

2012-3069  
2014-02-18

GROUP	<b>4</b>	HERBICIDE
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BASE

**2, 4-D AMINE 600**

HERBICIDE  
COMMERCIAL SOLUTION



WARNING

POISON

KEEP OUT OF REACH OF CHILDREN  
READ THE LABEL AND ATTACHED BOOKLET BEFORE USING

GUARANTEE:

2,4-D (present as dimethylamine salt)....564 g a.e./L

REGISTRATION NO. 5931 PEST CONTROL PRODUCTS ACT

IN CASE OF EMERGENCY DUE TO A MAJOR SPILL, FIRE OR  
POISONING INVOLVING THIS PRODUCT CALL DAY OR NIGHT, 1-  
800-561-8273

LOVELAND PRODUCTS CANADA INC.

789 Donnybrook Drive

Dorchester, Ontario

N0L 1G5

1-800-328-4678

NET CONTENTS: 1L – 1000 L

**GROUP**

**4**

**HERBICIDE**

FRONT

**2, 4-D AMINE 600**

HERBICIDE

COMMERCIAL SOLUTION



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## **PRECAUTIONS**

### **KEEP OUT OF REACH OF CHILDREN.**

Causes skin and eye irritation. Avoid contact with skin, eyes and clothing. Do not inhale fumes. Avoid breathing spray mist.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's website at: [www.croplife.ca](http://www.croplife.ca).

### **PROTECTIVE CLOTHING AND EQUIPMENT:**

**HANDLING THE CONCENTRATE (MIXING AND LOADING):** Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes and protective eye wear (face shield or safety glasses). Rinse gloves before removal. Coveralls should also be worn when open pouring from containers.

**HANDLING THE DILUTE SPRAY SOLUTION (DURING APPLICATION OR REPAIRING OR CLEANING EQUIPMENT):** Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes. Rinse gloves before removal. Gloves are not required during application when applicator is in an enclosed tractor or in an enclosed airplane cockpit.

Mixers/loaders/applicators using mechanically pressurized handguns must wear a respirator if they will be handling more than 5 kg a.e. per day (sufficient to treat approximately 8.9 L/day at the rate of 0.562 kg a.e./L).

When handling more than 265 kg a.e. per day (470 L), workers must also use a closed system.

### **OPERATOR USE PRECAUTIONS:**

- Wear freshly laundered clothing and clean protective equipment daily.
- Rinse gloves before removal.
- Wash hands before eating, drinking, using tobacco or using the toilet.
- If herbicide penetrates clothing, remove immediately, then wash thoroughly and put on clean clothing. Throw away clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate.
- After using this product, remove clothing and launder separately and promptly and thoroughly wash hands and exposed skin with soap and water. Follow manufacturer's instructions for cleaning personal protective equipment. If no such instructions for washables are provided, use detergent and hot water. Keep and wash personal protective equipment separate from household laundry.
- After work, remove all clothing and shower using soap and water.

## **ENVIRONMENTAL HAZARDS**

Toxic to small mammals, birds, aquatic organisms and non-target terrestrial plants.

**TOXIC** to broadleaf terrestrial plants. Observe buffer zones specified under **DIRECTIONS FOR USE**.

This product may harm other broadleaf plants in the vicinity of the treatment area. If applying this product using a mechanically-pressurized handgun, do not directly spray or allow the spray to drift onto ornamentals or gardens.

Do not spray exposed roots of trees and ornamentals.

**LEACHING:** The use of this chemical may result in contamination of groundwater particularly in areas where soils are permeable (e.g., sandy soil) and/or the depth to the water table is shallow.

**RUN-OFF:** To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to, heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (e.g., soils that are compacted, fine textured or low in organic matter and clay).

Avoid application of this product when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a strip of untreated vegetation between the treated area and the edge of the water body.

To prevent runoff, avoid spraying on driveways, sidewalks or other hard surfaces. Do not irrigate within 24 hours after application.

### **USE PRECAUTIONS:**

Avoid spray drift to any desirable vegetation **NOT** listed on this label as damage may occur. Avoid contamination of ponds, streams, rivers and other water sources. Do not spray during periods of high winds when spray is likely to drift. Coarse sprays are less likely to drift. Do not spray during periods of high temperatures when crops may be under stress as damage to the crop may occur.

### **FIRST AID**

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

**IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15-20 minutes.

Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.

Call a poison control centre or doctor for treatment advice.

