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U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (7505P)
Ariel Rios Building
1200 Pennsylvania Ave., NW
Washington, D.C. 20460

NOTICE OF PESTICIDE:
___ Registration
_X_ Reregistration
(under FIFRA, as amended)

EPA Reg. Number:	Date of Issuance:
66222-166	JAN 26 2010

Term of Issuance:

Name of Pesticide Product:
Imazapyr 2 SL

Name and Address of Registrant (include ZIP Code):
Makhteshim Agan of North America, Inc.
4515 Falls of Neuse Road, Suite 300
Raleigh, NC 27609

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product, always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is reregistered in accordance with FIFRA section 4(g)(2)(C) provided you:

1. Submit and/or cite all data required for registration review/reregistration of your product when the Agency requires all registrants of similar products to submit data.

2. Make all the following changes to the product label:

   a. Due to the importance of resistance management to a long-term pest-management strategy, it is suggested that resistance management grouping symbols and statements be included on the labeling as described in PR Notice 2001-5.

   b. Change the heading from "INERT INGREDIENTS" to "OTHER INGREDIENTS".

   c. Under First Aid, change the heading to read "If on skin **or clothing**" and move the statement to below the "If swallowed" statement. The "If in eyes" and "If inhaled" statements are optional for this product.

   d. Change the Hazards to Humans and Domestic Animals statement to read "CAUTION Harmful if swallowed or absorbed through skin. Avoid contact with skin or clothing."

Continued on Page 2

Signature of Approving Official:

Jim Tompkins
Product Manager 25
Herbicide Branch
Registration Division (7505P)

Date: JAN 26 2010

EPA Form 8570-6

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e. Change the PPE sentence to read "Some materials that are chemical-resistant to this product **are made of any waterproof material.**"

f. Change the User Safety Recommendations sentence to read "Wash hands with plenty of soap and water before eating, **drinking,** chewing gum, using tobacco or using the toilet."

g. On page 2, change the sentence to read "Imazapyr 2 SL **must** be used only in accordance with **directions** on the label attached to the container…"

h. Throughout the label, change the heading from "GENERAL INFORMATION" to "PRODUCT INFORMATION", as the term "general" renders all information contained within to be advisory and unenforceable.

i. On page 2, change the sentence to read "Imazapyr 2 SL is also used for the release of unimproved Bermudagrass and Bahiagrass."

j. Make the following changes to the Spray Drift Management section:

   i. Change the heading from "Managing spray drift from aerial applications" to "Spray drift requirements for aerial applications".

   ii. Under spray drift requirements for aerial applications, add the following requirement as per imazapyr RED:

   "Applicators are required to use a Coarse or coarser droplet size (ASABE S572) or, if specifically using a spinning atomizer nozzle, applicators are required to use a volume mean diameter (VMD) of 385 microns or greater for release heights below 10 feet; Applicators are required to use a Very Coarse or coarser droplet size or, if specifically using a spinning atomizer nozzle, applicators are required to use a VMD of 475 microns or greater for release heights above 10 feet; Applicators must consider the effects of nozzle orientation and flight speed when determining droplet size."

   iii. Change the heading from "Managing spray drift from ground boom applications" to "Spray drift requirements for ground boom applications".

k. On page 11, change the heading from "SUGGESTED TANK-MIXES AND APPLICATION RATES" to "TANK-MIXES RATES".

l. Change the Pesticide Disposal statement to read "Wastes resulting from the use of this product **must** be disposed of on site or at an approved waste disposal facility."

m. Under Container Handling, change the second Refillable Container sentence to read "Refill this container with **imazapyr** only."

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The basic confidential statement of formula (CSF) dated December 15, 2008 is acceptable.

A stamped copy of your label is enclosed for your records. You must submit one (1) copy of the final printed label before you release the product for shipment. Products shipped after twelve (12) months from the date of this notice or the next printing of the label, whichever occurs first, must bear the new revised label. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

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IMAZAPYR 2 SL

Imazapyr 2 SL controls undesirable vegetation in non-cropland areas such as railroad, utility, pipeline and highway rights-of-way, utility plant sites, petroleum tank farms, pumping installations, fence rows, storage areas, non-irrigation ditchbanks and under paved surfaces.

