## (Container)



For application to wheat, barley, rye, corn, established pastures and rangeland, turf, asparagus and non-cropland for the control of certain annual and perennial weeds.

## **AGRICULTURAL**

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

GUARANTEE: 2,4-D, present as dimethylamine salt 470 g a.e./L liquid

REGISTRATION NO. 9528 PEST CONTROL PRODUCTS ACT



NET CONTENTS: 205 L

Corteva Agriscience Canada Company Suite 240, 115 Quarry Park Rd. SE Calgary, AB T2C 5G9 1-800-667-3852

™Trademark of Corteva Agriscience and its affiliated companies.

PRECAUTIONS
KEEP OUT OF REACH OF CHILDREN
CAUSES IRRITATION OF SKIN AND EYES
DO NOT GET IN EYES
AVOID CONTACT WITH SKIN AND CLOTHING

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 web site at www.croplife.ca.

## PROTECTIVE CLOTHING AND EQUIPMENT

## All Application Equipment (Ground and Aerial)

- When mixing/loading, wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks, shoes and protective eye wear (face shield or safety glasses). Rinse gloves before removal.
- When applying during clean-up and repair, 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 the applicator is in an enclosed tractor or in an enclosed airplane cockpit.
- When handling more than 564 L per day workers must also use a closed system.

## **Application using Aerial Equipment**

- Applicators must wear coveralls over a long-sleeved shirt and long pants. Chemical-resistant gloves must also be worn during clean-up and repair activities.
- No human flaggers are permitted.

## **Application using Groundboom Equipment**

 Applicators must wear coveralls over a long-sleeved shirt and long pants. Chemical-resistant gloves must also be worn during clean-up and repair activities.

## **Application using Handheld Equipment**

Applicators must wear coveralls over a long-sleeved shirt, long pants, respirator and chemical-resistant gloves.

Refer to Directions for Use section for any additional requirements.

## **MIXING**

## **Transfer System**

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.

#### **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 clothing and 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.

## **FIRST AID**

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

**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 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 inhaled**: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further 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.

#### **TOXICOLOGICAL INFORMATION**

No specific antidote. Employ supportive care. Treatment should be based on judgement of the physician in response to reactions of the patient. 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.

#### AGRICULTURAL CHEMICAL

Do not ship or store with food, feeds, drugs or clothing.

#### **ENVIRONMENTAL HAZARDS**

- Toxic to small mammals, birds, aquatic organisms and non-target terrestrial plants.
- Observe buffer zones specified under DIRECTIONS FOR USE.
- This product will harm other broadleaved plants in the vicinity of the treatment area. If applying this
  product using a handheld sprayer, 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.

## **RUNOFF**

- To reduce runoff from treated areas into aquatic habitats avoid application to areas with moderate to steep slope, compacted soil, or 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 from domestic uses avoid spraying on driveways, sidewalks or other hard surfaces. Do not irrigate within 24 hours after application.

#### **STORAGE**

This product must be stored away from fertilizers, seeds, insecticides, fungicides or other herbicides intended for use on 2,4-D sensitive crops.

## USE

When the container is empty, triple rinse and add the rinse water to the spray tank. Care must be taken during application to avoid contaminating irrigation ditches or domestic water supplies. Avoid using sprayers which contained 2,4-D to apply other pesticides to sensitive crops.

## **DISPOSAL**

Do not reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

For information on 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.

**NOTE:** Local conditions may affect the use of herbicides. Provincial agricultural authorities issue recommendations to fit local conditions. Be sure that use of this product conforms to all applicable regulations.

If this product is exposed to temperatures below  $0^{\circ}$ C, it should be warmed to at least  $5^{\circ}$ C and mixed thoroughly before using.

**NOTICE TO USER:** This pest control product is to be used only in accordance with the directions on the 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.

(Booklet)



# 2,4-D Amine 500

## Herbicide

GROUP 4 HERBICIDE

For application to wheat, barley, rye, corn, established pastures and rangeland, turf, asparagus and non-cropland for the control of certain annual and perennial weeds.

#### **AGRICULTURAL**

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

GUARANTEE: 2,4-D, present as dimethylamine salt 470 g a.e./L liquid

REGISTRATION NO. 9528 PEST CONTROL PRODUCTS ACT



**NET CONTENTS: 205 L** 

Corteva Agriscience Canada Company Suite 240, 115 Quarry Park Rd. SE Calgary, AB T2C 5G9 1-800-667-3852

<sup>™</sup>Trademark of Corteva Agriscience and its affiliated companies.

