

 **Dow AgroSciences** |
Vantage* Forestry
Herbicide Solution

Water soluble herbicide for silvicultural sites

COMMERCIAL

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

GUARANTEE: Glyphosate, 356 grams acid equivalent per litre present as isopropylamine salt

REGISTRATION NO. 26884 PEST CONTROL PRODUCTS ACT



CAUTION

IRRITANT

Net Contents: 10 L, 55 L, 115 L, 450 L, Bulk

Dow AgroSciences Canada Inc.

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Calgary, Alberta

T2E 7P1

1-800-667-3852

*Trademark of Dow AgroSciences LLC

PRECAUTIONS

MAY CAUSE EYE IRRITATION

HARMFUL IF SWALLOWED

Avoid contact with eyes or prolonged contact with skin.

KEEP OUT OF REACH OF CHILDREN

PHYSICAL OR CHEMICAL HAZARDS

Spray solutions of this product should be mixed, stored and applied only in stainless steel, aluminum, fibreglass, plastic and plastic-lined steel containers. DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS. This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

FIRST AID:

Take container label or product name and Pest Control Product registration number with you when seeking medical attention.

If in eyes: Immediately flush with plenty of clean water for at least 15 minutes. Call a physician or contact a poison control centre.

If on skin: Immediately flush with plenty of water. Remove contaminated clothing. Wash clothing before reuse.

If swallowed: This product will cause gastro-intestinal tract irritation. Immediately dilute by swallowing water or milk. Call a physician or contact a poison control centre.

If inhaled: Remove individual to fresh air. If breathing difficulty occurs, get medical attention at once or contact a poison control centre.

TOXICOLOGICAL INFORMATION

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

For further information, consult the Material Safety Data Sheet.

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

ENVIRONMENTAL HAZARDS

Avoid direct applications to any body of water. Do not contaminate water by disposal of waste or cleaning of equipment.

STORAGE

Store product in original container only. Avoid contamination of seed, feed, and foodstuffs.

DISPOSAL

Recyclable Containers:

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

Returnable Containers:

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

Refillable Containers

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 this container for any other purpose.

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.

DIRECTIONS FOR USE

GENERAL INFORMATION

When applied as directed under conditions described, this product controls undesirable vegetation listed on this label. This product also suppresses or controls undesirable vegetation listed on this label, when applied at recommended rates for release of established coniferous or deciduous species listed in the "Conifer Release" and "Deciduous Release" sections of this label.

This product may be applied using aerial and ground or wiper spray equipment for silvicultural site preparation, rights of ways, and conifer release, and ground spray or wiper equipment for deciduous release, forest road-side vegetation management and forest tree planting nurseries. Woody vegetation may be controlled by injection application of this product. See the "Mixing" and "Applications Instructions" and Selective Equipment sections of this label for information on how to properly apply this product.

For herbaceous weeds, woody brush, and trees controlled, see the "Vegetation Controlled" section of this label.

For specific site preparation instructions, see the "Site Preparation, Forest Roadside and Rights of Way Vegetation Management" sections of the label.

For specific conifer or deciduous release instructions see the "Conifer Release" or "Deciduous Release" sections of this label.

Treatments should not be made to trees or brush after fall leaf drop has begun.

For specific forest tree planting nursery instructions, see the "Forest Tree Planting Nurseries" section of this label.

For specific injection application instructions, see the "Injection Applications" section of this label.

For specific instructions on use of wick or wiper applicators for vegetation control, see the Selective Equipment section of this label.

This product moves through the plant from the point of foliage contact to and into the root system. Visible effects on most annual weeds occur within 2 to 4 days, but on most susceptible perennial weeds, trees and woody brush, may not occur until 7 to 14 days. Extremely cool or cloudy weather at treatment time may slow down activity of this product and delay visual effects or control. Visible effects are a gradual wilting and yellowing of the plant which advance to complete browning of above-ground growth and deterioration of underground plant parts.

Delay application until vegetation has emerged to the stages described for control of such vegetation under the "Vegetation Controlled" section of this label to provide adequate leaf surface to receive the spray. Unemerged plants arising from underground rhizomes or root stocks of perennials will not be affected by the spray and will continue to grow. For this reason best control of most perennial herbaceous vegetation is obtained when treatment is made at late growth stages approaching maturity.

