days prior to harvest, or post-harvest until October 1<sup>st</sup>. For optimum control of Japanese beetle larvae, make applications from June 1 to July 15.

Application to grass covered rows, row middles, drive lanes, headlands, and other grassy areas in and around the berry field will control resident grub populations. Applications directed to the root-zone will help protect berry plant roots from grub

Apply Dominion 4lb to moist soil. If necessary, apply one hour of irrigation water immediately before application of Dominion 4lb. To ensure maximum efficacy of soil surface spray, apply ½ to 1 inch of irrigation water if this amount of rain is not received within 24 hours of application of Dominion 4lb to facilitate movement into the soil and into the root-zone.

## **CANEBERRY**

## Crops of Crop Subgroup 13A including:

Blackberry (Rubus eubatus, including bingleberry, black satin berry, boysenberry, Cherokee blackberry, Chesterberry, Cheyenne blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, Himalayaberry, hullberry, Lavacaberry, Loganberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, nectarberry, olallieberry, Oregon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, youngberry, and varieties and/or hybrids of these) Raspberry (black and red. Rubus occidentalis, Rubus strigosus, Rubus idaeus)

Pests Controlled	Rate: Fluid ounces per Acre	
Aphids, Leafhoppers, Whiteflies	8.0-16.0	
Rednecked cane borer	12.0-16.0	
Pests Suppressed	Rate: Fluid ounces per Acre	
Thrips (foliage feeding thrips only)	8.0-16.0	

## Restrictions:

- Pre-Harvest Interval (PHI): 7 days
- Maximum Dominion 4lb allowed per season: 16.0 fluid ounces/Acre (0.5 lb Al/Acre)
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Soil Application: Apply specified dosage in one of the following methods:

- Chemigation into roof-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.
- · Basal, soil drench in a minimum of 500 gallons solution per acre.

## CITRUS (Containerized)

Crops of Crop Group 10 Including: Calamondin, Citrus citron, Citrus hybrids (includes chironia, tangelo, and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Pummelo, Orange (sweet and sour), Satsuma mandarin, Tangelo, White sanote (Casimiroa spp), and other cultivars and/or hybrids of these

Pests Controlled	Rate mL/ft <sup>3</sup> container media	
Aphid, Asian citrus psyllid, Blackfly, Citrus leafminer,	0.37	+
Leafhoppers/Sharpshooters, Mealybugs, Scales, Whiteflies		
Citrus root weevil (larval complex)	0.62-1.25	
Pests Suppressed		· <del></del>

Citrus thrips (foliage feeding thrips only)

**Application:** Determine volume of container and calculate dosage necessary to treat container. Apply calculated dosage of Dominion 4lb per container as a soil drench or through low-pressure drip or trickle irrigation water. Use sufficient carrier volume to ensure thorough uniform distribution throughout the media without loss of gravitational water from the container. For optimal results, treat at planting prior to insect infestation. Retreat if necessary. For control of larvae of the citrus root weevil complex, apply prior to neonate larvae entering potting media. Utilize higher dosage for heavy infestations.

#### Restrictions:

- Pre-harvest interval (PHI) 0 (zero) days.
- Maximum rate per application 0.17 fl oz per cubic foot of container medium
- Maximum rate per crop season 0.1 fl oz per plant
- · Do not apply pre-bloom or when bees are actively foraging

## CITRUS (Field)

Crops of Crop Group 10 Including: Calamondin, Citrus citron, Citrus hybrids (includes chironja, tangelo, and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Pummelo, Orange (sweet and sour), Satsuma mandarin, Tangelo, White sapote (Casimiroa spp), and other cultivars and/or hybrids of these.