**IF SWALLOWED:** Call a poison control centre or doctor immediately for treatment advice.

Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

**IF INHALED:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable by mouth-to-mouth, if possible.

Call a poison control centre or doctor for treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**TOXICOLOGICAL INFORMATION:** This product may cause severe irritation to the eyes. Overexposure to 2, 4-D may cause coughing, burning, dizziness or temporary loss of muscle coordination. Other possible effects of overexposure include fatigue, muscle weakness or nausea. Treat symptomatically.

**STORAGE:** Store container tightly closed and away from seeds, feeds, fertilizer, plants and foodstuffs. Protect from freezing. Product exposed to subfreezing temperatures should be warmed to 5°C and mixed thoroughly before using. Insecticides and fungicides should be segregated from herbicides so as to prevent the possibility of cross-contamination.

**SHAKE WELL BEFORE USING.**

**DISPOSAL:**

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
3. Make the empty container unsuitable for further use.
4. Dispose of the container in accordance with provincial requirements.
5. For information on the disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

**REFILLABLE CONTAINER**

For disposal, this container may be returned to the point of purchase (distributor/dealer).

It must be refilled by the distributor/dealer with the same product. Do not reuse container for any other purpose.

**NOTICE TO USER:** This pest control product is to be used only in accordance with the directions on this label. It is an offence under the *PEST CONTROL PRODUCTS ACT* to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

**GROUP**

**4**

**HERBICIDE**

DATAPAK

**2, 4-D AMINE 600**

HERBICIDE  
COMMERCIAL SOLUTION



WARNING

POISON

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NET CONTENTS: 1L – 1000 L

## **PRECAUTIONS**

### **KEEP OUT OF REACH OF CHILDREN.**

Causes skin and eye irritation. Avoid contact with skin, eyes and clothing. Do not inhale fumes. Avoid breathing spray mist.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's website at: [www.croplife.ca](http://www.croplife.ca).

### **PROTECTIVE CLOTHING AND EQUIPMENT:**

**HANDLING THE CONCENTRATE (MIXING AND LOADING):** Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes and protective eye wear (face shield or safety glasses). Rinse gloves before removal. Coveralls should also be worn when open pouring from containers.

**HANDLING THE DILUTE SPRAY SOLUTION (DURING APPLICATION OR REPAIRING OR CLEANING EQUIPMENT):** Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes. Rinse gloves before removal. Gloves are not required during application when applicator is in an enclosed tractor or in an enclosed airplane cockpit.

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When handling more than 265 kg a.e. per day (470 L), workers must also use a closed system.

### **OPERATOR USE PRECAUTIONS:**

- Wear freshly laundered clothing and clean protective equipment daily.
- Rinse gloves before removal.
- Wash hands before eating, drinking, using tobacco or using the toilet.
- If herbicide penetrates clothing, remove immediately, then wash thoroughly and put on clean clothing. Throw away clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate.
- After using this product, remove clothing and launder separately and promptly and thoroughly wash hands and exposed skin with soap and water. Follow manufacturer's instructions for cleaning personal protective equipment. If no such instructions for washables are provided, use detergent and hot water. Keep and wash personal protective equipment separate from household laundry.
- After work, remove all clothing and shower using soap and water.

## **ENVIRONMENTAL HAZARDS**

Toxic to small mammals, birds, aquatic organisms and non-target terrestrial plants.  
TOXIC to broadleaf terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

This product may harm other broadleaf plants in the vicinity of the treatment area. If applying this product using a mechanically-pressurized handguns, do not directly spray or allow the spray to drift onto ornamentals or gardens.

Do not spray exposed roots of trees and ornamentals.

**LEACHING:** The use of this chemical may result in contamination of groundwater particularly in areas where soils are permeable (e.g., sandy soil) and/or the depth to the water table is shallow.

**RUN-OFF:** To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to, heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (e.g., soils that are compacted, fine textured or low in organic matter and clay).

Avoid application of this product when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a strip of untreated vegetation between the treated area and the edge of the water body.

To prevent runoff, avoid spraying on driveways, sidewalks or other hard surfaces. Do not irrigate within 24 hours after application.

## **DIRECTIONS FOR USE**

### **RESISTANCE MANAGEMENT RECOMMENDATIONS:**

For resistance management, 2, 4-D AMINE 600 HERBICIDE is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to 2, 4-D AMINE 600 HERBICIDE and other Group 4 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Other resistance mechanisms that are not linked to site of action, but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance:



- Where possible, rotate the use of 2, 4-D AMINE 600 HERBICIDE or other Group 4 herbicides with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group when such use is permitted.
- Herbicide use should be based on an IPM program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage, cultural, biological and other chemical control practices.
- Monitor treated weed populations for resistance development.
- Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment and planting clean seed.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact Technical Service at 1-800-328-4678 or at [www.uap.ca](http://www.uap.ca).