ACTIVE INGREDIENT:

Isopropylamine salt of Imazapyr (2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-pyridinecarboxylic acid)*	27.8%
INERT INGREDIENTS	72.2%
TOTAL	100.0%

Equivalent to 22.6% 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-pyridinecarboxylic acid or 2 pounds acid per gallon.

EPA Reg. No. 66222-166 **EPA Est. No. _____**

KEEP OUT OF REACH OF CHILDREN

CAUTION!/PRECAUCIÓN!

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

ACCEPTED with COMMENTS in EPA Letter Dated JAN 26 2010 Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 66222-166

Manufactured for:
Makhteshim Agan of North America, Inc.
4515 Falls of Neuse Rd., Suite 300
Raleigh, NC 27609
NET CONTENTS: _____ GALLONS

FIRST AID	
If swallowed	• Call a poison control center 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 center 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 first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If on skin	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center 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 mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact Prosar at 1-877-250-9291 for emergency medical treatment information.	

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION! Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist.

Personal Protective Equipment (PPE):
Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category A on an EPA chemical-resistant category selection chart.

Mixers, loaders, applicators and other handlers must wear:

- Long-sleeve shirt and long pants.
- Chemical-resistant gloves made of any waterproof material for all mixers and loaders, plus applicators using handheld equipment.
- Shoes plus socks.

See engineering controls for additional requirements.

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

User Safety Recommendations

Users Should:

- Wash hands with plenty of soap and water before eating, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENGINEERING CONTROLS

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)].

ENVIRONMENTAL HAZARDS

This product is toxic to plants. Drift and runoff may be hazardous to plants in water adjacent to treated areas. **DO NOT** apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment washwaters or rinsate. See Directions for Use for additional precautions and requirements.

PHYSICAL AND CHEMICAL HAZARDS

Spray solutions of **Imazapyr 2 SL** should be mixed, stored and applied only in stainless steel, fiberglass, plastic and plastic-lined steel containers.

DO NOT mix, store or apply **Imazapyr 2 SL** or spray solutions of **Imazapyr 2 SL** in unlined steel (except stainless steel) containers or spray tanks.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Imazapyr 2 SL should be used only in accordance with recommendations on the label attached to the container. Keep containers closed to avoid spills and contamination.

GENERAL INFORMATION

Imazapyr 2 SL is an aqueous solution intended to be mixed with water and surfactant(s) for application to non-cropland areas such as railroad, utility, pipeline and highway rights-of-way, utility plant sites, petroleum tank farms, pumping installations, fence rows, storage areas, non-irrigation ditchbanks, including grazed or hayed areas within these sites. **Imazapyr 2 SL** is also recommended for the release of unimproved Bermudagrass and Bahiagrass. It may also be used beneath certain paved surfaces.

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When applied either preemergence or postemeregence to weeds, **Imazapyr 2 SL** will control most annual and perennial grasses and broadleaf weeds in addition to many brush and vine species. **Imazapyr 2 SL** will provide residual control of labeled weeds which germinate in the treated areas. Postemergence application with a surfactant is the method of choice in most situations, particularly for perennial weeds. For maximum affect, weeds should be growing vigorously at postemergence application and the spray solution should include a surfactant (See ADJUVANT Section for recommendations). **Imazapyr 2 SL** solutions may be broadcast by using ground or aerial equipment, or may be applied as a spot treatment by using low-volume techniques. In addition, **Imazapyr 2 SL** may be used for stump and cut stem treatments.

Imazapyr 2 SL controls vegetation by absorption through leaves, stems, and roots, from which it is translocated throughout the plant, where it accumulates in rapidly-growing meristematic tissue. Treated plants stop growing soon after treatment. Chlorosis (yellowing of plant tissue) first appears in the newest leaves and necrosis spreads from this point. In perennials, **Imazapyr 2 SL** is translocated into and kills underground storage tissues to prevent regrowth. Chlorosis and tissue necrosis may not be apparent in some plant species until two weeks after application. Complete kill of plants may not occur for several weeks. Applications of **Imazapyr 2 SL** are rain-fast one hour after treatment.

PRECAUTIONS FOR AVOIDING INJURY TO NON-TARGET PLANTS

Imazapyr 2 SL can occasionally affect non-target or untreated plants by root uptake of the herbicide. Injury or loss of non-target plants may result if **Imazapyr 2 SL** is applied onto or near desirable plants, or to areas where their roots extend, or in areas where treated soil may be washed or moved within their drip line.