Pests Controlled	Rate: Fluid ounces per acre	
Aphids, Asian citrus psyllid, Blackfly, Citrus leafminer, Leafhoppers/Sharpshooters, Mealybugs, Scales, Termites (FL only), Whiteflies	8.0-16.0	
Pests/Diseases Suppressed		
Citrus nematode, Symptoms of: Citrus tristeza virus (CTV) through vector control, Citrus yellows, Thrips (foliage feeding thrips only)	16.0	

#### Restrictions:

- Pre-Harvest Interval (PHI): 0 day
- Maximum Dominion 4lb allowed per season: 16.0 fluid ounces/Acre (0.5 lb Al per Acre)
- Do not apply to trees over 8 feet tall

Applications: Apply specified dosage in one of the following methods:

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment. For optimum results, apply to newly planted trees or those previously trained to drip, trickle or micro-sprinkler irrigation. Lightly pre-wet the soil to break soil surface tension prior to applications of Dominion 4lb. Chemigation application can be made separate to normal irrigation but followed by 10 to 20 minutes of additional watering to move Dominion 4lb into root-zone. Allowed 24 hours before initiating subsequent irrigations.
- Soil surface band spray on both sides of the tree. Overlap bands at the tree base to create a continuous band within the
  drip-line area of the tree, and follow immediately with light sprinkler irrigation sufficient to move the product into the upper
  portion of the root-zone. This method is suitable for very coarse soils with 0.75% organic matter or less.
- Drench to base of tree not exceeding one-quart total solution per tree immediately around trunk of tree and extending outward covering the entire fibrous root system of the tree.
- For control of existing termite infestations, apply specified dosage in 1 to 4 quarts of total solution volume, depending on size of tree, as a drench application to the basal portion of the tree trunk and surrounding soil in the immediate area of the tree trunk.
- For suppression of citrus nematode, apply specified dosage through low-pressure chemigation or soil surface band spray
  only, ensuring complete coverage of the root system and utilizing application directions stated above for the respective
  application method. Repeated and regular use of Dominion 4lb over several consecutive growing seasons provides the
  greatest degree of nematode suppression and yields the greatest plant response.

#### COFFEE

301122	
Pests Controlled	Rate: Fluid ounces per acre
Aphids, Leafhoppers, Leafminer	8.0-16.0
Pests Suppressed	
Scales	8.0-16.0

## Restrictions:

- · Pre-Harvest Interval (PHI): 7 days
- Maximum Dominion 4lb allowed per season: 16.0 fluid ounces/Acre (0.5 lb Al/Acre)
- Do not apply pre-bloom or when bees are actively foraging.

Applications: Apply specified dosage in one of the following methods:

- · Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- Subsurface side-dress shanked into the root-zone on both sides of the plants followed by irrigation.
- Basal soil drench in sufficient water to insure incorporation into the root-zone followed by irrigation.

#### **CRANBERRY**

Pests Controlled	Rate: Fluid ounces per acre	
Rootgrubs (Scarabaeidae)	8.0-16.0	
Rootworms (Chrysomelidae)	·	

#### Restrictions:

- · Pre-Harvest Interval (PHI): 30 days
- Maximum Dominion 4lb allowed per season: 16.0 fluid ounces/Acre (0.5 lb Al/Acre)
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

**Applications:** Apply Dominion 4lb to moist soil using one of the following methods:

- · As a soil spray (ground application) directed to the root and crown area using a minimum of 20 gal. of water per acre.
- As a chemigation application with 600 to 1000 gal. of water.

After application, immediately incorporate the Dominion 4lb into the root-zone by 0.1 - 0.3 inches of water per acre, either with chemigation application, or through irrigation or rainfall. Inadequate incorporation within 24 hours of application may result in reduced control.

#### Rootgrubs and Rootworms

Make application post-bloom immediately after bees are removed. Applications should target early instar larvae.

Dominion 4lb has not been tested for crop response in tank mixtures with other registered fungicides or insecticides. If tank mixing is desired, premix a sample of the Dominion and the fungicide or insecticide partner at labeled rates and apply to a small area. Evaluate the crop response within 48 hours and for at least two weeks prior to using the tank mix on a larger scale. If crop injury results for the premix test, do not apply the tank mix to larger acreage.

