

2007-4535  
07-MAY-2008

NUFARM

RAZOR

Liquid Herbicide

**INDUSTRIAL**

CONTAINS A GLYPHOSATE SALT SOLUTION

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

**READ THE LABEL AND ATTACHED BOOKLET BEFORE USING.**

For use on Non-Crop land



**CAUTION**

**IRRITANT**

**REGISTRATION NO. 26707 PEST CONTROL PRODUCTS ACT.**

NET CONTENTS: (10 – Bulk) Litres

Nufarm Agriculture Inc.  
5507 First St. S.E.  
Calgary, AB T2H 1H9  
1-800-868-5444

24 HOUR EMERGENCY RESPONSE NUMBER 1-800-424-9300

## **NUFARM RAZOR**

### **1.0 PRODUCT DESCRIPTION**

**Water soluble herbicide for non-selective weed control in NON-CROPLAND AREAS.**

**NON-CROPLAND USES INCLUDE:** Industrial; recreational, rights-of-way, and public areas; turf grass renovation.

**2.0 In case of an emergency involving this product,** Call Nufarm collect, day or night:

Accident/Spills/Medical Emergency... 1-800-424-9300  
or Prosar.....1-877-325-1840

**Read NOTICE before buying or using. If notice terms are not acceptable, return at once unopened.**

**2.1** For additional information on this or other Nufarm agricultural products, call the Nufarm office: 1-800-868-5444

### **3.0 PRECAUTIONS:**

KEEP OUT OF REACH OF CHILDREN.

MAY CAUSE EYE IRRITATION.

HARMFUL IF SWALLOWED.

Avoid contact with eyes or prolonged contact with skin.

**FIRST AID: 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 IN EYES,** Hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

**IF 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.

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

**TOXICOLOGICAL INFORMATION:** Treat symptomatically.

## **Environmental Hazards**

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

## **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.

## **Storage and Disposal**

Avoid contamination of seed, feed, and foodstuffs. Soak up small amounts of spill with absorbent clays.

### **DISPOSAL FOR 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.

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.

### **DISPOSAL FOR RETURNABLE CONTAINERS:**

Do not use this container for any purpose. For disposal, this empty container may be returned, with seals intact, 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.

**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.

E01R2B/ 07-4535

2007-4535  
07-MAY-2008

1

NUFARM

RAZOR

Liquid Herbicide

**INDUSTRIAL**

CONTAINS A GLYPHOSATE SALT SOLUTION

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

**READ THE LABEL AND ATTACHED BOOKLET BEFORE USING.**

For use on Non-Crop land



**CAUTION**

**IRRITANT**

**REGISTRATION NO. 26707 PEST CONTROL PRODUCTS ACT.**

Nufarm Agriculture Inc.  
5507 First St. S.E.  
Calgary, AB T2H 1H9  
1-800-868-5444

24 hour EMERGENCY RESPONSE NUMBER 1-800-424-9300

## CONTENTS

1.0 PRODUCT DESCRIPTION.....	
2.0 EMERGENCY NUMBERS.....	
2.1 Office Telephone Number.....	
3.0 PRECAUTIONS: .....	
4.0 GENERAL INFORMATION.....	
5.0 MIXING AND APPLICATION	
5.1 Precautions.....	
5.2 EQUIPMENT INFORMATION	
5.3 Aerial Application.....	
6.0 WEEDS CONTROLLED	
6.1 Annuals.....	
6.2 Perennials.....	
6.3 Woody Brush and Trees.....	
7.0 Selective Equipment	
8.0 <b><u>NON-CROPLAND USES: INDUSTRIAL, RIGHTS OF WAY, RECREATIONAL, AND PUBLIC AREAS</u></b>	
8.1 Weed Control In Non-Cropland Areas .....	
8.2 Application Information for Non-Cropland Uses.....	
8.2.1 Ground Applications.....	
8.2.2 Aerial application (rights-of-way only).....	
8.2.3 Purple Loosestrife Control	
8.3 Selective Equipment for Non-Cropland Uses.....	
8.4 Turfgrass.....	
8.5 Injection Applications.....	
8.6 Cut Stump Application.....	

