

PMRA Approved – GD
2010-5702
03-AUG-2011



FORZA™

SILVICULTURAL HERBICIDE - COMMERCIAL

Soluble Concentrate

For the control of undesirable woody plants, annual and perennial weeds in forest and woodland management areas.

GUARANTEE: Glyphosate (present as isopropylamine salt) 360 g/L

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING.

REGISTRATION NO. 26401 PEST CONTROL PRODUCTS ACT

WARNING ♦ EYE IRRITANT

NET CONTENTS: 10L
(Additional version with blank contents)

<p>EMERGENCY TELEPHONE NUMBER IN CASE OF A MEDICAL EMERGENCY INVOLVING THIS PRODUCT, CALL TOLL FREE, DAY OR NIGHT, 1-866-303-6950.</p>

Registrant:
Cheminova Canada Inc.
22499 Jefferies Road, Unit C2,
Kilworth, Ontario N0L 1R0
Canada
1-888-316-6260
519-472-0600

CHEMINOVA
PRODUCT OF DENMARK

™**FORZA** is a trademark of Cheminova.

TABLE OF CONTENTS

1	PRECAUTIONS	(Printer insert page # here)
	1.1	PRECAUTIONS FOR USE
	1.2	ENVIRONMENTAL HAZARDS
	1.3	PHYSICAL OR CHEMICAL HAZARDS
	1.4	STORAGE
2	FIRST AID	
	2.1	EMERGENCY TELEPHONE NUMBER
3	TOXICOLOGICAL INFORMATION	
4	DISPOSAL	
	4.1	RETURNABLE CONTAINERS 23 L or less
	4.2	RETURNABLE-REFILLABLE CONTAINERS
	4.3	OTHER CONTAINERS
5	SPILLS	
6	DRIFT CONTROL	
7	GENERAL PRODUCT AND APPLICATION INFORMATION	
8	NOTICE TO USER STATEMENT	
9	MIXING AND APPLICATION INSTRUCTIONS	
	9.1	MIXING
	9.2	APPLICATION
10	APPLICATION EQUIPMENT	
	10.1	AERIAL EQUIPMENT
	10.2	BOOM EQUIPMENT
	10.3	BOOMLESS EQUIPMENT
	10.4	KNAPSACK SPRAYERS, HANDHELD & HIGH VOLUME EQUIPMENT
	10.5	WIPER, WICK AND ROLLER EQUIPMENT
	10.6	MIST BLOWER EQUIPMENT
11	VEGETATION CONTROLLED	
	11.1	PERENNIAL GRASSES AND SEDGES CONTROLLED
	11.2	PERENNIAL BROADLEAF WEEDS AND GRASSES CONTROLLED
	11.3	WOODY BRUSH AND TREES CONTROLLED
12	DIRECTIONS FOR USE	
	12.1	RESTRICTED USES: FOREST AND WOODLANDS MANAGEMENT
		12.1.1 Site Preparation
		12.1.2 Conifer Release
	12.2	NON-RESTRICTED USES – WOODLANDS MANAGEMENT
		12.2.1 Site Preparation (Ground Only), Forest Roadside (Ground Only) and Rights of Way Vegetation Management
		12.2.2 Conifer Release (Ground Only)
	12.3	DIRECTED SPRAY APPLICATIONS
		12.3.1 Conifer Release
		12.3.2 Deciduous Release (Ground Only)
	12.4	FOREST TREE PLANTING NURSERIES (Ground Only)
	12.5	SELECTIVE APPLICATIONS
		12.5.1 Wick and Wiper Applicators
		12.5.2 Injection Applications
		12.5.3 Cut Stump / Surface Applications
13	FORZA SILVICULTURAL HERBICIDE RATE AND USE TABLE	