#### GRAPE

Including: American bunch grape, Muscadine grape and Vinifera grape

Pests Controlled	Rate: Fluid ounces per acre
European fruit lecanium, Leafhoppers/Sharpshooters,	
Mealybugs, Phylloxera * spp	8.0-16.0
Pest/Disease Suppressed	
Grapeleaf skeletonizer, Nematodes, Pierce's disease	12.0-16.0

## Restrictions:

- Pre-Harvest Interval (PHI): 30 days
- Maximum Dominion 4lb allowed per season: 16.0 fluid ounces/Acre (0.5 lb Al/Acre)

Applications: Apply specified dosage in one of the following methods:

- · Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- Subsurface side-dress shanked into the root-zone on both sides of the plants followed by irrigation.
- · Hill drench in sufficient water to insure incorporation into the root-zone followed by irrigation.
- For suppression of nematodes, apply 7 fluid ounces in a single application or two 3.5 fluid ounce applications on a 30 to 45 day interval. Apply only by 1) chemigation into the root-zone through above ground low-pressure drip, trickle, microsprinkler or equivalent equipment; or 2) French plow technique, followed immediately by sufficient irrigation to move the product into the entire root-zone of the plant. Repeated and regular use of Dominion 4lb over several consecutive growing seasons provides the greatest degree of nematode suppression and plant response.

Make application(s) between bud-break and the pea-berry stage. A total of 7 fluid ounces/Acre is recommended under any of the following conditions:

- 1. Where vigorous vine growth is expected;
- In warmer growing areas;
- 3. Where mealybug and European fruit lecanium populations are expected to be heavy;
- 4. Where vine populations exceed 600 per acre, or;
- 5. For suppression of nematodes.

\*Repeated and regular use of Dominion 4lb over several, consecutive growing seasons controls existing *Phylloxera* infestations over time or prevents *Phylloxera* from becoming established.

## HOPS

11010	
Pest Controlled	Rate: Fluid ounces per acre
Aphids	9.6

## Restrictions:

- Pre-Harvest Interval (PHI): 60 days
- Maximum Dominion 4lb allowed per season: 9.6 fluid ounces/Acre (0.3 lb Al/Acre)

Applications: Apply specified dosage in one of the following methods:

Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.

- Subsurface side-dress shanked into the root-zone on both sides of the plants followed by irrigation.
- · Hill drench in sufficient water to insure incorporation into the root-zone followed by irrigation.

Use the higher rate where extended residual control is desired or for treating larger vines or vines with dense foliage volume.

#### POME FRUIT

Crops of Crop Group 11 Including: Apple, Crabapple, Loquat, Mayhaw, Pear (including Oriental pear), Quince

Pests Controlled	Rate: Fluid ounces per acre	-
Aphids (including Wooly apple aphid), Leafhoppers	8.0-12.0	

#### Restrictions:

- · Pre-Harvest Interval (PHI): 21 days
- Maximum Dominion 4lb allowed per season: 12.0 fluid ounces/Acre (0.38 lb Al/Acre)
- Do not apply pre-bloom or during bloom or when bees are actively foraging

Applications: Apply specified dosage in the following method:

Chemigation into the root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.

#### POMFGRANATE

Pests Controlled	Rate: Fluid ounces per acre
Leafhoppers/Sharpshooters, Whiteflies	8.0-16.0

#### Restrictions:

- · Pre-Harvest Interval (PHI): 0 days
- Maximum Dominion 4lb allowed per season: 16.0 fluid ounces/Acre (0.5 lb Al/Acre)
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Apply specified dosage in the following method:

· Chemigation into the root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.

#### STONE FRUIT

Crops of Crop Group 12 Including: Apricot, Cherry (including sweet and tart), Nectarine, Peach, Plum (including Chickasaw, Damson, and Japanese). Plumcot, Prune (fresh and dried)

In-field, Soil Application	
Pests Controlled	Rate: Fluid ounces per acre
Aphids (including Woolly apple aphid), Leafhoppers	8.0-12.0

#### Restrictions:

- Pre-Harvest Interval (PHI): 21 days
- Maximum Dominion 4lb allowed per season: 12.0 fluid ounces/Acre (0.38 lb Al/Acre)
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Apply specified dosage in the following method:

Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.

Pre-plant, Root Dip Application	
Pest Controlled	Rate fluid ounce per 10 gallons root-dip solution
Black peach aphid (infesting roots)	1.0
Mix Dominion 4lb at 1.0 fluid ounces per 10 gallons of water.	Thoroughly wet bare-root transplant to slightly above the graft

Mix Dominion 4lb at 1.0 fluid ounces per 10 gallons of water. Thoroughly wet bare-root transplant to slightly above the graft union by soaking roots in the Dominion 4lb solution for up to 5 minutes. Allow solution to dry on roots and transplant trees as soon as possible following treatment.