**NUFARM RAZOR****1.0****PRODUCT DESCRIPTION**

**Water soluble herbicide for non-selective weed control in NON-CROPLAND AREAS.**

**NON-CROPLAND USES INCLUDE:** Industrial; recreational, rights-of-way, and public areas; turf grass renovation.

**2.0 In case of an emergency involving this product, Call Nufarm collect, day or night:**

Accident/Spills/Medical Emergency... 1-800-424-9300  
or Prosar.....1-877-325-1840

**Read NOTICE before buying or using. If notice terms are not acceptable, return at once unopened.**

**2.1** For additional information on this or other Nufarm agricultural products, call the Nufarm office: 1-800-868-5444

**3.0 PRECAUTIONS:**

KEEP OUT OF REACH OF CHILDREN.

MAY CAUSE EYE IRRITATION.

HARMFUL IF SWALLOWED.

Avoid contact with eyes or prolonged contact with skin.

**FIRST AID: 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 IN EYES,** Hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

**IF 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.

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

**TOXICOLOGICAL INFORMATION:** Treat symptomatically.

### **Environmental Hazards**

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

### **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.

### **Storage and Disposal**

Avoid contamination of seed, feed, and foodstuffs. Soak up small amounts of spill with absorbent clays.

#### **DISPOSAL FOR 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.

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.

#### **DISPOSAL FOR RETURNABLE CONTAINERS:**

Do not use this container for any purpose. For disposal, this empty container may be returned, with seals intact, 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.

**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.

#### **4.0 GENERAL INFORMATION**

Do not apply this product using aerial spray equipment except under conditions as specified within this label.

Nufarm RAZOR, a water soluble liquid, mixes readily with water for application as a foliage spray for the control or destruction 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 booklet instructions.

This herbicide 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 perennial weeds may not occur until 7 to 10 days. Extremely cool or cloudy weather at treatment time may slow down activity of this product and delay visual effects of control. Visible effects are a gradual wilting and yellowing of the plant which advances 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 annual and perennial weed control sections of this booklet 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 weeds 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 when weed growth is heavy or dense, or weeds are growing in an undisturbed (non-cultivated) area.

Do not treat weeds 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.

This product does not provide residual weed control. For subsequent residual weed control follow a label approved herbicide program. Read and carefully observe the cautionary statements and all other information appearing on the labels of all herbicides used.

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 mix with any surfactant, pesticide, herbicide oils or any other material other than water unless specified in this booklet. For best results, spray coverage should be uniform and complete. Do not spray weed foliage to the point of runoff.

## **5.0 MIXING AND APPLICATION**

### **5.1 PRECAUTIONS**

**ATTENTION: AVOID CONTACT WITH FOLIAGE, GREEN STEMS, DESIRABLE PLANTS AND TREES SINCE SEVERE INJURY OR DESTRUCTION MAY RESULT.**

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

**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. Do not apply when winds are gusty or in excess of 8 km/h or when other conditions, including lesser wind velocities, will allow 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.

**DO NOT USE IN GREENHOUSES. REDUCED RESULTS MAY OCCUR IF WATER CONTAINING SOIL IS USED, SUCH AS WATER FROM PONDS AND UNLINED DITCHES.**

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

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

### **5.2 MIXING AND APPLICATION EQUIPMENT INFORMATION**

#### **MIXING**

For ground or industrial type sprayers, fill the spray tank with one-half the required amount of water. Add the proper amount of herbicide (see section 8) 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 water source. Use of mechanical agitators may cause excessive foaming. Bypass 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.

## **APPLICATION EQUIPMENT**

### **BOOM EQUIPMENT**

**For control of perennial weeds and woody brush and trees listed on this booklet using conventional boom equipment--** Apply this product in 50 to 300 L of clean water per hectare as a broadcast spray using no more than 275 kPa pressure. See section 8 for rates to control specific weeds.