READ ENTIRE LABEL CAREFULLY BEFORE USE

1 PRECAUTIONS

- KEEP OUT OF REACH OF CHILDREN
- CAUSES EYE IRRITATION
- HARMFUL IF SWALLOWED
- AVOID CONTACT WITH EYES AND PROLONGED CONTACT WITH SKIN
- WASH HANDS AND EXPOSED SKIN AFTER WORK OR BEFORE EATING, DRINKING AND SMOKING

FOR GOOD APPLICATION PRACTICE:

- DURING MIXING, LOADING, CLEANUP AND REPAIR PROCEDURES WEAR GLOVES, COVERALLS, AND EYE PROTECTION
- WASH SPLASHES FROM SKIN AND EYES IMMEDIATELY

1.1 PRECAUTIONS FOR USE

Avoid contact with desirable vegetation by direct application or spray drift as severe injury or destruction may result. Avoid drift or over-spray to non-target vegetation and wildlife habitats. Do not use in greenhouses. Drain and clean sprayer and parts immediately after using this product. Do not contaminate water sources by disposal of wastes or cleaning of equipment. Reduced results may occur if water containing soil is used such as water from ponds and ditches. Poor control may also occur when treating species heavily covered with dust. Maintain appropriate buffer zones around non-target areas.

1.2 ENVIRONMENTAL HAZARDS

Avoid direct application 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. Do not contaminate water by disposal of waste or cleaning of equipment. Avoid all drift or contact with vegetation for which treatment is not intended as damage or destruction may occur.

1.3 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 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 the spray solutions of this product can react with such containers and tanks to produce hydrogen gas that 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.

1.4 STORAGE

KEEP AWAY FROM FOOD, DRINK, AND ANIMAL FEED STUFFS. KEEP ONLY IN ORIGINAL CONTAINER, LID TIGHTLY CLOSED.

2 FIRST AID

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

2.1 EMERGENCY TELEPHONE NUMBER

IN CASE OF A MEDICAL EMERGENCY INVOLVING THIS PRODUCT, CALL TOLL FREE, DAY OR NIGHT, 1-866-303-6950.

3 TOXICOLOGICAL INFORMATION

The decision on whether to induce vomiting or not should be made by an attending physician. If lavage is performed, endotracheal and/or esophageal control is suggested. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. There is no specific antidote. Supportive care is recommended. Treatment is based on the judgement of the physician in response to reactions of the patient.

4 DISPOSAL

4.1 RETURNABLE CONTAINERS 23 L or less

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.

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.

4.2 RETURNABLE-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 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.

4.3 OTHER CONTAINERS

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.

5 SPILLS

For small spills, soak up **FORZA SILVICULTURAL HERBICIDE** with cat litter or other absorbent clays. Sweep up absorbed spilled material, place in plastic bag. Contact manufacturer for instructions on disposal. Wash down surfaces – street, truck floors, warehouse floors etc. with a detergent and water solution. Do not contaminate any water courses with clean-up of spills or clean-up of surfaces.

24 hour Emergency Number: 613-996-6666

6 DRIFT CONTROL

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.

7 GENERAL PRODUCT AND APPLICATION INFORMATION

FORZA SILVICULTURAL HERBICIDE is a non-selective, non-residual herbicide containing 360 g/L glyphosate (acid equivalent) as isopropylamine salt, formulated as a water soluble liquid. This product controls or suppresses listed undesirable vegetation species, at the appropriate rates, in conifer and deciduous release programs, as well as other forestry sites.

The product is absorbed through the foliage and translocates throughout the plant down to the root system. Visible symptoms, such as gradual wilting and yellowing, are usually obvious within 2 to 4 days of application to annual weeds, but may not be apparent for 7 to 14 days on perennial weeds and woody brush. Refer to Section 11 of the label for a list of the undesirable vegetation that is controlled by this product.

Avoid contact with foliage, green stems or fruit of non-target crops, since damage to these crops may result. Apply as directed.