## TREE NUTS

Crops of Crop Group 14 including: Almond, Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert, Hickory nut, Macadamia nut, Pecan, Pistachio, Walnut (black and English)

Pests Controlled	Rate: Fluid ounces per acre
Aphids, Leafhoppers/Sharpshooters, Mealybugs, Spittlebugs,	8.0-16.0
Termites, Whiteflies	
Pests/Diseases Suppressed	
Pecan scab (from reduction in honeydew deposition)	8.0-16.0
Thrips (foliage-feeding thrips only)	16.0

## Restrictions:

- Pre-Harvest Interval (PHI): 7 days
- Maximum Dominion 4lb allowed per season: 16.0 fluid ounces/Acre (0.5 lb Al/Acre)
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Apply specified dosage prior to or at onset of pest infestation in one of the following methods:

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent irrigation equipment. Pre-wet soil prior to applications of Dominion 4lb and allow soil to dry following application and prior to subsequent irrigation;
- Emitter or spot application in a minimum of 4 fluid ounces of mixture per emitter site;
- Shank or subsurface side-dress injected to a depth just above or just within the root zone and between the trunk and drip

19/22

line of the tree canopy. Apply Dominion 4 LB in a minimum of 10 gallons per acre using multiple shanks on both sides of trees. Make sure that product placement is below sod or orchard floor debris. Irrigate the entire treated area unless sufficient rain falls within 48 hours to promote uptake by root system.

For control of termites, apply specified dosage to slightly moist soil as a high-volume drench to the basal portion of the tree trunk and surrounding soil in the immediate vicinity of the tree trunk. Use sufficient carrier volume to penetrate the soil to a depth of 18 – 24 inches to obtain optimum control. Allow soil to dry following treatment and before applying any irrigation.

#### Remarks:

Use the higher rates when 1) applied by shank or subsurface sidedress; 2) used on larger trees; 3) to soils with high clay content; 4) to high plant populations; and/or 5) where extended control is desired. Under some conditions, control may not occur for 14 or more days or until two (2) irrigations have been made. Applications made later in the season may result in reduced efficacy.

## TROPICAL FRUIT

Including: Acerola, Atemoya<sup>1</sup>, Avocado, Birida<sup>1</sup>, Black sapote, Canistel, Cherimoya<sup>1</sup>, Custard apple<sup>1</sup>, Feijoa, Jaboticaba, Guava, Llama<sup>1</sup>, Longan, Lychee, Mamey sapote, Mango, Papaya, Passionfruit, Persimmon, Pulasan, Rambutan, Sapodilla, Soursop<sup>1</sup>, Spanish lime, Star apple, Starfruit, Sugar apple<sup>1</sup>, Wax jambu

Codisop, Opanish line, Star apple, Starruit, Sugar apple	, wax jambu	
Pests Controlled	Rate: Fluid ounces per acre	
Aphids, Avocado lacebug, Leafhoppers, Whiteflies	12.0-16.0	
Pests Suppressed		
Scales	16.0	, .

#### Restrictions:

- Pre-Harvest Interval (PHI): 6 days
- Maximum Dominion 4lb allowed per season: 16.0 fluid ounces/Acre (0.5 lb Al/A).
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Apply specified dosage in the following method:

· Chemigation through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.

## **SEED PIECE TREATMENT**

## **POTATO**

POIATO	<u> </u>	
Pests Controlled	Rate: Fluid ounces per 100 lbs. of seed	Rate: Fluid ounces per acre*
Aphids, Colorado potato beetle, Flea beetles, Leafhoppers, Potato psyllid, Wireworms (seed-piece protection)	0.2-0.4	4.0-8.0
Pests/Diseases Suppressed	Rate: Fluid ounces per 1000 row-feet	Rate: Fluid ounces per acre
Symptoms of: Potato leaf roll virus (PLRV), Potato yellows, Net necrosis	0.4	8.0

### Restrictions:

- Maximum Dominion 4lb allowed per crop season: 10.0 fluid ounces/Acre (0.31 lb. Al/Acre)
- · Do not use treated seed-pieces for food, feed, or fodder.
- Do not apply any subsequent application of Dominion 4lb (in-furrow), Gaucho, Leverage, or Provado following a Dominion 4lb seed-piece treatment.