**For control of annual weeds listed on this booklet using conventional boom equipment--**Apply this product in 50 to 100 L of clean water per hectare as a broadcast spray, except as otherwise stated on this label using no more than 275 kPa pressure. See section 8 of this booklet for rates to control specific weeds.

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

**For control of weeds and woody brush and trees listed in the "Weed Controlled" section of this label using knapsack sprayers or high volume spraying equipment utilizing handguns or other suitable nozzle arrangements--**Unless otherwise specified, make a 1% solution of this product in water (1 litre of this product in 100 litres of water) and apply to foliage of vegetation to be controlled. For best results, use a 2% solution (2 litres of this product in 100 litres of water) on harder to control perennials such as field bindweed, hemp dog-bane, milkweed and Canada thistle.

Applications should be made on a spray-to-wet basis. Spray coverage should be uniform and complete. Do not spray to point of runoff. Hand gun applications should be properly directed to avoid spraying desirable plants.

### **SELECTIVE EQUIPMENT**

Selective equipment such as **WIPER** and **ROLLER** applicators can be used for weed control in non-crop areas. For information regarding use of this product with selective equipment, refer to "**Selective Equipment**" section of this label (7).

### **AERIAL EQUIPMENT (NON-CROPLAND USE ONLY)**

Aerial application can only be used for weed control in industrial rights-of-way. Refer to section 8.2.2 for more information.

## **6.0 WEEDS CONTROLLED**

This product controls many annual and perennial grasses, broadleaf weeds, and woody brush and trees when applied as recommended and under conditions described. For information on how to control specific weeds including herbicide rate refer to the **Weed Control** sections of this label (8.1). The following is a partial list of weeds controlled:

### **6.1**

#### **ANNUAL WEEDS**

##### **Annual Grasses**

##### **Blue Grass (annual)**

*Poa annua*

##### **Crab Grass (large)**

*Digitaria sanguinalis*

##### **Downy Brome**

*Bromus tectorum*

##### **Giant Foxtail**

*Setaria faberii*

##### **Green Foxtail**

*Setaria viridis*

##### **Persian Darnel**

*Lolium persicum*

##### **Volunteer Barley**

*Hordeum* spp.

##### **Volunteer Corn**

*Zea Mays*

##### **Volunteer Wheat**

*Triticum* spp.

##### **Wild Oats**

*Avena fatua*

##### **Annual Broadleaf Weeds**

##### **Fleabane (Canada)**

*Erigeron canadensis*

##### **Flixweed**

*Descurania sophia*

##### **Hempnettle**

*Galeopsis tetrahit*

##### **Kochia**

*Kochia scoparia*

**Lady's-Thumb**

*Polygonum persicaria*

**Lamb's-Quarters (common)**

*Chenopodium album*

**Narrow-leaved Hawk's Beard**

*Crepis tectorum*

**Narrow-leaved Vetch**

*Vicia angustifolia*

**Prickly Lettuce**

*Lactuca scariola*

**Ragweed (common)**

*Ambrosia artemisiifolia*

**Redroot Pigweed**

*Amaranthus retroflexus*

**Russian Thistle**

*Salsola pestifer*

**Shepherd's Purse**

*Capsella bursa-pastoris*

**Sowthistle (annual)**

*Sonchus oleraceus*

**Stinkweed**

*Thlaspi arvense*

**Volunteer Canola**

*Brassica* spp

**Volunteer Flax**

*Linaria* spp

**Wild Buckwheat**

*Polygonum convolvulus*

**Wild Mustard**

*Sinapsis arvensis*

**6.2**

**PERENNIAL WEEDS**

**Perennial Grasses / Sedges**

**Blue Grass (Canada)**

*Poa compressa*

**Blue Grass (Kentucky)**

*Poa pratensis*

**Brome Grass (smooth)**

*Bromus inermis*

**Cattail (common)**

*Typha latifolia*

**Foxtail Barley**

*Hordeum jubatum*

**Quackgrass**

*Agropyron repens*

**Yellow Nutsedge**

*Cyperus esculentus*

**Perennial Broadleaved Weeds**

**Alfalfa**

*Medicago* spp.