FORZA SILVICULTURAL HERBICIDE is applied as a foliar spray for the control of most herbaceous plants. It may be applied through most standard industrial or field type sprayers after dilution and thorough mixing with water in accordance with the label instructions.

FORZA SILVICULTURAL HERBICIDE may be applied utilizing air, ground boom or boomless, wiper or injection application equipment for the control of vegetation in conifer release, site preparation, and rights of way management. For deciduous release, forest roadside vegetation management and forest tree planting nurseries apply **FORZA SILVICULTURAL HERBICIDE** utilizing ground spray, wiper or injection application equipment.

Application should be made when vegetation has emerged to the stages described for control of such vegetation to provide adequate leaf surface to receive the spray. Unemerged plants arising from underground rhizomes or rootstocks of perennials will not be affected by the spray and will continue to grow.

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.

Best control of most perennial herbaceous vegetation is obtained when treatment is made at late growth stages approaching maturity. Do not apply in autumn after leaf drop has started. 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.

Heavy rainfall immediately after application may wash the chemical off the foliage and a repeat treatment may be required. Do not apply if rainfall is forecast for the time of application.

Do not treat weeds and herbaceous species under poor growing conditions such as drought stress, disease or insect damage, as reduced weed control may result. Reduced results may also occur when treating weeds heavily covered with dust. **FORZA SILVICULTURAL HERBICIDE** does not provide residual weed control. For best results spray coverage should be uniform and complete. Do not spray weed foliage to the point of runoff.

8 NOTICE TO USER STATEMENT

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. The user assumes the risk to persons or property that arises from any such use of this product.

9 MIXING and APPLICATION INSTRUCTIONS

9.1 MIXING

For ground, aerial or industrial type sprayers, fill the spray tank with one half the required amount of water. Add the proper amount of **FORZA SILVICULTURAL HERBICIDE** (see Section 9.2 or 13) and mix well before adding the remaining portion of water. Placing the filling hose below the surface of the liquid solution will prevent any excessive foaming. Remove the hose from the tank immediately after filling to avoid back siphoning into water source (a one-way valve should be installed to prevent back siphoning). Use of mechanical agitators may cause excessive foaming. By-pass lines should terminate at the bottom of the tank.

9.2 APPLICATION

Apply spray solutions in properly maintained and calibrated equipment capable of delivering desired volumes. Use flat fan nozzles in boom sprayers.

General: 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, boomless, mist blower equipment, or apply as a 1 to 2% solution using hand-held high volume equipment.

Site preparation: 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.

Note: For specific rates for wick or wiper applicators, see Section 12.5 of this label.

To control perennial weeds, and woody brush and trees as listed, apply **FORZA SILVICULTURAL HERBICIDE** in 20 to 300 L of water per hectare as a broadcast spray. Use no more than 275 kPa pressure. To control annual weeds as listed, apply **FORZA SILVICULTURAL HERBICIDE** in 20 L to 100 L of water per hectare as a broadcast spray. Use no more than 275 kPa pressure.

10 APPLICATION EQUIPMENT

10.1 AERIAL EQUIPMENT

Use the recommended rates of this herbicide in 20 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. Coarse sprays are less likely to drift, therefore do not use nozzles or nozzle configurations that dispense spray as fine spray droplets. Do not angle nozzles forward into the airstream and do not increase spray volume by increasing nozzle pressure. Ensure uniform application--To avoid streaked, uneven or overlapped application, use appropriate marking devices, or equivalent electronic positioning systems (GPS).

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 IS MOST SUSCEPTIBLE.
The maintenance of an organic coating (paint) which meets aerospace specification MIL-C-38412 may prevent corrosion.

10.2 BOOM EQUIPMENT

FOR CONTROL OF HERBACEOUS WEEDS AND WOODY BRUSH AND TREES LISTED IN SECTION 11 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.

10.3 BOOMLESS EQUIPMENT

FOR CONTROL OF HERBACEOUS WEEDS, WOODY BRUSH AND TREES LISTED IN SECTION 11 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.