DO NOT apply this product directly to freshwater habitats such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands, estuaries or marine habitats.

DO NOT contaminate irrigation/drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

DO NOT apply to the exposed roots of trees and ornamentals.

Mixers/loaders/applicators using mechanically pressurized handguns must wear a respirator if they will be handling more than 5 kg a.e. per day (sufficient to treat approximately 8.9 L/day at the rate of 0.562 kg a.e/L ).

Field sprayer application: DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) coarse classification. Boom height must be 60 cm or less above the crop or ground.

Aerial application: DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply when wind speed is greater than 16 km/h at flying height at the site of application. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) coarse classification. To reduce drift caused by turbulent wingtip vortices, the nozzle distribution along the spray boom length MUST NOT exceed 65% of the wing- or rotorspan.

## **A. CROP USE**

GROUND APPLICATION: Apply 50-200 L of spray solution per hectare depending on the type of application equipment used. Use sufficient water for even distribution. Spray at low pressures (200-275 kPa) when the weeds are actively growing.

**AERIAL APPLICATION:** (including fixed and rotary wing aircraft). Apply a minimum of 30 L of spray solution per hectare depending on the type of application system being used.

**MIXING:** Shake this product well before using. Half fill the spray tank with clean water. Add the required amount of product and agitate thoroughly. Fill tank with clean water and agitate well before use. **NOTE:** If spray solution has been left standing, agitate thoroughly before use.

**TRANSFER SYSTEMS FOR CONTAINERS LARGER THAN 20 L:** Use a transfer system that avoids open pouring when transferring the liquid concentrate from such containers into the spray tank.

**USE PRECAUTIONS FOR AERIAL APPLICATION:**

(to cereal crops, grass crops, pasture, rangeland, stubble and non-cropland)

Use where aerial use is appropriate, suitable and safe.

Exercise special care:

- Use sufficient water for even distribution.
- Avoid direct applications to any body of water. Do not contaminate water through spray drift or by cleaning of equipment or disposal of wastes.
- Apply a minimum of 30L of spray solution per hectare.
- Use boom pressure of 235 kPa or less. Avoid placing nozzles where spray will enter wing tip vortices.
- Do not apply this product directly to, or otherwise permit it to come into direct contact with desirable crops or other desirable broadleaf plants or non-target species and do not permit spray mists to drift onto them.
- Coarse sprays are less likely to drift, use only nozzles or nozzle configuration which minimize the production of fine spray drops. Do not angle nozzles forward into the airstream and do not increase spray volume by increasing nozzle pressure. When spraying, avoid combination of pressure and nozzle type that will result in fine particles (mist) which are more likely to drift. A spray thickening agent or drift retardant may be used with this product to aid in reducing spray drift.
- Do not use human flaggers.
- Avoid spray drift: Apply only when there is little or no hazard from spray drift. Small quantities of the spray, which may not be visible, may seriously injure susceptible crops and damage sensitive non-target habitat. A method must be used to detect air movement, lapse conditions, or temperature inversions (stable air) such as the use of balloons or a continuous smoke column at or near the spray site or a smoke generator on the spray equipment. If the smoke develops into layers or indicates a potential for hazardous spray drift, do not spray.
- BUFFER ZONES:** Appropriate buffer zones should be established between treatment areas and aquatic systems, and treatment areas and significant wildlife habitat.

- Do not spray in winds exceeding 8 km per hour.
- Do not spray in dead calm near sensitive plants. A “cloud” of suspended droplets may drift onto sensitive plants when the wind comes up. Spray only when the wind is blowing away from a sensitive crop, shelter-belt or garden.

### **USE PRECAUTIONS:**

Avoid spray drift to any desirable vegetation NOT listed on this label as damage may occur. Avoid contamination of ponds, streams, rivers and other water sources. Do not spray during periods of high winds when spray is likely to drift. Coarse sprays are less likely to drift. Do not spray during periods of high temperatures when crops may be under stress as damage to the crop may occur.