IMPORTANT

DO NOT use on food crops. DO NOT treat irrigation ditches or water used for irrigation of crops or for domestic purposes. Keep away from fertilizers, insecticides, fungicides and seeds. DO NOT drain or flush equipment on or near desirable plants, or onto areas where their roots may extend, or in locations where the chemical may be washed or moved within their drip line. DO NOT use on lawns, walks, driveways, tennis courts or similar areas where roots of desirable vegetation may extend and be exposed to potential injury and/or mortality from root uptake of **Imazapyr 2 SL**. DO NOT side trim desirable vegetation with this product unless severe injury or plant death is acceptable. Exercise precautions to prevent spray drift onto desirable plants.

Clean application equipment immediately after using this product by thoroughly flushing with water.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of **48 hours.**

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls.
- Shoes plus socks.
- Chemical-resistant gloves made of any waterproof material.
- Protective eyewear.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Non-crop weed control is not within the scope of the Worker Protection Standard. See the **GENERAL INFORMATION** section of this label for a description of non-crop sites.

DO NOT enter or allow others to enter treated areas until sprays have dried.

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SPRAY DRIFT MANAGEMENT

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

Spray drift from applying this product may damage sensitive plants adjacent to the treatment area. Only apply this product when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, or non-target crops) is minimal. **DO NOT** apply when the following conditions exist that increase the likelihood of spray drift from intended targets: high or gusty winds, high temperatures, low humidity, temperature inversions.
The best drift management strategy and most effective way to reduce drift potential are to apply large droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see **WIND, TEMPERATURE AND HUMIDITY AND TEMPERATURE INVERSIONS**).

Controlling Droplet Size:

- Volume – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure – **DO NOT** exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of Nozzles – use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation – Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is recommended practice. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- Nozzle Type – Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift. **DO NOT** use nozzles producing a mist droplet spray.

Application Height: Making applications at the lowest possible height (aircraft, ground driven spray boom) that is safe and practical reduces exposure of droplets to evaporation and wind.

Swath Adjustment: When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the application equipment (e.g. aircraft, ground) upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller droplets, etc.)

Wind: Drift potential is lowest between wind speeds of 3-10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 3 mph due to variable wind direction and high inversion potential. **NOTE**: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity: When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions: Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud, which can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. **Wind Erosion:** Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.

Aerial Application Methods and Equipment: Use 2 or more gallons of water per acre. The actual minimum spray volume per acre is determined by the spray equipment used. Use adequate spray volume to provide accurate and uniform distribution of spray particles over the treated area and to avoid spray drift.

Managing Spray Drift from Aerial Applications: Applicators must follow these requirements to avoid off-target drift movement: 1) boom length – the distance of the outermost nozzles on the boom must not exceed 60% of the length of the wingspan or 90% of the rotor blade diameter, 2) nozzle orientation – nozzles must always point backward

parallel with the air stream and never be pointed downwards more than 45 degrees, and 3) application height – without compromising aircraft safety, applications should be made at a height of 10 feet or less above the crop canopy or tallest plants; 4) applicators must use upwind swath displacement; 5) applications into temperature inversions are prohibited; 6) do not apply with wind speeds less than 3 mph and with wind speeds greater than 10 mph. Applicators must follow the most restrictive use cautions to avoid drift hazards, including those found in this labeling as well as applicable state and local regulations and ordinances.

Ground Application (Broadcast): Use 5 or more gallons of water per acre. The actual minimum spray volume per acre is determined by the spray equipment used. Use adequate spray volume to provide accurate and uniform distribution of spray particles over the treated area and to avoid spray drift.

Managing spray drift from ground boom applications: Applicators are required to use a nozzle height below 4 feet above the ground or plant canopy and Coarse or coarser droplet size (ASABE S572) or, if specifically using a spinning atomizer nozzle, applicators are required to use a volume mean diameter (VMD) of 385 microns or greater.
Applications with wind speeds greater than 10 mph are prohibited.
Applications into temperature inversions are prohibited.