10.4 KNAPSACK SPRAYERS, HAND HELD & HIGH VOLUME EQUIPMENT

High volume spraying utilizes handguns or other suitable nozzle arrangements to apply a directed spray to weeds, woody brush and trees. Use coarse sprays only. Avoid spraying desirable plants.

Mixing: Mix the proper amount of **FORZA SILVICULTURAL HERBICIDE** with water in a large container. Fill the sprayer with the mixed solution. Unless otherwise stated, make a 1% solution in water (1 L of **FORZA SILVICULTURAL HERBICIDE** in 100 L of water). A 2% solution (2 L in 100 L of water) should be used on harder to control perennials.

Application: Spray coverage should be uniform and complete. Apply on a spray-to-wet basis. Do not spray to the point of runoff. Hand gun application should be properly directed to avoid spraying desirable plants.

10.5 WIPER, WICK AND ROLLER EQUIPMENT

These applicators apply **FORZA SILVICULTURAL HERBICIDE** solution directly onto the weeds by contacting the weed with an absorbent material containing the herbicide solution. The weeds must be above any desired vegetation to prevent contact with the desired vegetation.

Mixing: Mix the proper amount of **FORZA SILVICULTURAL HERBICIDE** with water in a large container. Use this mixed solution in the wiper, wick or roller equipment.

10.6 MIST BLOWER EQUIPMENT

FOR CONTROL OF HERBACEOUS WEEDS, WOODY BRUSH AND TREES LISTED IN SECTION 11 OF THIS LABEL--Use the recommended rate of this product in at least 200 L of water per hectare.

11 VEGETATION CONTROLLED

A PARTIAL LIST OF PERENNIAL WEEDS, WOODY BRUSH AND TREE SPECIES CONTROLLED ARE LISTED IN THE FOLLOWING SECTIONS.

11.1 PERENNIAL GRASSES AND SEDGES CONTROLLED

Bluegrass (Canada)	<i>Poa compressa</i>
Bluegrass (Kentucky)	<i>Poa pratensis</i>
Brome grass (smooth)	<i>Bromus inermis</i>
Cattail (common)	<i>Typha latifolia</i>
Foxtail barley	<i>Hordeum jubatum</i>
Quackgrass	<i>Agropyron repens</i>
Yellow nutsedge	<i>Cyperus esculentus</i>

11.2 PERENNIAL BROADLEAF WEEDS AND GRASSES CONTROLLED

Alfalfa	<i>Medicago spp.</i>
Cottontop	<i>Eriophorm chamissionis</i>
Curled dock	<i>Rumex crispus</i>
Dandelion	<i>Taraxacum officinale</i>
Field bindweed	<i>Convolvulus arvensis</i>
Hemp dogbane	<i>Apocynum cannabinum</i>
Hoary cress	<i>Cardaria draba</i>
Knotweed (Japanese)	<i>Polygonum cuspidatum</i>
Milkweed (common)	<i>Asclepias syriaca</i>
Poison ivy	<i>Rhus radicans</i>
Purple loosestrife	<i>Lythrum salicaria</i>
Sow thistle (perennial)	<i>Sonchus arvensis</i>
Thistle (Canada)	<i>Cirsium arvense</i>
Toad flax	<i>Linaria vulgaris</i>
Wormwood (Absinth)	<i>Artemisia absinthium</i>

11.3 WOODY TREES BRUSH AND TREES CONTROLLED

Alder	<i>Alnus spp</i>
Birch	<i>Betula spp.</i>
Broad-leafed meadowsweet**	<i>Spiraea latifolia</i>
Canadian rhododendron**	<i>Rhododendron canadense</i>