Always use the higher rate of this product per hectare within the recommended range on hard to control species or when vegetation growth is heavy or dense.

Do not treat vegetation under poor growing conditions such as drought stress, disease or insect damage as reduced vegetation control may result. Reduced results may also occur when treating vegetation heavily covered with dust.

Rainfall occurring soon after application may reduce effectiveness. Heavy rainfall within 2 hours after application may wash the product off the foliage and a repeat treatment may be required.

Do not mix with any surfactant, pesticide, herbicide oils or any other material other than water unless specified in this label.

For best results spray coverage should be uniform and complete. Do not spray weed foliage to the point of runoff.

Not for reformulation or repackaging.

MIXING AND APPLICATION

PRECAUTIONS

AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT INJURING DESIRABLE PLANTS AND CROPS. Do not allow spray mist to drift, since even minute quantities of spray can cause severe damage or destruction to nearby crops, plants or other areas on which treatment is not intended, or may cause other unintended consequences. Apply only in wind conditions in compliance with local and/or provincial regulations. Do not apply when other climatic conditions, including lesser wind velocities, will allow significant drift to occur. When spraying, avoid combinations of pressure and nozzle type that will result in fine particles (mist) which are more likely to drift.

NOTE: Use of this product in any manner not consistent with this label may result in injury to persons, animals or crops, or other unintended consequences. Keep container closed to prevent spills and contamination.

Clean sprayer parts immediately after using this product by thoroughly flushing with water. Do not contaminate water sources by disposal of wastes or cleaning of equipment.

MIXING INSTRUCTIONS

This product mixes readily with water.

For ground, aerial or industrial type sprayers, fill the spray tank with one half the required amount of water. Add the proper amount of herbicide (see "Application Instructions" section of the label) and mix well before adding the remaining portion of water. Placing the filling hose below the surface of the liquid solution will prevent excessive foaming. Removing hose from tank immediately will avoid back siphoning into the water source. Use of mechanical agitators may cause excessive foaming. By-pass lines should terminate at the bottom of the tank. For use in knapsack sprayers, it is suggested that the proper amount of this herbicide be mixed with water in a larger container. Fill sprayer with the mixed solution.

NOTE: REDUCED RESULTS MAY OCCUR IF WATER CONTAINING SOIL IS USED, SUCH AS WATER FROM PONDS AND UNLINED DITCHES.

APPLICATION INSTRUCTIONS

APPLY THESE SPRAY SOLUTIONS IN PROPERLY MAINTAINED AND CALIBRATED EQUIPMENT CAPABLE OF DELIVERING DESIRED VOLUMES.

HAND GUN APPLICATIONS SHOULD BE PROPERLY DIRECTED TO AVOID SPRAYING DESIRABLE PLANTS.

AVOID DRIFT--Drift may cause damage to any vegetation contacted for which treatment is not intended. Applications in wind conditions in excess of local and/or provincial aerial spray regulations are not recommended.

To prevent injury to adjacent vegetation appropriate buffer zones must be maintained.

Do not apply directly to any body of water populated with fish or used for domestic purposes. Do not use in areas where adverse impact on domestic water or aquatic species is likely.

APPLICATION RATES

To control or suppress most herbaceous weeds, woody brush and trees, apply 3 to 6 litres of this product per hectare using aerial, ground boom or boomless, or mist blower equipment, or apply as a 1 to 2% solution using hand-held high volume equipment. For control of perennial herbaceous weeds in site preparation applications using aerial, ground boom or boomless, or mist blower equipment, apply 7 to 12 litres of this product per hectare as directed in the recommended volume of clean water to the foliage or actively growing vegetation. Use the 6 L/ha rate for control of maple, alder or willow species.

For specific rates for wick or wiper applicators, see the Selective Equipment section of this label.

AERIAL EQUIPMENT

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 rates recommended for aerial application on this label in 20-100 L of water per ha. **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 or equivalent electronic positioning systems (GPS).

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 *Basic Knowledge Requirements for Pesticide Education in Canada: Applicator Core and Aerial Module*, developed by CAPCO.

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. Do not angle nozzles forward into the air stream and do not increase spray volume by increasing nozzle pressure.

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 the recommended rates of this herbicide in 20 to 100 L of water per hectare. For control of perennial weeds in site preparation applications using 7 to 12 L of this product, use 50 to 100 L of water per hectare. As density of vegetation increases, spray volume should be increased within the recommended range to ensure complete coverage.

Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove residues of this product accumulated during spraying or from spills. PROLONGED EXPOSURE OF THIS PRODUCT TO UNCOATED STEEL SURFACES MAY RESULT IN CORROSION AND POSSIBLE FAILURE OF THE PART. LANDING GEAR ARE MOST SUSCEPTIBLE. The maintenance of an organic coating (paint) which meets aerospace specification MIL-C-38412 may prevent corrosion.

BOOM EQUIPMENT

FOR CONTROL OF HERBACEOUS WEEDS AND WOODY BRUSH AND TREES LISTED IN THE "VEGETATION CONTROLLED" SECTION OF THIS LABEL USING CONVENTIONAL BOOM EQUIPMENT--Apply this product in 100 to 300 L of clean water per hectare as a broadcast spray using no more pressure than 275 kPa.

BOOMLESS EQUIPMENT

FOR CONTROL OF HERBACEOUS WEEDS, WOODY BRUSH AND TREES LISTED IN THE "VEGETATION CONTROLLED" SECTION OF THIS LABEL USING BOOMLESS EQUIPMENT SUCH AS CLUSTER NOZZLES--Apply this product in 100-350 L of clean water per hectare as a broadcast spray using no more pressure than 275 kPa.

HAND HELD AND HIGH VOLUME EQUIPMENT (use coarse sprays only)

FOR CONTROL OF HERBACEOUS WEEDS, WOODY BRUSH AND TREES LISTED IN THE "VEGETATION CONTROLLED" SECTION OF THIS LABEL USING KNAPSACK SPRAYERS OR HIGH VOLUME SPRAYING EQUIPMENT UTILIZING HANDGUNS OR OTHER SUITABLE NOZZLE ARRANGEMENTS.

Applications should be made on a spray-to-wet basis. Spray coverage should be uniform and complete. Do not spray to point of runoff.

MIST BLOWER EQUIPMENT

FOR CONTROL OF HERBACEOUS WEEDS, WOODY BRUSH AND TREES LISTED IN THE "VEGETATION CONTROLLED" SECTION OF THIS LABEL--Use the recommended rate of this product in at least 200 L of water per hectare.

VEGETATION CONTROLLED

A PARTIAL LIST OF PERENNIAL HERBACEOUS WEEDS, WOODY BRUSH AND TREE SPECIES CONTROLLED INCLUDES:

Perennial Grasses/Sedges

Blue Grass (Canada) <i>Poa compressa</i>	Foxtail Barley <i>Hordeum jubatum</i>
Blue Grass (Kentucky) <i>Poa pratensis</i>	Quackgrass <i>Agropyron repens</i>
Brome Grass (smooth) <i>Bromus inermis</i>	Yellow Nutsedge <i>Cyperus esculentus</i>
Cattail (common) <i>Typha latifolia</i>	

Perennial Broadleaved Weeds

Alfalfa <i>Medicago spp.</i>	Milkweed (common) <i>Asclepias syriaca</i>
Cottontop <i>Eriophorum Chamissionis</i>	Poison Ivy <i>Rhus radicans</i>
Curled Dock <i>Rumex crispus</i>	Purple Loosestrife <i>Lythrum salicaria</i>
Dandelion <i>Taraxacum officinale</i>	Sow Thistle (perennial) <i>Sonchus arvensis</i>
Field Bindweed <i>Convolvulus arvensis</i>	Thistle (Canada) <i>Cirsium arvense</i>
Hemp Dogbane <i>Apocynum cannabinum</i>	Toad Flax <i>Linaria vulgaris</i>
Hoary Cress <i>Cardaria draba</i>	Wormwood (Absinth) <i>Artemisia absinthium</i>
Knotweed (Japanese) <i>Polygonum cuspidatum</i>	

Woody Brush and Trees

Alder Alnus spp.	Mountain-fly Honeysuckle Lornica villosa
Birch Betula spp.	Pine Pinus spp.
Broadleaved meadowsweet ^{††} Spiraea latifolia	Poplar Populus spp.
Canadian rhododendron ^{††} Rhododendron canadenses	Raspberry/Salmonberry Rubus spp.
Cedar Thuja spp.	Sheep laurel [†] Kalmia angustifolia
Cherry Prunus spp.	Snowberry (Western) Symphoricarpos occidentalis
Douglas Fir Pseudotsuga spp.	Sweet fern [†] Comptonia peregrina
Hemlock Tsuga spp.	Willow ^{††} Salix spp.
Maple Acer spp.	Withrod [†] Viburnum cassinoides

[†]Apply as a 1-2% solution.