WEEDS CONTROLLED BY IMAZAPYR 2 SL

When used as directed, **Imazapyr 2 SL** provides preemergence or postemergence control with residual control of the weed species listed below. Annual weeds may be controlled by preemergence or postemergence applications of **Imazapyr 2 SL.** For established biennial and perennial vegetation control, postemergence treatments of **Imazapyr 2 SL** are recommended. The tables below show broadcast rates and indicate relative weed sensitivity. It is important to consider relative weed sensitivity when preparing low volume spray solutions (See **LOW VOLUME** section of **GROUND APPLICATIONS**), since low volume treatments apply less **Imazapyr 2 SL** per acre than is shown for the broadcast treatments.

Resistant Biotypes: Some weeds listed below may have naturally-occurring biotypes (plants within a given species that have a slightly different but distinct genetic makeup from other plants of that species) that are not effectively controlled by this and/or other herbicides (Oust®) with the ALS/AHAS enzyme-inhibiting mode of action. If naturally-occurring ALS/AHAS-resistant biotypes are present in an area, **Imazapyr 2 SL** should be tank-mixed or applied sequentially with a registered herbicide that depends on a different mode of action to ensure control.

GRASSES

Apply 2-3 pints per acre[1]

COMMON NAME	SPECIES	GROWTH HABIT[2]
Annual bluegrass	*(Poa annua)*	A
Broadleaf signalgrass	*(Brachiaria platyphylla)*	A
Canada bluegrass	*(Poa compressa)*	P
Downy brome	*(Bromus tectorum)*	A
Fescue	*(Festuca* spp.*)*	A/P
Foxtail	*(Setaria* spp.*)*	A
Italian ryegrass	*(Lolium multiflorum)*	A
Johnsongrass	*(Sorghum halepense)*	P
Kentucky bluegrass	*(Poa pratensis)*	P
Lovegrass	*(Eragrostis spp.)*	A/P
Orchardgrass	*(Dactylis glomerata)*	P
Paragrass	*(Brachiaria mutica)*	P
Quackgrass	*(Agropyron repens)*	P
Sandbur	*(Cenchrus* spp.*)*	A
Sand dropseed	*(Sporobulus cryptandrus)*	P
Smooth brome	*(Bromus inermis)*	P
Vaseygrass	*(Paspalum urvillei)*	P
Wild oats	*(Avena fatua)*	A
Witchgrass	*(Panicum capillare)*	A

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Apply 3-4 pints per acre[1]

COMMON NAME	SPECIES	GROWTH HABIT[2]
Barnyardgrass[3]	*(Echinochloa crus-gali)*	A
Beardgrass	*(Andropogon* spp.*)*	P
Bluegrass, Annual[3]	*(Poa annua)*	A
Cheat	*(Bromus secalinus)*	A
Crabgrass	*(Digitaria* spp.*)*	A
Crowfootgrass[3]	*(Dactyloctenium aegyptium)*	A
Fall panicum	*(Panicum dichotomiflorum)*	A
Giant Reed	*(Arundo donax)*	A
Goosegrass	*(Eleusine indica)*	A
Itchgrass[3]	*(Rottboellia exaltata)*	A
Junglerice[3]	*(Echinochloa colonum)*	A
Lovegrass[3]	*(Eragrostis* spp.*)*	A
Maidencane	*(Panicum hemitomon)*	A
Panicum, Browntop[3]	*(Panicum fasciculatum)*	A
Panicum, Texas[3]	*(Panicum texanum)*	A
Prairie threeawn	*(Aristida oligantha)*	P
Reed canarygrass	*(Phalaris arundinacea)*	P
Sandbur, Field[3]	*(Cenchrus incertus)*	A
Signalgrass[3]	*(Brachiaria* spp.*)*	A
Torpedograss	*(Panicum repens)*	P
Wild barley	*(Hordeum* spp.*)*	A
Wooly Cupgrass[3]	*(Erichloa villosa)*	A

Apply 4-6 pints per acre[1]

COMMON NAME	SPECIES	GROWTH HABIT[2]
Bahiagrass	*(Paspalum notatum)*	P
Bermudagrass[4]	*(Cynodon dactylon)*	P
Big bluestem	*(Andropogon gerardii)*	P
Cattail	*(Typha* spp.*)*	P
Cogongrass	*(Imperata cylindrica)*	P
Dallisgrass	*(Paspalum dilatatum)*	P
Feathertop	*(Pennisetum villosum)*	P
Guineagrass	*(Panicum maximum)*	P
Phragmites	*(Phragmites australis)*	P
Prairie cordgrass	*(Spartina pectinata)*	P
Saltgrass[4]	*(Distichlis stricta)*	P
Sand dropseed	*(Sporobolus cryptandrus)*	P
Sprangletop[3]	*(Leptochloa* spp.*)*	A
Timothy	*(Phleum pratense)*	P
Wirestem muhly	*(Muhlenbergia frondosa)*	P