Cedar	<i>Thuja spp.</i>
Cherry	<i>Prunus spp.</i>
Douglas Fir	<i>Pseudotsuga spp.</i>
Hemlock	<i>Tsuga spp.</i>
Maple	<i>Acer spp.</i>
Mountain-fly honeysuckle	<i>Lonicera villosa</i>
Pine	<i>Pinus spp.</i>
Poplar	<i>Populus spp.</i>
Raspberry/ Salmonberry	<i>Rubus spp.</i>
Sheep laurel*	<i>Kalmia angustifolia</i>
Snowberry (Western)	<i>Symphoricarpos occidentalis</i>
Sweet fern*	<i>Comptonia peregrina</i>
Willow**	<i>Salix spp.</i>
Withrod*	<i>Viburnum cassinoides</i>

* Apply as a 1-2% solution.

** Suppression only.

Apply spray to achieve uniform and complete coverage of the leaves and green stems. Do not spray to the point of runoff. Do not allow spray drift to contact non-target desirable vegetation as severe damage may occur.

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.

12 DIRECTIONS FOR USE

12.1 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 pest control product is to be used only in accordance with the directions on the label. It is an offense 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 person or property that arises from any such use of this product.

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.

12.1.1 Site Preparation

Use this product as broadcast treatment at recommended rates, as listed in Section 9 or 13, to control herbaceous weeds, woody brush and tree species listed in Section 11. 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 colour on undesirable deciduous species is acceptable provided no major leaf fall has occurred. Following site preparation application of this product, any silvicultural species may be planted.

12.1.2 Conifer Release

Use this product as a broadcast spray at recommended rates, as listed in Section 9, to control herbaceous weeds, woody brush and tree species, as listed in Section 11 of this label, to release from competition the coniferous species listed below:

Douglas fir *Pseudotsuga spp.*

Fir *Abies spp.*

Hemlock *Tsuga spp.*

Pine *Pinus spp.*

Spruce *Picea spp.*

For conifer release of spruce seedlings in the year of transplanting, apply 3 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 that 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 periods of active conifer growth may result in conifer injury. Avoid application during lammas or late-season conifer growth. Some autumn colour is 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 **DIRECTED SPRAY APPLICATIONS** in Section 12.3). **DO NOT TREAT** Christmas tree plantations in the year of anticipated harvest.

12.2 NON-RESTRICTED USES - WOODLAND MANAGEMENT

Application of 500 ha or less

12.2.1 Site Preparation (Ground Only), Forest Roadside (Ground Only) and Rights of Way Vegetation Management

Use this product as broadcast treatment at recommended rates, as listed in Section 9, to control herbaceous weeds, woody brush and tree species listed in Section 11. For control of herbaceous weeds, apply when most perennial broadleaf weeds have reached the early head or 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 colour on undesirable deciduous species is acceptable provided no major leaf fall has occurred. Following site preparation application of this product, any silvicultural species may be planted.

12.2.2 Conifer Release (Ground Only)

Use this product as a broadcast spray at recommended rates, as listed in Section 9 or 13 to control herbaceous weeds, woody brush and tree species, as listed in Section 11 of this label, to release from competition the coniferous species listed below:

Douglas fir	<i>Pseudotsuga spp.</i>
Fir	<i>Abies spp.</i>
Hemlock	<i>Tsuga spp.</i>
Pine	<i>Pinus spp.</i>
Spruce	<i>Picea spp.</i>

For conifer release of spruce seedlings in the year of transplanting, apply 3 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 that 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 periods of active conifer growth may result in conifer injury. Avoid application during lammas or late season conifer growth. Some autumn colour is 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 **DIRECTED SPRAY APPLICATIONS, Conifer Release** in Section 12.3). DO NOT TREAT Christmas tree plantations in the year of anticipated harvest.

12.3 DIRECTED SPRAY APPLICATIONS

12.3.1 Conifer Release

Use this product to control herbaceous and woody species as listed in Section 11 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 colour, 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.

FORZA SILVICULTURAL HERBICIDE 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, application instructions, and vegetation controlled see Sections **9** and **11** 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.