### **SPRAYER:**

Clean all spray equipment thoroughly before use. Select nozzle tips to apply the recommended volume per hectare. Higher water volumes will reduce the risk of crop injury. Calibrate the sprayer and adjust the boom height to ensure uniform coverage. Nozzles must be in good condition and spraying the same volume. Flat fan nozzle tips are recommended.

### **CLEANING OF SPRAYER:**

Thoroughly clean the herbicide sprayer before applying any other chemical on crops which may be damaged (see USE PRECAUTIONS). Wash the outside of the sprayer and drain the tank completely. Remove and clean filters, screens and nozzle tips separately. Fill the sprayer tank with water. With the agitator running flush out the lines and boom, then drain. Fill the sprayer with clean water and use ALL CLEAR LIQUID TANK CLEANER or for each 100 L add 1 L household ammonia. Operate the pump and agitator for 15 minutes. If possible, let the solution remain in the tank and hoses overnight; recirculating and drain each time. DO NOT contaminate irrigation or drinking water when cleaning the sprayer.

### **TIMING:**

For best results spray when WEEDS ARE YOUNG AND ACTIVELY GROWING. Apply in good growing conditions. Application must be made before the crop canopy shields the weeds.

### **SPOT TREATMENT:**

For spot treatment of weeds such as thistles with knapsack, mix 230 mL of product in 10 L of water. Wet all foliage thoroughly.

### **SELECTIVE WEED CONTROL IN SMALL GRAINS:**

Weeds differ in their susceptibility to 2, 4-D AMINE 600 HERBICIDE, and not all types can be controlled satisfactorily in crops. The amount of 2, 4-D AMINE 600 HERBICIDE to use will depend upon the susceptibility and whether the crops will tolerate this amount.

**WHEAT, BARLEY, RYE (not underseeded with legumes):**

Crop may be sprayed from the 4-leaf to the early flag leaf (shot blade) stage. Do not apply after the flag leaf stage. Treatment at the 4-leaf stage usually combines maximum crop tolerance with maximum weed susceptibility. The recommended rate is 0.6 to 0.95 L/ha. Higher rates may be needed to control certain weed species. Possible crop injury from these higher rates is usually offset by increased yield of the cleaner crop. If applying by ground use 50 or more L/ha of water. Spraying with higher volumes of water (100-150 L/ha of water) may reduce the risk of crop injury.

DO NOT apply more than one application per year.

**PREHARVEST INTERVALS:**

- Do not permit lactating dairy animals to graze treated fields within 7 days after application.
- Do not harvest forage or cut hay within 30 days after application.
- Withdraw meat animals from treated fields at least 3 days before slaughter.

**FALL RYE, WINTER WHEAT:**

Treat in the spring between full tillering and just before the flag leaf stage. **DO NOT APPLY DURING AND AFTER THE FLAG LEAF STAGE. DO NOT** apply in the fall. The recommended rate is 0.6 to 0.95 L/ha. Higher rates may be needed to control certain weed species. Possible crop injury from these higher rates is usually offset by the increased yield of the cleaner crop. If applying by ground use 50 or more L/ha of water. Spraying with higher volumes of water (100-150 L/ha) may reduce the risk of crop injury.

DO NOT apply more than one application per year.

**PREHARVEST INTERVALS:**

- Do not permit lactating dairy animals to graze treated fields within 7 days after application.
- Do not harvest forage or cut hay within 30 days after application.
- Withdraw meat animals from treated fields at least 3 days before slaughter.

**FIELD CORN:**

Apply as an overall spray before the corn is 15 cm tall (leaf extended) and/or before the 6-leaf stage. **DAMAGE TO THE CORN MAY OCCUR IF AN OVERALL SPRAY IS APPLIED BEYOND THIS STAGE.**

The recommended rate for an overall spray is 0.46 to 0.92 L/ha. Do not exceed this rate for an overall spray. For later applications (corn 15-75 cm leaf extended) a shielded spray or directed spray with drop pipes is necessary.

Keep spray off the corn foliage. **DO NOT** apply within 2 weeks of silking and tasselling. Use 100 or more L/ha of water. In case of very dry conditions, delay spray until one week following rain. Avoid cultivation for 2 weeks following spraying. **DO NOT** add oil or surfactant.

DO NOT apply more than one application per year.

**PREHARVEST INTERVALS:**

- Do not permit lactating dairy animals to graze treated fields within 7 days after application.
- Do not harvest as forage within 30 days after application.
- Withdraw meat animals from treated fields at least 3 days before slaughter.