BROADLEAF WEEDS

Apply 2-3 pints per acre[1]

COMMON NAME	SPECIES	GROWTH HABIT[2]
Alligatorweed	*(Alternanthera philoxeroides)*	A/P
Burdock	*(Arctium* spp.*)*	B
Carpetweed	*(Mollugo verticillata)*	A

Carolina geranium	*(Geranium carolinianum)*	A
Clover	*(Trifolium* spp.*)*	A/P
Common chickweed	*(Stellaria media)*	A
Common ragweed	*(Ambrosia artemisiifolia)*	A
Dandelion	*(Taraxacum officinale)*	P
Dogfennel	*(Eupatorium capillifolium)*	A
Filaree	*(Erodium* spp.*)*	A
Fleabane	*(Erigeron* spp.*)*	A
Hoary vervain	*(Verbena stricta)*	P
Horseweed	*(Conyza canadensis)*	A
Indian mustard	*(Brassica juncea)*	A
Kochia[5]	*(Kochia scoparia)*	A
Lambsquarters	*(Chenopodium album)*	A
Lespedeza	*(Lespedeza* spp.*)*	P
Miners lettuce	*(Montia perfoliata)*	A
Mullein	*(Verbascum* spp.*)*	B
Nettleleaf goosefoot	*(Chenopodium murale)*	A
Oxeye daisy	*(Chrysanthemum leucanthemum)*	P
Pepperweed	*(Lepidium* spp.*)*	A
Pigweed	*(Amaranthus* spp.*)*	A
Plantain	*(Plantago spp.)*	P
Puncturevine	*(Tribulus terrestris)*	A
Russian thistle	*(Salsola kali)*	A
Smartweed	*(Polygonum* spp.*)*	A/P
Sorrell	*(Rumex* spp.*)*	P
Sunflower	*(Helianthus* spp.*)*	A
Sweet clover	*(Melilotus* spp.*)*	A/B
Tansymustard	*(Descurainia pinnata)*	A
Western ragweed	*(Ambrosia psilostachya)*	P
Wild carrot	*(Daucus carota)*	B
Wild lettuce	*(Lactuca* spp.*)*	A/B
Wild parsnip	*(Pastinaca sativa)*	B
Wild turnip	*(Brassica campestris)*	B
Woollyleaf bursage	*(Franseria tomentosa)*	P
Yellow woodsorrel	*(Oxalis stricta)*	P

Apply 3-4 pints per acre[1]

COMMON NAME	SPECIES	GROWTH HABIT[2]
Broom snakeweed[6]	*(Gutierrezia sarothrae)*	P
Bull thistle	*(Cirsium vulgare)*	B
Burclover[3]	*(Medicago* spp.*)*	A
Chickweed, Mouseear[5]	*(Cerastium vulgatum)*	A
Clover, Hop[3]	*(Trifolium procumbens)*	A
Cocklebur	*(Xanthium strumarium)*	A
Cudweed[3]	*(Gnaphalium* spp.*)*	A
Desert Camelthorn	*(Alhagi pseudalhagi)*	P
Diffuse knapweed	*(Centaurea diffusa)*	A
Dock	*(Rumex* spp.*)*	P
Fiddleneck[3]	*(Amisinckia intermedia)*	A
Goldenrod	*(Solidago* spp.*)*	P
Henbit[3]	*(Lamium aplexicaule)*	A
Knotweed, prostrate[3]	*(Polygonum aviculare)*	A/P
Pokeweed	*(Phytolacca americana)*	P
Purple loosestrife[6]	*(Lythrum salicaria)*	P
Purslane	*(Portulaca* spp.*)*	A
Pusley, Florida[3]	*(Richardia scabra)*	A