PRECAUTIONS
KEEP OUT OF REACH OF CHILDREN
CAUSES IRRITATION OF SKIN AND EYES
DO NOT GET IN EYES
AVOID CONTACT WITH SKIN AND CLOTHING

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 web site at www.croplife.ca.

## PROTECTIVE CLOTHING AND EQUIPMENT

## All Application Equipment (Ground and Aerial)

- When mixing/loading, wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks, shoes and protective eye wear (face shield or safety glasses). Rinse gloves before removal.
- When applying during clean-up and repair, 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 the applicator is in an enclosed tractor or in an
  enclosed airplane cockpit.
- When handling more than 564 L per day workers must also use a closed system.

## **Application using Aerial Equipment**

- Applicators must wear coveralls over a long-sleeved shirt and long pants. Chemical-resistant gloves must also be worn during clean-up and repair activities.
- No human flaggers are permitted.

## **Application using Groundboom Equipment**

 Applicators must wear coveralls over a long-sleeved shirt and long pants. Chemical-resistant gloves must also be worn during clean-up and repair activities.

## **Application using Handheld Equipment**

Applicators must wear coveralls over a long-sleeved shirt, long pants, respirator and chemical-resistant gloves.

Refer to Directions for Use section for any additional requirements.

## **MIXING**

## **Transfer System**

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.

#### **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 clothing and 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.

## **FIRST AID**

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

**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 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 inhaled**: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further 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.

#### **TOXICOLOGICAL INFORMATION**

No specific antidote. Employ supportive care. Treatment should be based on judgement of the physician in response to reactions of the patient. 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.

#### AGRICULTURAL CHEMICAL

Do not ship or store with food, feeds, drugs or clothing.

#### **ENVIRONMENTAL HAZARDS**

- Toxic to small mammals, birds, aquatic organisms and non-target terrestrial plants.
- Observe buffer zones specified under DIRECTIONS FOR USE.
- This product will harm other broadleaved plants in the vicinity of the treatment area. If applying this
  product using a handheld sprayer, 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.

## **RUNOFF**

- To reduce runoff from treated areas into aquatic habitats avoid application to areas with moderate to steep slope, compacted soil, or 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 from domestic uses avoid spraying on driveways, sidewalks or other hard surfaces. Do not irrigate within 24 hours after application.

#### **STORAGE**

This product must be stored away from fertilizers, seeds, insecticides, fungicides or other herbicides intended for use on 2,4-D sensitive crops.

## USE

When the container is empty, triple rinse and add the rinse water to the spray tank. Care must be taken during application to avoid contaminating irrigation ditches or domestic water supplies. Avoid using sprayers which contained 2,4-D to apply other pesticides to sensitive crops.

#### **DISPOSAL**

Do not reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

For information on 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.

**NOTE:** Local conditions may affect the use of herbicides. Provincial agricultural authorities issue recommendations to fit local conditions. Be sure that use of this product conforms to all applicable regulations.

If this product is exposed to temperatures below 0°C, it should be warmed to at least 5°C and mixed thoroughly before using.

#### **DIRECTIONS FOR USE**

#### **USE PRECAUTIONS**

- 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.

## 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.

#### **Restricted Entry Interval (REI)**

- All crops—12-hour REI
- Corn (sweet)—14-day REI for hand harvesting.

## **Ground Application - Cropland**

Apply 50 to 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 to 275 kPa) when the weeds are actively growing.

## **Ground Application - Non Cropland**

Apply 50 to 1000 L of spray solution per hectare depending on the type of application system being used. Use sufficient water to ensure uniform coverage.

#### To Prepare a Spray

Add half the required amount of water to the spray tank, then the 2,4-D Amine 500 Herbicide with agitation, and finally the balance of the water with continued agitation.

## **Spot Treatment**

For knapsack application of 2,4-D Amine 500 Herbicide for spot treatment of weeds such as thistles, mix 0.2 L of product in 10 L of water. Wet all foliage thoroughly. Maximum 2 applications per year.

Maximum Amount of Product Applied/day/person with Handheld Equipment: 5.8 L.

## **Selective Weed Control in Small Grains**

Weeds differ in their susceptibility to 2,4-D Amine 500 Herbicide and not all types can be controlled satisfactorily in crops. The amount of 2,4-D Amine 500 Herbicide to use will depend upon the susceptibility and whether the crops will tolerate this amount. See Table 1. Maximum 1 application per year.