^{††}Suppression only.

See "Mixing", "Application Instructions" and "Forest-" or "Woodland- Management" sections of this label for additional information.

For perennial broadleaf weeds, apply when most weeds have reached early head or early bud stage of growth. For annual and perennial grasses, apply when most weeds are at least 20 cm in height (the 3-4 leaf stage of growth).

If herbaceous weeds have been mowed, tilled, or scarified, do not treat until regrowth has reached the recommended stages, as reduced effectiveness will result. Most herbaceous weeds can be treated after a mild frost, provided the leaves are still green and actively growing at the time of application. Do not apply after the first damaging frost. Allow 7 or more days after application before tillage or other soil disturbance. Repeat treatments may be necessary to control weeds regenerating from underground parts or seed.

DIRECTIONS FOR USE

Spray coverage should be uniform and complete. Do not spray to the point of runoff.

Do not allow spray drift to contact non-target desirable vegetation as severe damage may occur.

RESTRICTED USES

FOREST and WOODLANDS MANAGEMENT

Ground/Aerial Application for Sites greater than 500 ha (Forestry Use)

Aerial Application for Sites 500 ha or less (Woodlands Use)

NOTICE TO USER: This control product is to be used only in accordance with the directions on this label. It is an offense under the Pest Control Products Act to use a control product under unsafe conditions.

NATURE OF RESTRICTION: This product is to be used only in the manner authorized; consult local pesticide regulatory authorities about use permits which may be required.

Do not apply to any body of water populated with fish or used for domestic purposes. Do not use in areas where adverse impact on domestic water or aquatic species is likely.

In order to reduce the drift hazard to non-target plants and aquatic species when aerially treating silvicultural sites, ensure that appropriate buffer zones are maintained.

SITE PREPARATION

Use this product as broadcast treatment at recommended rates, as listed in the "Application Rates" section, to control herbaceous weeds, woody brush and tree species listed in the "Vegetation Controlled" section. Apply when brush and tree species are actively growing and when foliage is full and well-developed. For best results apply in late summer or early fall. Some autumn colors on undesirable deciduous species are acceptable provided no major leaf fall has occurred. Following site preparation application of this product, any silvicultural species may be planted.

For control of vegetation on sites with infestations of ericaceous species (e.g. Kalmia spp - sheep laurel, lamb kill), use 6 L/ha Vantage Forestry Herbicide and an additional silicon-based surfactant (such as Sylgard 309) as per label instructions. Apply between mid-August and mid-September for maximum performance.

CONIFER RELEASE

Use this product as a broadcast spray at recommended rates, as listed in the "Application Rates" section, to control herbaceous weeds, woody brush and tree species, as listed in "Vegetation Controlled" section of this label, to release from competition the coniferous species listed below:

DOUGLAS FIR
Pseudotsuga spp.

PINE
Pinus spp.

FIR
Abies, spp

SPRUCE
Picea spp.

HEMLOCK
Tsuga, spp.

For conifer release of spruce seedlings in the year of transplanting, apply 2 to 6 litres of this product per hectare in plantations of summer planted spruce species (*Picea glauca*, *P. Engelmannii* and their hybrids).

Conifers must be planted in the same year as treatment and in the field for at least 18 days prior to treatment. Seedlings to be treated must clearly show bud set and bud hardening following a dormancy induction regime in the nursery. The need for such early release treatments is expected on sites which are subject to the rapid development of herbaceous and shrub communities.

Most annual and perennial weeds will be controlled or suppressed. Applications must be made after formation of final conifer resting buds. Applications made during period of active conifer growth may result in conifer injury. Avoid application during Lammas or late season conifer growth. Some autumn colors are acceptable provided no major leaf fall has occurred on undesirable brush and tree species.

For conifer release, apply where conifers have been established for more than a year. Vegetation should not be disturbed immediately prior to treatment or until visual signs appear after treatment. Symptoms of treatment are slow to appear, especially in woody species treated in late fall. Injury may occur to conifers treated for release, especially where spray patterns overlap or the higher rates are applied or when applications are made during periods of active conifer growth.