Rocket, London[3]	*(Sisymbrium irio)*	A
Rush skeletonweed[6]	*(Chondrilla juncea)*	B
Saltbush	*(Atriplex* spp.*)*	A
Shepherd's-purse[3]	*(Capsella bursa-pastoris)*	A
Spurge, Annual[3]	*(Euphorbia* spp.*)*	A
Stinging nettle[6]	*(Urtica dioica)*	P
Velvetleaf[3]	*(Abutilon theophrasti)*	A
Yellow starthistle	*(Centaurea solstitialis)*	A

Apply 4-6 pints per acre[1]

COMMON NAME	SPECIES	GROWTH HABIT[2]
Arrowwood	*(Pluchea sericea)*	A
Canada thistle	*(Cirsium arvense)*	P
Giant ragweed	*(Ambrosia trifida)*	A
Grey rabbitbrush	*(Chrysothamnus nauseosus)*	P
Japanese bamboo/knotweed	*(Polygonum cuspidatum)*	P
Little mallow	*(Malva parviflora)*	B
Milkweed	*(Asclepias* spp.*)*	P
Primrose	*(Oenothera kunthiana)*	P
Russian knapweed	*(Centaurea repens)*	P
Silverleaf nightshade	*(Solanum elaeagnifolium)*	P
Sowthistle	*(Sonchus* spp.*)*	A
Texas thistle	*(Cirsium texanum)*	P

VINES AND BRAMBLES

Apply 1 pint per acre[1]

COMMON NAME	SPECIES	GROWTH HABIT[2]
Field bindweed	*(Convolvulus arvensis)*	P
Hedge bindweed	*(Calystegia sepium)*	A

Apply 2-3 pints per acre[1]

COMMON NAME	SPECIES	GROWTH HABIT[2]
Wildbuckwheat	*(Polygonum convolvulus)*	P

Apply 3-4 pints per acre[1]

COMMON NAME	SPECIES	GROWTH HABIT[2]
Greenbriar	*(Smilax* spp.*)*	P
Honeysuckle	*(Lonicera* spp.*)*	P
Morningglory	*(Ipomoea* spp.*)*	A/P
Poison ivy	*(Rhus radicans)*	P
Redvine	*(Brunnichia cirrhosa)*	P
Wild rose including Multiflora rose and Macartney rose	*(Rosa* spp.*)* *(Rosa multiflora)* *(Rosa bractreata)*	P P P

Apply 4-6 pints per acre[1]

COMMON NAME	SPECIES	GROWTH HABIT[2]

Trumpetcreeper	*(Campsis radicans)*	P
Virginia creeper	*(Parthenocissus quinquefolia)*	P
Wild grape	*(Vitis spp.)*	P

BRUSH SPECIES

Apply 4-6 pints per acre[1]

COMMON NAME	SPECIES	GROWTH HABIT[2]
American beech	*(Fagus grandifolia)*	P
Ash	*(Fraxinus spp.)*	P
Bald cypress	*(Taxodium distichum)*	P
Bigleaf Maple	*(Acer macrophylum)*	P
Black Locust[7]	*(Robinia pseudoacacia)*	P
Blackgum	*(Nyssa sylvatica)*	P
Boxelder	*(Acer negundo)*	P
Brazilian peppertree	*(Schinus terebinthifolius)*	P
Cherry	*(Prunus spp.)*	P
Chinaberry	*(Melia azadarach)*	P
Chinese tallow-tree	*(Sapium sebiferum)*	P
Dogwood	*(Cornus spp.)*	P
Elm[8]	*(Ulmus spp.)*	P
Hawthorn	*(Crataegus spp.)*	P
Hickory	*(Carya spp.)*	P
Honeylocust[9]	*(Gleditsia triacanthos)*	P
Maple	*(Acer spp.)*	P
Melaleuca	*(Melaleuca quiquenervia)*	P
Mulberry	*(Morus spp.)*	P
Oak	*(Quercus spp.)*	P
Persimmon	*(Diospyros virginiana)*	P
Pine[10]	*(Pinus spp.)*	P
Poplar	*(Populus spp.)*	P
Privet	*(Ligustrum vulgare)*	P
Red Alder	*(Alnus rubra)*	P
Red Maple	*(Acer rubrum)*	P
Russian Olive	*(Eleagnus angustifolia)*	P
Saltcedar	*(Tamarix ramosissima)*	P
Sassafras	*(Sassafras albidum)*	P
Sourwood	*(Oxydendrum arboreum)*	P
Sumac	*(Rhus spp.)*	P
Sweetgum	*(Liquidamber stryaciflua)*	P
Willow	*(Salix spp.)*	P
Yellow poplar	*(Liriodendron tulifpifera)*	P