## Wheat, Barley and Rye

Spray from the 3-leaf expanded stage (15 cm tall) to just before the flag-leaf (shot-blade) stage. To avoid crop injury, do not treat during boot and flowering stages. Winter wheats and fall rye should be treated in early spring, as soon as weeds appear and before the crop reaches the shot-blade stage.

<u>Table 1 Suggested Amounts of 2,4-D Amine 500 Herbicide for Weed Control in Cereals (not underseeded to legumes)</u>

Mixed Weedy Growth	Stage of Weed	Amount	Hectares
Mixed Weedy Glowth	Kind of Weather	L/ha	Treated/20 L
Susceptible weeds such as:	Seedling (2-4 leaves)	700 mL	28
mustard (except dog and green tansy),	Growing rapidly		
bluebur, burdock, cocklebur, field horsetail,			
stinkweed, goatsbeard, prickly lettuce,			
hoary cress, kochia, lamb's-quarters			
plantain, ragweeds, Russian pigweed,	Weeds in bud	1.1 L	18
shepherd's purse, annual sunflower, sweet	Dry, cool weather		
clover, vetch, wild radish	Heavy infestation		
Harder to kill weeds such as:	Seedling (2-4 leaves)	1.25 <b>†</b> L	16
biennial wormwood, dock, dandelion, dog	Growing rapidly		
mustard, field peppergrass, hairy galinsoga,			
hedge bindweed, lady's thumb,			
oak leaf goosefoot, redroot pigweed,	Weeds in bud	1.75 <b>†</b> L	11
Russian thistle, smartweed, annual sow-	Dry or cool weather		
thistle, tansy, Tartary buckwheat,	Heavy infestation		
tumbleweed, blue lettuce*, Canada thistle*,			
field bindweed*, leafy spurge*, perennial			
sow-thistle*			

<sup>\*</sup>Top growth control only.

### **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.

#### Corn

Maximum 1 application per year.

**Emergence** - Use 1.27 L/ha 2,4-D Amine 500 Herbicide between first emergence and when corn plants are 15 cm tall.

**Postemergence** - Treat with 0.5 to 1.1 L/ha when corn plants are 15 to 20 cm tall and most weeds have germinated but are still in seedling stage. Use drop nozzles to keep spray off corn foliage. Do not cultivate until at least 2 weeks after treatment.

<sup>\*</sup>The higher rates may cause deformities and delayed maturity which will be offset by a higher relative yield from a less weedy crop.

#### **Pre-Harvest Intervals**

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

### **Asparagus**

Treat asparagus with 2,4-D Amine 500 Herbicide following a cultivation just before the first spears appear. Use 3.5 L/ha. Treatment may be repeated at end of cutting season.

## Established Grasses - Eastern Canada

For the control of yellow rocket and other susceptible winter annual weeds, spray with 2.0 L/ha of 2,4-D Amine 500 Herbicide . Application should be made in early fall.

#### **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.

## Established Pastures and Rangeland - Western Canada

To control susceptible perennials or winter annuals, spray with 2,4-D Amine 500 Herbicide at 1.1 to 2.0 L/ha before growth of legumes and grasses start in the spring. Maximum 2 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.

#### **Turf Weed Control**

For lawns and other turf areas, use 2.25 L/ha of 2,4-D Amine 500 Herbicide in not less than 450 L of water.

- 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.
- DO NOT apply more than two broadcast applications per season. This does not include spot treatments.
- If weed populations do not warrant a broadcast application (e.g., entire lawn), consider spot treatments that target only weedy areas.
- DO NOT apply by air.
- 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.
- 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.

## **Re-entry Interval for Turf**

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

## **Maximum Application Frequency for Turf**

For good turf/lawn management, normally two applications per year per treatment site are adequate. This does not include spot treatments.

#### WEED CONTROL IN NON-CROPLAND

For taller weed growth control on the non-cropland areas such as vacant lots, fencerows, roadsides and rights-of-way (railway, hydro, roadways, highways, pipeline, industrial storage yards), sufficient spray solution should be used to wet all foliage thoroughly. Use 2,4-D Amine 500 Herbicide at the rate of 2.5 to 4.75 L per hectare. Maximum 2 applications per year. Deeprooted perennial weeds such as bindweed and Canada thistle may require repeated application as new growth appears.

Maximum Amount of Product Applied/day/person with Handheld Equipment: 5.8 L.