NOTE: This product is not recommended for use as an over-the-top broadcast spray in forest tree nurseries or in Christmas tree plantations. Applications in such cities should be limited to directed sprays (see "Conifer Release by Directed Spraying" section). DO NOT TREAT Christmas tree plantations in the year of anticipated harvest.

WOODLAND MANAGEMENT (Treatment of 500 ha or less)

SITE PREPARATION (Ground Only), FOREST ROADSIDE (Ground Only) and RIGHTS-OF-WAY VEGETATION MANAGEMENT (Ground or Aerial)

Use this product as broadcast treatment at recommended rates, as listed in the "Application Rates" section, to control herbaceous weeds, woody brush and tree species listed in the "Vegetation Controlled" section. For control of herbaceous weeds, apply when most perennial broadleaf weeds have reached the early head of early bud stage of growth. For perennial grasses, apply when most weeds are 20 cm in height. Apply when brush and tree species are actively growing and when foliage is full and well-developed. For best results apply in late summer or early fall. Some autumn colors on undesirable deciduous species are acceptable provided no major leaf fall has occurred. Following site preparation application of this product, any silvicultural species may be planted.

For control of vegetation on sites with infestations of ericaceous species (e.g. *Kalmia* spp - sheep laurel, lamb kill), use 6 L/ha Vantage Forestry Herbicide in the recommended water volume and an additional silicon-based surfactant (such as Sylgard 309) as per label instructions. Apply between mid-August and mid-September for maximum performance.

CONIFER RELEASE (Ground Only)

Use this product as a broadcast spray at recommended rates, as listed in the "Application Rates" section, to control herbaceous weeds, woody brush and tree species, as listed in "Vegetation Controlled" section of this label, to release from competition the coniferous species listed below:

DOUGLAS FIR
Pseudotsuga spp.

PINE
Pinus spp.

FIR
Abies, spp

SPRUCE
Picea spp.

HEMLOCK
Tsuga, spp.

For conifer release of spruce seedlings in the year of transplanting, apply 2 to 6 litres of this product per hectare in plantations of summer planted spruce species (*Picea glauca*, *P. Engelmannii* and their hybrids). Conifers must be planted in the same year as treatment and in the field for at least 18 days prior to treatment. Seedlings to be treated must clearly show bud set and bud hardening following a dormancy induction regime in the nursery. The need for such early release treatments is expected on sites which are subject to the rapid development of herbaceous and shrub communities.

Most annual and perennial weeds will be controlled or suppressed. Applications must be made after formation of final conifer resting buds. Applications made during period of active conifer growth may result in conifer injury. Avoid application during Lammas or late season conifer growth. Some autumn colors are acceptable provided no major leaf fall has occurred on undesirable brush and tree species.

For conifer release, apply where conifers have been established for more than a year. Vegetation should not be disturbed immediately prior to treatment or until visual signs appear after treatment. Symptoms of treatment are slow to appear, especially in woody species treated in late fall. Injury may occur to conifers treated for release, especially where spray patterns overlap or the higher rates are applied or when applications are made during periods of active conifer growth.

NOTE: This product is not recommended for use as an over-the-top broadcast spray in forest tree nurseries, or in Christmas tree plantations. Applications in such sites should be limited to directed sprays (see "Conifer Release by Directed Spraying" section.) DO NOT TREAT Christmas tree plantations in the year of anticipated harvest.

CONIFER RELEASE BY DIRECTED SPRAYING

Use this product to control herbaceous and woody species as listed in the "Vegetation Controlled" section of the label.

Apply when the undesirable species are actively growing and the foliage is full and well-developed. This product does not provide pre-emergent weed control. Repeat treatments may be necessary to control weeds that generate from underground parts or seed.

Undesirable deciduous species may be treated when they already have autumn colours, provided there has been no major leaf fall. For perennial broadleaf species, apply when most weeds have reached early head or early bud stage of growth. For annual and perennial grasses, apply when most weeds are 20 cm in height (3-4 leaf stage of growth).

Direct spray so that the foliage of undesired vegetation is thoroughly wetted. Do not spray foliage to the point of run-off. Applying the product to conifers during their period of active growth (before lignification) may cause tree injury. Under such conditions, take the necessary precautions to ensure that spray, mist or spray drift does not come into contact with the foliage or green bark of conifers being cultivated.