**Application:** Apply specified dosage as a diluted spray onto seed-pieces using a shielded spray system. Dilute with 3 parts water, or less, to 1 part Dominion 4lb. Agitate or stir spray solution as needed. Fungicidal or inert absorbent dusts may be applied after Dominion 4lb application. Apply only in areas with adequate ventilation or in areas that are equipped to remove spray mist or dust. Plant seed pieces as soon as possible after treating avoiding prolonged exposure of Dominion 4lb treated seed-pieces to sunlight and in accordance with the recommendation of your local Extension service.

\* Based on a seeding rate of 2000 lbs. per acre.

#### **OTHER CROPS**

## **CHRISTMAS TREE**

CHRISTINAS INCL		
Pests Controlled	Rate: Fluid ounces per acre	
White grub complex (damage from grubs of Asiatic garden beetle, European and Masked chafer, Japanese beetle and Oriental beetle)	8.0-16.0	

## **Restrictions:**

Maximum Dominion 4lb allowed per season: 16.0 fluid ounces/Acre (0.5 lb Al/A).

**Applications:** Soil incorporation and movement of Dominion 4lb to the root-zone is required for activity. Dominion 4lb can be incorporated most easily when applied to moist soil. Apply specified dosage in one of the following methods:

- Chemigation through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- 18-inch band on each side of the row (small trees) to full broadcast application (large trees) followed by rainfall or 0.25 1 inch of irrigation within 12 hours of application.

For optimal grub control, apply Dominion 4lb during adult flight activity, or up to mid-July when 1st instar larvae are present.

#### POPLAR/COTTONWOOD

(includes members of the genus Populus grown for pulp or timber)

(includes members of the genus <i>Populus</i> grown for pulp of timber)		
Field Application Instructions. See below for Cutting/Whips Application Instructions		
Pests Controlled	Rate: Fluid ounces per acre	
Aphids, Cottonwood leaf beetle	8.0-16.0	
Pest Suppressed		
Phylloxerina popularia	8.0-16.0	

#### Restrictions:

- Maximum Dominion 4lb allowed at-plant per crop season: 16.0 fluid ounces/Acre (0.5 lb Al/Acre)
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Apply specified dosage in the following method:

- Chemigation through low-pressure drip irrigation.
- For narrow-row, cutting orchards/nurseries used for plant propagation, shank into root-zone followed by adequate
  irrigation to promote uptake. (Adequate irrigation depends on soil moisture level at application. Under dry conditions,
  apply 0.25 inches/Acre of water).

For Cottonwood leaf beetle, protection against damage will occur when application is made early-season, when the beetles first begin feeding. Larger trees may require earlier treatment as a result of slower uptake.

For Phylloxerina, apply early in the year from break of dormancy through May.

Cutting/Whip Application Instructions. See above for Field Application Instructions	
Pests Controlled	Cutting/Whip Soaking Solution
	Fluid ounces Dominion 4lb per 100 gallons
Cottonwood leaf beetle	6.65 – 13.3 (unhydrated cuttings/whips) 13.3 – 20 (partially hydrated cuttings/whips)
Pest Suppressed	
Aphids, Phylloxerina popularia	6.65 – 13.3 (unhydrated cuttings/whips) 13.3 – 20 (partially hydrated cuttings/whips)

## Restrictions:

Maximum Dominion 4lb allowed at-plant per crop season: 16.0 fluid ounces/Acre (0.5 lb Al/Acre)

#### **Applications:**

Product absorption into the plant material is affected by 1) the moisture content of the cuttings/whips prior to application, 2) the solution concentration; and 3) the length of soaking intervals. For a constant soaking interval of 24 hours, drier cuttings/whips absorb a higher amount of solution and require a lower concentration. On the other hand, more hydrated cuttings/whips absorb less solution and require a higher concentration. Soaking of cuttings/whips should be done in a covered container without UV light.