## **GRASS CROPS - FOR FORAGE AND SEED PRODUCTION:**

### 1. Seedling Stage - Stand Establishment:

May be used on seedling grasses from the 3-leaf to just before the shot-blade stage of development. Spray thoroughly using 0.49 to 0.95 L/ha of product in 100 to 200 L water.

### 2. Established Grasses:

May be used in the spring up to the shot-blade stage of the grass or in the fall after harvest to control annual and biennial broad-leaved weeds. On seed crops do not exceed 0.95 L/ha of product. On established stands of forage grasses grown for hay or pasture, spray thoroughly using 0.585 to 1.95 L/ha of product in 100 to 300 L water.

Late germinating weeds such as red bartsias may be controlled at 0.95 L/ha of product after the first hay crop has been removed.

Do not use during flower development or pollination or seed yields will be reduced

DO NOT apply more than two applications per year.

### PRE-HARVEST INTERVALS:

- Do not permit lactating dairy animals to graze fields within 7 days after application.
- Do not harvest forage or cut hay within 30 days after application.
- Withdraw meat animals from treated fields at least 3 days before slaughter.

## **FORAGE SORGHUM, FORAGE MILLET:**

Apply post emergent to the weeds and crop when the crop is at the 4-6 leaf stage, before closure of the canopy. Ground or air application.

SUSCEPTIBLE WEEDS: Small seedlings, good growing conditions: 500 mL/ha. Weeds in bud, dry conditions, very heavy infestations: 1.0 L/ha.

LESS SUSCEPTIBLE WEEDS: Small seedlings, good growing conditions: 1.2 L/ha.

DO NOT apply more than one application per year.

### PREHARVEST INTERVALS:

- Do not permit lactating dairy animals to graze treated fields within 7 days after application.
- Do not harvest as forage within 30 days after application.
- Withdraw meat animals from treated fields at least 3 days before slaughter.

## **ESTABLISHED PASTURES AND RANGELAND (without legumes):**

Apply at the time of rapid growth (usually May, June and/or September). Spray thoroughly using 1.5 to 4 L/ha of 2,4-D AMINE 600 HERBICIDE in 100 to 300 L of water. (Use the higher rate for perennial weeds; a second treatment may be required for spot spraying). Apply only after pasture has been grazed or cut and weed growth has resumed.

There is a possibility that plants poisonous to livestock will appear more palatable and could be grazed more readily after a 2,4-D treatment (eg: tansy ragwort, water hemlock, poison hemlock, death camas). Suitable precautions should be taken when such plants are present.

Livestock should not be allowed to graze the treated area until poisonous plants have been removed, are dead or have resumed a normal growth habit. Under conditions of good growth and adequate soil moisture, sprays can be applied up to 2 weeks before normal frost time.

DO NOT apply more than two applications per year.

## PREHARVEST INTERVALS:

- Do not permit lactating dairy animals to graze treated fields within 7 days after application.
- Do not harvest forage or cut hay within 30 days after application.
- Withdraw meat animals from treated fields at least 3 days before slaughter.

### **ASPARAGUS (Eastern Canada only):**

Apply early in the season immediately after a thorough cutting or disking. The recommended rate is 1.7 to 2.25 L/ha. If emerging spears are contacted directly by spray drift they may become distorted ie: twisted. Spears emerging afterwards will be normal.

2, 4-D AMINE 600 HERBICIDE may also be applied 3 weeks after a post harvest disking with a directed spray to avoid the fern. Apply 1.7 to 2.25 L/ha in 50 to 200 L of water by ground application.

**CRANBERRY:** Apply as an over the top wipe on application to actively growing weeds (June - July). Apply at a rate of one part 2,4-D AMINE 600 HERBICIDE to 2.6 parts water (27.5% solution). Injury will result if the crop is contacted. Apply one application per year and observe a pre-harvest interval of 50 days. Weeds Controlled: All labeled weeds as well as Hardhack, St. Johns Wort, Alder and Purple Aster.

### **STRAWBERRIES (Eastern Canada only):**

Apply 2 to 4 weeks AFTER PLANTING, but before the runners root in June. Use 0.95 L/ha in 100 to 200 L of water by ground application. A low pressure nozzle and coarse spray are recommended to reduce drift. Renovation Treatment: Apply 1.7 L/ha in 100 to 200 L of water after harvest but before mowing. Delay mowing for a few days after application. DO NOT apply between mid-August and fall dormancy because of possible damage to flower bud formation. Veestar is more sensitive than Redcoat. This treatment may cause temporary distortion of leaves.

DO NOT apply more than one application per year.