The product may be applied on sites regenerated by the following species (partial list): SPRUCE (*Picea* spp.), PINE (*Pinus* spp.), HEMLOCK (*Tsuga* spp.), DOUGLAS FIR (*Pseudotsuga* spp.). No time interval is required between tree planting and application of the product. For specific rates and application instructions, see the "Mixing Instructions", "Application Instructions" and "Vegetation Controlled" sections of the product label.

Do not allow spray to come in contact with foliage, green stems or fruit of non-target crops, since they may be killed or severely damaged.

DECIDUOUS RELEASE (Ground Only)

Use this product to control herbaceous weeds and woody brush mentioned in the "Vegetation Controlled" section of the label.

Apply when the undesirable species are actively growing, and the foliage is well developed. This product has no pre-emergent activity. Repeat treatments may be required for species which regenerate from underground stems or from seeds. Applications may be made to undesirable deciduous species with some autumn colours, provided that major leaf fall has not yet occurred.

Use a directed spray to thoroughly cover the foliage of the undesirable vegetation. Take all necessary precautions to prevent contact of the spray, spray mist or spray drift with the foliage or green bark of desirable species.

A partial list of species for use with this product on regenerated sites includes: ASH (*Fraxinus* spp.); WALNUT (*Juglans* spp); LINDEN or BASSWOOD (*Tilia* spp); CHERRY (*Prunus* spp.); OAK (*Quercus* spp); ELM (*Ulmus* spp) and POPLAR (*Populus* spp). Product may be applied immediately after transplanting.

For use rates and application instructions, refer to the "Application Rates" and "Application Instructions" sections of this label.

INJECTION APPLICATIONS

Woody vegetation may be controlled by injection application of this product. Apply using suitable equipment, which must penetrate into living tissue, at a rate of at least 0.5 mL (either undiluted or 1:1 with water) per 5 cm tree diameter at breast height (DBH). The cuts should be spaced evenly around the tree and below all major branches. Application may be made at any time of year, except when cold temperatures prevent adequate penetration of injection equipment, or in the spring during periods of heavy sap flow. Control of tree species with tree diameters greater than 20 cm may not be acceptable at this rate.

Total control may not be evident for 1-2 years following treatment.

A partial list of species controlled includes:

ALDER <i>Alnus</i> spp	MAPLE [†] <i>Acer</i> spp.
BIRCH <i>Betula</i> spp	PINE <i>Pinus</i> spp.
CEDAR <i>Thuja</i> spp.	POPLAR <i>Populus</i> spp.
CHERRY <i>Prunus</i> spp.	WILLOW <i>Salix</i> spp.
DOUGLAS FIR <i>Pseudotsuga</i> spp.	HEMLOCK <i>Tsuga</i> spp.

[†]This treatment may only provide suppression of Big-leaf Maple. Late fall applications will provide optimum suppression of Big leaf Maple

CUT STUMP APPLICATION

Woody vegetation may be controlled by the application of this product to freshly cut stumps to prevent regrowth. Because the treatment uses a concentrated solution, application must be made using low-pressure equipment e.g., squirt bottle or similar device. This product must be applied immediately to the surface of the freshly cut stump i.e., within 5 minutes for optimum control at the prescribed rates. Only the cambial tissues of the cut surface should be treated. Apply the herbicide solution at a rate equivalent to at least 0.5 mL Vantage Forestry Herbicide for every 5 cm of DBH. Do not cover the remaining area nor any exposed roots, as this product does not penetrate bark well. This treatment may be used at any time of year, except during periods of heavy sap flow or when low temperatures prevent solution application due to freezing. A water soluble colourant may be added to the solution as a means of indicating which surfaces have been treated. Total control may not be evident until 1-2 years after treatment.

See the INJECTION APPLICATIONS section of this label for a partial list of species controlled.