**Cottontop**

*Eriophorum chamissionis*

**Curled Dock**

*Rumex crispus*

**Dandelion**

*Taraxacum officinale*

**Field Bindweed**

*Convolvulus arvensis*

**Hemp Dogbane**

*Apocynum cannabinum*

**Hoary Cress**

*Cardaria draba*

**Knotweed (Japanese)**

*Polygonum cuspidatum*

**Milkweed (common)**

*Asclepias syriaca*

**Poison Ivy**

*Rhus radicans*

**Purple Loosestrife**

*Lythrum salicaria*

**Sow Thistle (perennial)**

*Sonchus arvensis*

**Thistle (Canada)**

*Cirsium arvense*

**Toad Flax**

*Linaria vulgaris*

**Wormwood (Absinth)**

*Artemisia absinthium*

**6.3 Woody Brush and Trees**

**Alder**

Alnus spp.

**Birch**

Betula spp.

**Broadleaved meadowsweet**

Spiraea latifolia

**Canadian rhododendron**

Rhododendron canadenses

**Cedar**

Thuja spp.

**Cherry**

Prunus spp.

**Douglas Fir**

Pseudotsuga spp.

**Hemlock**

Tsuga spp.

**Maple**

Acer spp.

**Mountain-fly honeysuckle**

Lornica villosa

**Pine**

Pinus spp.

**Poplar**

Populus spp.

**Raspberry / Salmonberry**

Rubus spp.

**Sheep laurel**

Kalmia angustifolia

**Snowberry (Western)**

Symphoricarpos occidentalis

**Sweet fern**

Comptonia peregrina

**Willow**

Salix spp.

**Withrod**

Viburnum cassinoides

**7.0**

**SELECTIVE EQUIPMENT**

**WIPER APPLICATORS**

This product may be applied with a wiper applicator, after dilution and thorough mixing with water, to listed weeds in any industrial, tree planting and non-crop site specified on this label. See section 8

A wiper applicator applies the herbicide solution onto weeds by rubbing the weed with an absorbent material containing the herbicide solution. Wiper applicators include either roller or wick devices that physically wipe appropriate concentrations or amounts of this product directly onto the weed. Equipment must be designed, maintained and operated to prevent the herbicide solution from contacting desirable vegetation. Performance may be improved by reducing speed in areas of heavy weed 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. See the Weed Control tables in this label (section 8) for recommended stage of growth for specific weeds.

#### 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.
- . Maintain recommended roller RPM on roller applicators while in use.
- . 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 Roller Applicators**--Mix 0.5 to 1.0 L of this product in 10 L water to prepare a 5 to 10% solution. Roller speed should be maintained at 50 to 150 rpm.

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

## 8.0

### NON-CROPLAND USES

#### INDUSTRIAL, RIGHTS-OF-WAY, RECREATIONAL, AND PUBLIC AREAS

**ALWAYS READ PRECAUTIONARY STATEMENTS, GENERAL INFORMATION and MIXING and APPLICATION SECTIONS (3.0, 4.0 and 5.0) PRIOR TO SPECIFIC APPLICATION INFORMATION IN ANY LABEL SECTION.**

This product can be used to control annual and perennial weeds and woody brush and trees listed on this label in non-crop areas such as railroad, pipeline, highway, power and telephone rights-of-way; petroleum tank farms and pumping installations; roadsides; storage areas; lumberyards; fence rows; industrial plant sites; parking areas; school yards, parks, golf courses, other public areas; airports and similar industrial or non-crop areas.

**NOTE:** For all industrial, rights-of-way, recreational and public areas, repeat treatments may be necessary to control regeneration or new growth.

When applied as recommended under the conditions described, this product will control weeds in non-cropland areas as listed in the following table.