### **RASPBERRIES (Eastern Canada only):**

Apply at any time EXCEPT DURING BLOOM. Avoid spraying new shoots. Apply 0.92 L/ha in 100 to 200 L of water by ground application. Higher rates may be used for spot treatments.

DO NOT apply more than two applications per year.

**BEARING FRUIT TREES:** Apple, Peach, Pear, Plum, Apricot, Sweet and Sour Cherry. Treatment Stage: Apply in the early spring after weed emergence, but in compliance with pre-harvest interval of 80 days or post-harvest to actively growing broadleaf weeds.

DO NOT APPLY BY AIR

Weeds Controlled: Plantains, Dandelion, Curled Dock, Mustards, Redroot Pigweed, Prostate Pigweed, Russian Pigweed, Common Ragweed, Shep-herd's Purse, Lamb's-

Quarters, Stinkweed, Cocklebur, Prickly Lettuce, Narrow-Leaved Hawk's Beard (fall rosette or spring at 1-2 Leaf Stage), Russian Thistle, seedling Sow Thistle and seedling Canada Thistle.

Rate of Application: 1.67 L/ha

Pre-harvest Interval: Do not apply to weeds within 80 days of harvest of fruit crop.

Precaution: Do not apply when usable fruit is on the orchard floor.

Re-entry Interval: Do not allow people (other than applicators) or pets into treatment area during application. Do not enter treated area until spray has thoroughly dried.

**CHRISTMAS TREES (Balsam Fir and Fraser Fir):**

Apply 0.83L/ha 2,4-D Amine 600 HERBICIDE plus 1L/ha GLYPHOS, tank mixed in 100 L of water, using a directed and shielded jet below the branches to trees that are 1.2 meters or higher. The herbicide should not touch the branches. Apply once per year in June.

Preharvest Interval of one year.

When using a tank mixture, consult the labels of the tank mix partners and use the largest (most restrictive) buffer zone recommended for any of the products.

TANK MIX: When applied as a tank-mix combination, read and observe all label directions, including rates, restrictions, and grazing limitations for each product used in the tank-mix. Follow the more stringent label precautionary measures for mixing, loading and applying stated on both product labels.

**B. NON CROP USES** (eg., roadsides, rights-of-way for transportation, rights-of-way for utility lines, in airports, in wastelands, in industrial parks)

Do not apply more than twice per year. This does not include spot treatments.

GROUND APPLICATION: Apply 50-300 L of spray solution per hectare depending on the type of application system being used. Use sufficient water to ensure uniform coverage.

**AERIAL APPLICATION (STUBBLE LAND AND UNCROPPED LAND ONLY):**

(including fixed and rotary wing aircraft). Apply a minimum of 30L of spray solution per hectare. Use boom pressures of 235 kPa or less. Avoid placing nozzles where spray will enter wing tip vortices. (See use precautions for Aerial Application)

**STUBBLE LAND, ROADSIDES, UNCROPPED LAND:**

**DO NOT APPLY BY AIR TO ROADSIDES.**

Apply at the time of rapid growth (usually May, June and/or September). Spray thoroughly using 1.5 to 2.75 L/ha of product in 100 L or more of water if applying by ground. (Use the higher rate for perennial weeds and susceptible woody growth, a second treatment may be required). Cultivating grain stubble and spraying after regrowth may aid in control. **DO NOT** apply on freshly seeded grasses and pastures until established.

There is a possibility that plants poisonous to livestock will appear more palatable and could be grazed more readily after 2,4-D treatment (eg: tansy ragwort, water hemlock, poison hemlock, death camas).

Suitable precautions should be taken when such plants are present. Livestock should not be allowed to graze the treated area until poisonous plants have been removed, are dead or have resumed a normal growth habit. Under conditions of good growth and adequate soil moisture, sprays can be applied up to 2 weeks before normal frost time.

**PREHARVEST INTERVALS:**

- Do not permit lactating dairy animals to graze treated fields within 7 days after application.
- Do not harvest forage or cut hay within 30 days after application.
- Withdraw meat animals from treated fields at least 3 days before slaughter.