FOREST TREE PLANTING NURSERIES (Ground Only)

This product may be used to control most annual and perennial weeds for site preparation prior to establishing plantations, or as a post directed spray in established plantations. Application may be made to established deciduous plantings of ASH, Fraxinus spp.; CARAGANA, Caragan spp.; CHERRY, Prunus spp.; ELM, Ulmus spp.; LILAC, Syringa spp.; MAPLE, Acers spp.; MOUNTAIN ASH, Sorbus spp.; POPLAR, Populus spp.; RUSSIAN OLIVE, Elaeagnus spp.; and WILLOW, Salix spp. Applications may be made prior to or in established conifer plantings of FIR, Abies spp.; JUNIPER, Juniperus spp.; PINE, Pinus spp.; SPRUCE, Picea spp.; and YEW, Taxus spp.. **SPRAY MAY CONTACT MATURE BARK ONLY. AVOID SPRAY CONTACT WITH FOLIAGE OR GREEN BARK OF ESTABLISHED PLANTINGS IN POST DIRECTED APPLICATIONS.**

For specific rates and applications instructions, see "Application Instructions" section of this booklet. **DO NOT APPLY UNDER WIND OR OTHER CONDITIONS WHICH ALLOW DRIFT TO OCCUR.** If weeds have been mowed or tilled do not treat until regrowth has reached the recommended stages.

This product does not provide pre-emergence weed control. Repeat treatments may be necessary to control weeds generating from underground parts or seed.

NOTE: This product is not recommended for use as an over-the-top broadcast spray in forest tree nurseries, or in Christmas tree plantations. Applications in such sites should be limited to directed sprays (see "Conifer Release by Directed Spraying" section). **DO NOT TREAT** Christmas tree plantations in the year of anticipated harvest.

SELECTIVE EQUIPMENT - WIPER APPLICATORS

This product may be applied with a wiper applicator, after dilution and thorough mixing water, to listed weeds in the Vegetation Controlled section of this label. It may be used in any forestry site specified in this label.

A wiper applicator applies the herbicide solution onto weeds by rubbing the weed with an absorbent material containing the herbicide solution. Equipment must be designed, maintained and operated to prevent the herbicide solution from contacting desirable vegetation, except in cases of conifer release operations where conifers are well hardened off (see "Conifer Release Section"); in these cases, a slight contact between the wiper and the conifer may be acceptable. Performance may be improved by reducing speed in areas of heavy infestations to insure adequate wiper saturation. Best results may be obtained if 2 applications are made in opposite directions.

AVOID CONTACT WITH DESIRABLE VEGETATION. Contact of the herbicide solution with desirable vegetation may result in damage or destruction. Applicators used above desired vegetation should be adjusted so that wiper contact point is at least 5 cm above the desirable vegetation. Droplets or foam of the herbicide solution settling on desirable vegetation may result in discoloration, stunting or destruction.

Applications should be made when the weeds are a minimum of 15 cm above the desirable vegetation. Best results may be obtained when more of the weed is exposed to the herbicide solution. Weeds not contacted by the herbicide solution will not be affected. This may occur in dense clumps, severe infestations, or when the height of the weeds varies so that not all weeds are contacted. In these instances, repeat treatments may be necessary.

NOTES

- Maintain equipment in good operating condition. Avoid leakage or dripping onto desirable vegetation.
- Adjust height of applicator to insure proper contact with weeds.
- Keep wiping surfaces clean.
- Keep wiper material at proper degree of saturation with herbicide solution.
- DO NOT use wiper equipment when weeds are wet.
- DO NOT operate equipment at ground speeds below 4 and greater than 10 km/h. Weed control may be affected by speed of application equipment. As weed density increases, reduce equipment ground speed to insure good coverage of weeds.
- Be aware that on sloping ground the herbicide solution may migrate, causing dripping on the lower end and drying on the upper end of the wiper applicator.
- Variation in equipment design may affect weed control. With wiper applicators, the wiping material and its orientation must allow delivery of sufficient quantities of the recommended herbicide solution directly to the weed.
- Care must be taken with all types of wipers to insure that the absorbent material does not become over-saturated, causing the herbicide to drip onto desirable vegetation.
- With all equipment, drain and clean wiper parts immediately after using this product, by thoroughly flushing with water.

For wick or other Wiper Applicators - Mix 1 litre of this product in 2 litres of water to prepare a 33% solution.

NOTICE TO USER: This 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 a control product under unsafe conditions.

NOTICE TO BUYER: Seller's guarantee shall be limited to the terms set out on the label and subject thereto, the buyer assumes the risk to persons or property arising from the use or handling of this product and accepts the product on that condition.

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