## **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.

## **BROADCAST AERIAL APPLICATION**

#### **Directions for Use**

Apply only by fixed-wing or rotary aircraft equipment which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label.

Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment.

Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices

## **Use Precautions**

Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. Apply only under conditions of good practice specific to aerial application as outlined in the *National Aerial Pesticide Application Manual*, developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides.

Do not apply to any body of water. Avoid drifting of spray onto any body of water or other non-target areas. Specified buffer zones should be observed.

Coarse sprays are less likely to drift, therefore, avoid combinations of pressure and nozzle type that will result in fine particles (mist). Do not apply during periods of dead calm or when wind velocity and direction pose a risk of spray drift. Do not spray when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as shelter-belt) or aquatic habitat.

## **Operator Precautions**

Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted.

It is desirable that the pilot have communication capabilities at each treatment site at the time of application.

The field crew and the mixer/loaders must wear chemical resistant gloves, coveralls and goggles or face shield during mixing/loading, cleanup and repair. Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label.

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

## **Product Specific Precautions**

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-800-667-3852 or obtain technical advice from the distributor or your provincial agricultural representative. Application of this specific product must meet and/or conform to the following use precautions.

## USE PRECAUTIONS FOR AERIAL APPLICATIONS (to cereal crops, corn, pasture, rangeland and non-crop land)

- DO NOT apply when wind speed is greater than 16 kmph at flying height at the site of application. Do
  not spray in dead calm near sensitive plants. The "cloud" of suspended droplets may drift onto
  sensitive plants when the wind comes up. Spray only when wind is blowing away from a sensitive
  crop, shelterbelt or garden.
- Fixed and rotary-winged aerial applications to field crops should be made in a minimum of 30 L/ha
  total spray mixture. Use boom pressure of 235 kPa or less. Avoid placing nozzles where spray will
  enter wing tip vortices.
- 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.

## **Sensitive Plants**

Vegetables, flowers, grapes, fruit trees and other desirable plants are sensitive to 2,4-D, even in minute quantities. Care should be taken to avoid spraying these types of plants or allowing spray mist to drift onto these plants during both their growing and dormant periods. Coarse sprays are less likely to drift. At higher temperatures, vaporization may cause injury to susceptible plants growing nearby.

This product may cause damage to lawns or pastures if applied before the grass is well established. In addition, most legumes may be damaged or killed.

## **BUFFER ZONES TO PROTECT SENSITIVE HABITATS**

Buffer zones are not required for applications with handheld equipment and for spot treatment.

The buffer zones specified in the table 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.

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

Page 13

For application to rights-of-way, buffer zones for protection of sensitive terrestrial habitats are not required; however, the best available application strategies which 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.

### **Buffer Zone Table**

Method of Application				Buffer Zon	as (motros)	Required	for the Pro	tection of:
Field sprayer	Crop		Buffer Zones (metres) Freshwater Habitat of Depths:		Estuarine/Marine Habitats of Depths:		tection or.	
	Turf			Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	Terrestrial Habitat
				1	0	1	0	1
	Pastures, rangeland, non- cropland (including rights-of- way*)		1	0	1	0	2	
Aerial	Pastures, rangeland		Fixed wing	1	0	1	0	60
			Rotary wing	1	0	1	0	50
	Non- cropland (including rights-of- way*)	4.8 L/ha	Fixed wing	1	0	1	0	150*
			Rotary wing	1	0	1	0	80*
		9.5 L/ha	Fixed wing	2	0	2	0	225*
			Rotary wing	1	0	1	0	100*

<sup>•</sup> For application to rights-of-way, buffer zones for protection of sensitive terrestrial habitats are not required.

**NOTE**: Applicators may recalculate a site-specific buffer zone by combining information on current weather conditions and spray configuration for the following applications: all airblast applications, and for field and aerial applications which specify the following droplet size category wording on the product label: 'DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) [Fine or Medium or Coarse] classification.' To access the Buffer Zone Calculator, please visit the Pest Management Regulatory Agency web site.

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.

## RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, 2,4-D Amine 500 Herbicide is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to 2,4-D Amine 500 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 500 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 (or other mechanical), 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 resistancemanagement and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact Corteva Agriscience Canada Company at 1-800-667-3852 or at <a href="https://www.corteva.ca">www.corteva.ca</a>.

**NOTICE TO USER:** This pest control product is to be used only in accordance with the directions on the 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.

™Trademark of Corteva Agriscience and its affiliated companies.