**WOODY GROWTH (non-grazing):**

Apply at time of rapid growth (usually May, June and/or September). Prepare a spray solution by mixing 3 to 7.9 L of product in 1000-3000 L of water if applying by ground. Use the lower rate for species that are more susceptible such as chokecherry, western snowberry and willow. Depending on the density of the brush, 1000 to 3000 L of spray solution may be required per hectare. Spray brush species up to 3 metres tall after foliage is well developed. Applications soon after leaves are fully open usually give the best results. Apply sufficient spray volume to thoroughly wet all plant parts to the ground line. Brush or trees above 3 m tall should be cut close to the ground and sprayed when the regrowth is over 0.6 m tall. With good growing conditions and adequate soil moisture, sprays may be applied up to 2 to 3 weeks before normal frost time.

AIRCRAFT APPLICATIONS ON WOODY GROWTH: On susceptible species prepare a spray solution by mixing 3 to 7.9 L of product in 55-165 L of water. Apply as a foliar spray in 55 to 165 L of spray solution per hectare. Use the lower rate for species that are very susceptible such as chokecherry, western snowberry and willow. Spray after the foliage is well developed. With good growing conditions and adequate soil moisture, sprays may be applied up to 2 to 3 weeks before normal frost time. Use special care during aircraft application as risk of drift is greater. Do NOT spray in winds exceeding 8 km/h. Use caution when spraying near sensitive, desirable vegetation as contact with spray drift will cause damage. DO NOT contaminate any body of water.

**LAWNS, PARKS, GOLF COURSES:**

This product is designed to target treatment of weedy areas of lawns. This product may injure desirable ornamentals and vegetables.

DO NOT apply by air. Apply by ground only. Apply at time of rapid growth (usually May, June and/or September) before grasses are in the flag leaf (shot blade) stage. Apply 2.7 L/ha of 2, 4-D AMINE 600 HERBICIDE in 100 to 200 L of water/ha. If weed populations do not warrant a broadcast application (e.g., entire lawn), consider spot treatments that target only weedy areas.

DO NOT USE ON BENTGRASS OR NEWLY SEEDED LAWNS. Avoid mowing for several days before and after treatment. Do not spray within 24 hours of rainfall or during hot, dry periods. Use caution when spraying near sensitive, desirable vegetation as contact with spray drift will cause damage.



**MAXIMUM APPLICATION FREQUENCY TO TURF:** For good turf/lawn management, normally two applications per year per treated site are adequate. This does not include spot treatments.

**DO NOT** apply more than two broadcast applications per year. This does not include spot treatments.

**RE-ENTRY INTERVAL:**

Do not allow people (other than applicator) or pets on treatment area during application. Do not enter treated areas until spray has thoroughly dried. Do not enter treated area within 12 hours after application.

**WEEDS CONTROLLED:**

This product is only effective when applied to the leaves of actively growing weeds. This product will not prevent new weeds—apply only when weeds are present. If weed populations do not warrant a broadcast application (e.g., entire lawn), consider spot treatments that target only weedy areas. Do not exceed the application rates given for each specific crop in the Directions for Use section.

**SUSCEPTIBLE** easy-to-control weeds in the seedling stage (2 to 4 leaf) and growing rapidly. Use 0.6 to 0.95 L/ha. Use the higher rate for larger weeds, dry or cold weather, or heavy infestations. Bluebur, burdock (before the 4-leaf stage), cocklebur, common plantain, daisy fleabane, false flax, false ragweed, flixweed, goat's beard, kochia, lamb's-quarters (including triazine resistant types), mustards (except dog and tansy), prickly lettuce, ragweeds (common and giant - including triazine resistant types), redroot pigweed (including triazine resistant types), Russian pigweed, Russian thistle, shepherd's purse, stinging nettle, stinkweed, sweet clover, thyme-leaved spurge, wild radish, wild (prairie) sunflower.

**LESS SUSCEPTIBLE** harder-to-control weeds in the seedling stage (2 to 4 leaf) and growing rapidly. Use 1 to 1.5 L/ha. Use the higher rate for larger weeds, dry or cold weather, or heavy infestations. Weeds listed under susceptible plus annual sow thistle, blue lettuce, biennial wormwood, common chickweed, common purslane, curled dock (before the 4-leaf stage), dandelion in lawns, dog and tansy mustard, oak-leaved goosefoot, groundsel, gumweed, hairy galinsoga, hawkweed, heal-all, hedge bindweed, knotweed (before the 4-leaf stage), leafy spurge, lady's thumb, peppergrass, pineappleweed, prostrate pigweed, purslane, Russian knapweed, sheep sorrel, smartweed, tumble pigweed, velvet leaf, volunteer canola, wild buckwheat, yellow rocket (before the 4-leaf stage).