Apply specified dosage in one of the following cuttings/whips soaking methods:

- For freshly cut (unhydrated) cuttings/whips, soak plant material in specific solution concentration for 24 hours prior to cold storage. After removal from cold storage, plant as needed.
- For previously hydrated cuttings/whips removed from cold storage, allow plant material to reach room temperature and soak in specified solution concentration for 24 hours prior to planting.
- Proper care must be taken in disposal of any residual soaking solution. Solution may be applied to existing trees or other
  registered crops as long as all product label precautions and restrictions are observed.

**Note:** Not all *Populus* spp. (clones/varieties/hybrids) have been tested fro crop safety. Treat small numbers of cuttings/whips and evaluate before commercial use.

## **USE IN AND AROUND POULTRY HOUSING STRUCTURES**

Darkling and hide beetles:

DOMINION 4LB may be used as a spot, crack and crevice, or overall surface spray to control darkling beetles and hide beetles on floors, walls, and support beams of poultry or turkey housing structures.

#### INSECTICIDE CLASS ROTATIONS:

In order to avoid problems with developed resistance to insecticides it is important to rotate to an insecticide of a different class each 2-3 flocks. It is best to attempt to use 3 different classes of insecticides during a calendar year.

When to Apply: Apply between flocks after de-caking and sanitation procedures have been completed. Do not apply more than 7 days prior to bird placement.

#### Restrictions:

- Do not apply when birds are present.
- Do not allow food or feed to be contacted by the spray.
- · Remove feed and water from the treatment area before applying.
- · Do not restock birds until spray has completely dried.

Mixing and Application Rates: Calculate the surface area to be sprayed. Apply 3 fl. oz. of DOMINON 4LB per 1000 square feet of surface in ½ to 2 gallons of final dilution per 1000 square feet. To prepare the dilution, partly fill the spray tank with ½ the water to be used, then add the appropriate amount of DOMINION 4LB, mix, then add the rest of the water while agitating or mixing. Maintain agitation while spraying. Prepare a fresh mixture for each application.

#### How To Apply:

Apply DOMINION 4LB to the entire footing including 1 foot up onto the wall above the footing, and to 3 to 4 foot wide bands iderectly beneath all feed lines. These areas are where the vast majority of the adult and larval beetles reside when the birds are in the house, and therefore will have an increased likelihood of coming in contact with the insecticide. Measure these areas to determine the correct amount of DOMINION 4LB needed for the application.

If Beetle infestations are very high it may be necessary to treat the footings including 1 foot up onto the walls and the entire floor area of the house.

Also apply as a crack and crevice spray around wall insulation or other areas where beetle may be located. In structures having support beams it is necessary to treat the floor 1 foot around each post and 2 feet up onto the posts. In cases of extreme infestation, treat the entire facility. Apply 3 fl oz per 1000 square feet in 2 gallons of water per 1000 square feet as described above. Apply as a broadcast spray to litter over the entire floor to litter under feed and water lines, and to lower sections of walls to one foot above the foundation.

Ants in and around animal housing facilities:

Use only crack and crevice or wall void applications in building interiors.

Apply at a rate of ¾ teaspoon to 1 ½ teaspoons DOMINION 4LB per gallon of water (2 ½ teaspoons to 2 ½ fl. ounces per 10 gallons). Spray into cracks, crevices, drilled holes, onto walls, and around potential entry points such as doors, windows, vents, eaves, soffits, and utility access holes. If nests are present in voids, spray into the void if possible, or apply as a foam. (See specific instructions of foam generator). Spray surfaces to provide complete coverage but do not spray to dripping or runoff.

Also apply as a drench to soil, turf, ornamental shrubs or plants, or ground cover around the exterior of the building, and along driveways or other hard surfaces where ants may be tunneling. For above-ground nests, such as in wood posts, decks, or fences, or in trees, spray into the cavity and on the wood surface.

## Restrictions:

- Do not use to control native or imported fire ants, harvester ants or pharaoh ants.
- · Keep people and domestic animals out of the treated area until sprays have dried.

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal or cleaning of equipment. Open dumping is prohibited.

**PESTICIDE STORAGE:** Keep pesticide in original container. Do not put concentrate or dilute into food or drink containers. Store in cool, dry place. Do not store diluted spray.