## 8.1

### WEED CONTROL IN NON-CROPLAND AREAS WITH NUFARM RAZOR

WEEDS	GROUND APPLICATION**			COMMENTS
	BOOM APPLICATION		Hand Held High Volume Application % Solution	
	Rate L / ha	Water Vol. L /ha		
Annual grasses and broadleaves	2.25 - 3.5	50 – 100	1	. Actively growing weeds
<u>Perennial Weeds</u>				. Actively growing weeds
Quackgrass				. Add 0.5% v/v of a

	2.5  4.75 - 7.0	50 – 300  50 – 300	1  2	recommended surfactant (Agral 90, AgSurf, Companion, Enhance or Frigate) when using water volumes greater than 150 L. Always refer to surfactant label for specific instructions regarding use of that product.  Higher rate for long term control and for heavy infestations.
Canada Thistle (Bud Stage)	4.75-7.0	100-300	2	
Purple loosestrife	6.0	300-600	1-2 (or 33% for wiper application)	See section 8.2.3 for instructions on purple loosestrife applications
Other Perennials	7.0-12	100-300	2	Summer through fall is optimum
<u>Brush and Trees</u>				
Birch, Cherry, Poplar, Western Snowberry, Willow	3.0 - 6.0	100 – 300	1 - 2	Summer through early fall (see section 8.2)
Maple, Raspberry/ Salmonberry, Alder	6.0	100 – 300	2	Late Summer through fall Fall is optimum
<u>Turf Renovation</u>	2.5 - 12.0	100 – 300	1 - 2	Use higher end of the rate range for perennials
Annual and Perennial Weeds				
<u>Roadside Vegetation</u> (1-2 m wide along shoulders) Annual Weeds (refer to Tank-Mix sections on product labels for specific	1) 0.75-1.0 + 1.25-2.5L DyCleer®480  or	25-150	-	For 2,4-D amine formulations with a different guarantee, adjust the rate accordingly

weeds controlled)	2) 0.75-1.0 + 0.30 L DyCleer 480 + 1.2L 2,4-D amine 500			. No application to standing water.
<b>Residual Control Annual and Perennial Weeds</b> (the simazine component of this tank mixture will provide season long control of most germinating broadleaf weeds and grasses. It may also provide post-emergent activity on certain annual weeds)	2.5 - 12 + a) 2.5-5.6 kg Simazine 80W or + b) 4.0-9.0 L Simadex® Flowable	200-400	-	. Do not apply to coarse, sandy or gravelly soil. One application per year.  . Use according to the most restrictive label directions for each product in the mixture.  . For other simazine formulations registered for industrial/ non-cropland areas, use equivalent rates; i.e. 2.0-4.5 kg simazine/ha

\*\* Aerial application may be used for brush and tree control in Industrial rights-of-way only. See aerial application section (8.2.2).

DyCleer® is a registered trademark of Syngenta Crop Protection Canada Inc.

Simadex® is a registered trademark of Bayer CropScience Inc.

## **8.2 APPLICATION INFORMATION FOR NON-CROPLAND USES**

### **1. Foliar Applications**

Spray coverage should be uniform and complete. Do not spray to the point of run off. Do not allow spray drift to contact desirable vegetation as severe injury or destruction may occur. For woody brush and trees, early season applications may take 30-45 days for symptoms to develop on target species. Late season application may be made to species that have some autumn colours provided no major leaf drop has occurred. Control will be observed the following spring.

**EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OF SPRAY WITH FOLIAGE OF DESIRABLE TURFGRASSES, TREES, SHRUBS, OR OTHER DESIRABLE VEGETATION SINCE SEVERE DAMAGE OR DESTRUCTION MAY RESULT.**

This product does not provide residual weed control. For subsequent weed control, follow a label approved herbicide program. Read and carefully observe the cautionary statements and all other information appearing on the labels of all herbicides used.

#### **8.2.1 GROUND APPLICATIONS: For all non-cropland uses**

For woody brush and trees, apply 3 to 6 L of this product per hectare. Use ground boom or boomless, or mist blower equipment, or apply as a 1 to 2% solution using hand-held high volume equipment. Apply as directed in the recommended volume of clean water to foliage of actively growing vegetation. Use the 6 L/ha rate for Maple, Alder and Willow\* species, as well as for hard to control perennial weed species.