**TOP GROWTH CONTROL ONLY:** Use 1 to 1.5 L/ha. Biennial wormwood, blue lettuce, bull thistle, burdock, buttercup, Canada thistle, field bindweed, field dandelion, gum weed, hedge bindweed, hoary cress, leafy spurge, mouse-eared chickweed, perennial sowthistle, Russian knapweed, tartary buckwheat, teasel, volunteer sunflower, wild buckwheat, yellow rocket. Only rates greater than 1.5 L/ha will suppress top growth of hemp nettle and horsetail.

## **BUFFER ZONES TO PROTECT SENSITIVE AQUATIC AND TERRESTRIAL HABITAT:**

Use of the following spray methods or equipment. DO NOT require a buffer zone: mechanically pressurized handgun or backpack sprayer and spot treatment.

Seasonal water bodies require buffer zones if there is water in them during application. Water bodies which do not fill on an annual basis need not be buffered.

For application to rights-of-way, buffer zones for protection of sensitive terrestrial habitats are not required; however, the best available application strategies that minimize off-site drift, including meteorological conditions (e.g. wind direction, low wind speed) and spray equipment (e.g. coarse droplet sizes, minimizing height above canopy), should be used. Applicators must, however, observe the specified buffer zones for protection of sensitive aquatic habitats.

The buffer zones specified in the tables below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands), sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands), and estuarine/marine habitats.

Method of Application	Crop		Buffer Zones (metres) Required for the Protection of:				Terrestrial Habitat
			Freshwater Habitat of Depths:		Estuarine/Marine Habitats of Depths:		
			Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	
Field Sprayer	Golf courses, turf		1	0	1	0	1
	Field crops (cereal grains, corn, grain and forage sorghum, asparagus, strawberries, raspberries)		1	0	1	0	1
	Grasslands, fallow land and crop stubble, pastures, rangelands, noncropland (including rights-of-way** and brush control)		1	0	1	0	2
	Forestry (site preparation)		1	0	1	0	NR
Aerial	Field crops (cereal grains, corn, grain and forage sorghum, alfalfa )	Fixed wing	1	0	1	0	45
		Rotary wing	1	0	1	0	40
	Grasslands, fallowland and crop stubble, pastures, and rangelands	Fixed wing	1	0	1	0	60
		Rotary wing	1	0	1	0	50
	Non-cropland	2.24 kg a.e. /ha	Fixed wing	1	0	1	0

	including rights-of way**and brush control		Rotary wing	1	0	1	0	80**
		4.48 kg a.e. /ha	Fixed wing	2	0	2	0	225**
			Rotary wing	1	0	1	0	100*

- \* For field sprayer application, buffer zones can be reduced with the use of drift reducing spray shields. When using a spray boom fitted with a full shield (shroud, curtain) that extends to the crop canopy, the labeled buffer zone can be reduced by 70%. When using a spray boom where individual nozzles are fitted with cone-shaped shields that are no more than 30 cm above the crop canopy, the labeled buffer zone can be reduced by 30%.
- \*\* For application to rights-of-way, buffer zones for protection of sensitive terrestrial habitats are not required.
- NR - buffer zones not required.

When a tank mixture is used, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture.

### FIRST AID

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

**IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15-20 minutes.

Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.

Call a poison control centre or doctor for treatment advice.

**IF SWALLOWED:** Call a poison control centre or doctor immediately for treatment advice.

Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

**IF INHALED:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable by mouth-to-mouth, if possible.

Call a poison control centre or doctor for treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**TOXICOLOGICAL INFORMATION:** This product may cause severe irritation to the eyes. Overexposure to 2, 4-D may cause coughing, burning, dizziness or temporary loss of muscle coordination. Other possible effects of overexposure include fatigue, muscle weakness or nausea. Treat symptomatically.

**STORAGE:** Store container tightly closed and away from seeds, feeds, fertilizer, plants and foodstuffs. Protect from freezing. Product exposed to subfreezing temperatures should be warmed to 5°C and mixed thoroughly before using. Insecticides and fungicides should be segregated from herbicides so as to prevent the possibility of cross-contamination.

**SHAKE WELL BEFORE USING.**

**DISPOSAL:**

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
3. Make the empty container unsuitable for further use.
4. Dispose of the container in accordance with provincial requirements.
5. For information on the disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

**REFILLABLE CONTAINER**

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse container for any other purpose.

**NOTICE TO USER:** This pest control product is to be used only in accordance with the directions on this label. It is an offence under the *PEST CONTROL PRODUCTS ACT* to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.