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

**CONTAINER DISPOSAL:** Triple rinse (or equivalent). Do not reuse container. Offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK, OR FIRE), CALL INFOTRAC AT (800) 535-5053.

## **WARRANTY STATEMENT**

CONTROL SOLUTIONS warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of CONTROL SOLUTIONS. All such risks shall be assumed by the Buyer. To the extent consistent with applicable law, except as expressly provided herein, CONTROL SOLUTIONS makes no warranties, guarantees, or representations of any kind, either expressed or implied, or by usage of trade, statutory or otherwise, with regard to the product sold, including, but not limited to merchantability, fitness for a particular purpose, use or eligibility of the product for any particular trade usage. To the extent consistent with applicable law, the exclusive remedy of any buyer or user

n

of this product for any and all losses, injuries, or damages resulting from or in any way arising from the use, handling, or application of this product, whether in contract, warranty, tort, negligence, strict liability, or otherwise, shall be damages not exceeding the purchase price paid for this product or, at CONTROL SOLUTIONS election, the replacement of this product.

Bidrin is a registered trademark of AMVAC Chemical Corporation

Admire, Calypso, Gaucho, Leverage, Provado, Trimax are registered trademarks of Bayer CropScience

Actara, Centric, Cruiser, and Platinum are trademarks of Syngenta Group Company

Assail and Intruder are registered trademarks of Nippon Soda Company, Ltd.

Alias and Pasada are trademarks of Makhteshim Agan

Courage is a trademark of Cheminova

Belay and Clutch are registered trademarks of Arysta Corporation

Venom is a registered trademark of Valent USA, Corporation

Macho and Impulse are trademarks of Albaugh Inc.

Advise and Gallant are trademarks of Agriliance LLC

Widow is a trademark of Loveland Products, Inc.

Nuprid is a trademark of NuFarm America, Inc.

#### Additional/ Alternate Marketing Claims

- One Dose Formula
- Dust Free
- Rapid mixing
- Quick Mixing and Spraying
- Mix and spray liquid formula
- Quick to mix and apply
- Easy to apply, hard on darkling beetles
- Formulated for control of darkling beetles
- Darkling beetle control liquid formulation
- Formulated for use in the poultry industry
- Formulated for effective control of darkling beetles in the poultry industry
- Contains imidacloprid [a chloronicotinyl insecticide] [ neonicotinoid insecticide]
- Controls Darkling beetles that may [carry] [spread] [transmit] poultry disease-causing organisms
- Controls darkling beetles that can damage [buildings] [ceilings] [walls] [insulation]
- Controls darkling beetles that can feed on grain
- Controls both larvae and adults of [darkling beetle] [lesser mealworm] [hide beetle]
- Effective against both larvae and adults of [darkling beetle] [lesser mealworm] [hide beetle]
- Stops the damage and risks caused by darkling beetles
- Stops darkling beetles from [eating] [taking] your profits
- Effective control of [specified ants] [darkling beetles] lesser mealworms] [hide beetles]
- [Targeted] [Banded] application provides effective control of [darkling beetles] lesser mealworms] [hide beetles]
- One dose. Effective and easy to use
- [Focused] [Targeted] band treatment
- Allows labor-saving band treatment
- Less time-consuming band treatment
- Use less insecticide with [banded] [targeted] application
- Use less insecticide per [house] [building] [barn] with [banded] [targeted] application
- Time-saving band treatment
- Easy and flexible treatment options
- Easy and targeted control of [darkling beetles] lesser mealworms] [hide beetles]
- Mix and spray fast and flexible treatment options
- Broadcast or banded treatment
- May be applied as either band or broadcast spray
- Controls even [pyrethroid] [spinosad] [organophosphate] resistant [darkling beetles] lesser mealworms] [hide beetles]
- Control exactly where you need it
- Flexible application for any poultry operation
- The active ingredient in Dominion 4 LB has been shown to provide effective control of [specified ants] [darkling beetles] lesser mealworms] [hide beetles]
- Controls darkling beetle adults and larvae
- The solution to control of [darkling beetles] lesser mealworms] [hide beetles]
- Rotate with pyrethroid insecticides to manage resistance
- Manage resistance with a rotation of Dominion 4 LB and pyrethroids