12.3.2 Deciduous Release (Ground Only)

Use this product to control herbaceous weeds and woody brush mentioned in Section **11** 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 that regenerate from underground stems or from seeds. Applications may be made to undesirable deciduous species with some autumn colour, 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 equipment, refer to Sections **9** and **10** of this label.

12.4 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** (*Caragana spp.*), **cherry** (*Prunus spp.*), **elm** (*Ulmus spp.*), **lilac** (*Syringa spp.*), **maple** (*Acer 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 Section **9** of this label. **DO NOT APPLY UNDER WIND OR OTHER CONDITIONS THAT 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 **DIRECTED SPRAY APPLICATIONS** in Section **12.3**). **DO NOT TREAT** Christmas tree plantations in the year of anticipated harvest.

12.5 SELECTIVE APPLICATIONS

12.5.1 Wick and Wiper Applicators

This product may be applied with a wiper applicator, after dilution and thorough mixing with water, to listed weeds in Section **11** 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 Section **12**); 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.

12.5.2 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 spp.</i>
Birch	<i>Betula spp.</i>
Cedar	<i>Thuja spp.</i>
Cherry	<i>Prunus spp.</i>
Douglas fir	<i>Pseudotsuga spp.</i>
Hemlock	<i>Tsuga spp.</i>
Maple*	<i>Acer spp.</i>
Pine	<i>Pinus spp.</i>
Poplar	<i>Populus spp.</i>
Willow	<i>Salix spp.</i>

*This treatment may only provide suppression of Big-leaf maple.

Late fall applications will provide optimum suppression of Big-leaf maple.

12.5.3 Cut Stump / Surface Applications

Woody vegetation may be controlled by the application of this product to freshly cut stumps to prevent regrowth. Since 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 **FORZA SILVICULTURAL HERBICIDE** herbicide for every 5 cm of DBH. Do not cover the remaining area nor any exposed roots, as this product does not penetrate bark tissue. 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 Section 12.5.2 of this label for a partial list of species controlled.

13 FORZA SILVICULTURAL HERBICIDE RATE AND USE TABLE

Use Site	Application Method	Application Timing	Rate of FORZA SILVICULTURAL HERBICIDE	Water Volume	Application Comments
Site preparation	Ground boom or boomless	Full foliage, summer - early fall	3 - 6 L/ha	100 - 300 L/ha	Use higher rate for maple, alder, <i>Rubus spp.</i> , and willow*. Use 7-12 L/ha for perennial weed control. No plant-in delay required. * suppression only
	High volume handgun or knapsack		1 - 2 % solution	Spray to wet	
	Mist blower		3 - 6 L/ha	200 L/ha	
	Aerial		3 - 6 L/ha	20 - 100 L/ha	Same as above. NOTE: Aerial application is a restricted use. Follow permit guidelines.
Conifer release	Ground boom or boomless	August - Sept. after formation of conifer final resting buds (conifer has hardened-off)	3 - 6 L/ha	100 - 300 L/ha	Use higher rate for maple, alder, <i>Rubus spp.</i> , and willow*. Will also control herbaceous plants and weeds. Avoid drift. Be aware of lammas growth. *suppression only
	High volume handgun or knapsack		1 - 2 % solution	Spray to wet	
	Mist blower		3 - 6 L/ha	200 L/ha	
	Aerial		3 - 6 L/ha	20 - 100 L/ha	Same as above. NOTE: Aerial application is a restricted use. Follow permit guidelines.
Deciduous or conifer	High volume handgun or knapsack	Full foliage, summer -	1 - 2 % solution	Spray to wet	Apply directly to target species. Avoid non-

release	(directed spray)	early fall			target drift.
Forest nurseries	Preplant	During active weed growth	Refer to MIXING and APPLICATION INSTRUCTIONS in Section 9		No plant-in delay required.
	Directed spray				Apply directly to target species. Avoid drift.

03August2011