(\* Suppression only)

Spray coverage should be uniform and complete. Do not spray to the point of runoff. Do not allow spray drift to contact desirable vegetation as severe injury or destruction may occur. If weeds have been mowed or tilled, do not treat until regrowth has reached the recommended stages.

#### **8.2.2 AERIAL APPLICATIONS: For industrial rights-of-way only**

For woody brush and trees, apply 3 to 6 L of this product per hectare. Use the 6 L/ha rate for Maple, Alder and Willow\* species, as well as for hard to control perennial weed species. Use the recommended rates of this herbicide in 30 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.

(\* Suppression only)

Coarse sprays are less likely to drift, therefore do not use nozzles or nozzle configurations which 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. The use of a spotter plane is recommended.

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.

### **8.2.3 PURPLE LOOSESTRIFE CONTROL**

- DO NOT TREAT PLANTS OVER OPEN WATER. Nufarm RAZOR is not registered for direct application to bodies of water.
- Treat when plants are actively growing at or beyond the bloom stage. If using hand-held equipment, spray-to-wet.
- For wiper applications, see section 7.0
- Where feasible, remove flower heads before treatment to ensure prevention of seed set.
- For large (>1.6 ha) monocultures of loosestrife, work from the periphery inward in successive years to allow competing vegetation to invade the treated area.
- A long-term control strategy should include measures to control both established plants and seedlings. Sprayed areas should be monitored to determine the appropriate follow-up management. Early detection and treatment of second and third generation seedlings is important to prevent re-infestation of purple loosestrife. Desirable native plant communities will then have a chance to become re-established.

### **8.3 Selective Application for All Non-Cropland Uses**

Selective equipment such as **WIPER** and **ROLLER** applicators can be used to control emerged weeds in non-crop areas and tree plantings. See "Selective Equipment" (section 7) for more information.

### **8.4 Turfgrass**

When applied as directed, under conditions described, this product controls most existing vegetation. Apply this product at rates specified in the "Weed Control in Non-Cropland Areas" section (8.1).

#### **DO NOT DISTURB SOIL OR UNDERGROUND PLANT PARTS BEFORE TREATMENT.**

Where existing vegetation is growing in a field or unmowed situation, apply this product to actively growing weeds at the stages of growth given in the "Weeds Controlled" section of this booklet. Where existing vegetation is growing under mowed turfgrass management, apply this product after omitting at least one regular mowing to allow sufficient growth for good interception of the spray and proper translocation into underground plant parts. Tillage or renovation techniques such as vertical mowing, coring or slicing should be delayed for 7 days after application to allow proper translocation into underground plant parts.

For maximum control of existing vegetation, delay establishment to determine if regrowth from escaped underground plant parts occurs. When repeat treatments are necessary, sufficient

regrowth must be attained prior to application. Desirable turfgrasses may be established following the above procedures.

### **8.5 Injection Applications** - for all non-cropland uses

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 5cm 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**

Alnus spp.

#### **HEMLOCK**

Tsuga spp.

#### **BIRCH**

Betula spp.

#### **MAPLE\***

Acer spp.

#### **CEDAR**

Thuja spp.

#### **PINE**

Pinus spp.

#### **CHERRY**

Prunus spp.

#### **POPLAR**

Populus spp.

#### **DOUGLAS FIR**

Pseudotsuga spp.

#### **WILLOW**

Salix spp.

\* This treatment may only provide suppression of Big-Leaf Maple. Late fall applications will provide optimum suppression of Big-Leaf Maple

### **8.6 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 product for every 5cm 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 (8.5) of this label for a partial list of species controlled.

E01R2B/ 07-4535

\*\*\*\*\*

This label transcript service is offered by the Pest Management Regulatory Agency to provide efficient searching for label information. This service and this information do not replace the official hard-copy label. The PMRA does not provide any guarantee or assurance that the information obtained through this service is accurate, current or correct, and is therefore not liable for any loss resulting, directly or indirectly, from reliance upon this service.