[1]The higher rates should be used where heavy or well established infestations occur.
[2]Growth Habit – A = Annual, B = Biennial, P = Perennial
[3]For preemergence control, tank-mix with Pendulum®.
[4]Use a minimum of 75 GPA – Control of established stands may require repeat applications.
[5]For preemergence control, tank-mix with Pendulum® or Karmex®.
[6]For best results early postemergence applications are required.
[7]Tank-mix with Roundup®, Accord®, Escort®, Krenite®, Garlon™ 3A, or Tordon™ K.
[8]Tank-mix with Roundup®, Accord® or Escort®.
[9]Tank-mix with Roundup®, Accord® Garlon™ 3A, or Tordon™ K.
[10]Tank-mix with Accord®, Roundup®, Garlon™ 3A, or Tordon™ K, or Krenite®.

ADJUVANTS

For optimal postemergence performance of **Imazapyr 2 SL**, the addition of an adjuvant to the spray solution is essential to aid in the deposition and uptake of the herbicide.

Nonioinic Surfactants: Use a nonionic surfactant at 0.25% to 1% of the total spray volume (0.25% v/v is equivalent to 1 quart in 100 gallons) in accordance with the surfactant labeling. For best results, select a nonionic surfactant with a HLB (hydrophilic to lipophilic balance) ratio between 12 and 17 with at least 70% surfactant in the formulated product. Alcohols, fatty acids, horticultural spray oils, ethylene glycol or diethylene glycol should not be considered as surfactants to meet these requirements.

Methylated Seed Oils or Vegetable Oil Concentrates: Methylated seed oil or vegetable oil concentrate may be used at 1.5 to 2 pints per acre. When using spray volumes greater than 30 gallons per acre, mix methylated seed oil or vegetable oil concentrate at a rate of 1% of the total spray volume.

Silicone-Based Surfactants: Silicone-based surfactants allow greater spreading of the spray droplet on the leaf surface, as compared to conventional nonionic surfactants. However, some silicone-based surfactants may dry too quickly and limit herbicide uptake. Refer to the surfactant manufacturer's label for specific recommendations.

Fertilizer/Surfactant Blends: Nitrogen-based liquid fertilizers such as 28% N, 32% N, 10-34-0 or ammonium sulfate may be used with **Imazapyr 2 SL** at 2 to 3 pints per acre in combination with the recommended rate of nonionic surfactant, methylated seed oil or vegetable oil concentrate. Tank mixes with nitrogen-based fertilizers without a nonionic surfactant, methylated seed oil or vegetable oil concentrate is not recommended.

BRUSH CONTROL

AERIAL APPLICATIONS:
Exercise all precautions to minimize or eliminate spray drift. Fixed wing aircraft and helicopters can be used to apply **Imazapyr 2 SL**; however, **DO NOT** apply by fixed wing aircraft unless appropriate buffer zones can be maintained to prevent spray drift out of the target area or, if treating open tracts of land where spray drift from fixed wing aircraft application can be tolerated. Aerial equipment designed to minimize spray drift, such as helicopters equipped with a Microfoil™ boom, Thru-Valve™ boom or raindrop nozzles, must be used and calibrated. Unless applying with a Microfoil™ boom, use a drift control agent at the recommended label rate. To avoid drift, **DO NOT** make applications during inversion conditions, when winds are gusty, or during any other conditions that promote spray drift. Side trimming is not recommended with **Imazapyr 2 SL** unless death of treated vegetation is acceptable.

Uniformly apply **Imazapyr 2 SL** in 5 to 30 gallons of water per acre. Use a nonionic surfactant, methylated seed oil or silicone-based surfactant (See the **ADJUVANT** section of this label for specific recommendations). An anti-foam agent may be added, if needed.

Thoroughly clean application equipment, including landing gear, by thoroughly flushing with water immediately after using this product. Prolonged exposure of uncoated/unpainted steel (except stainless steel) surfaces to this product may result in corrosion and failure of the exposed part. Maintaining painted surfaces may prevent corrosion.

GROUND APPLICATIONS:
To minimize spray drift, select proper nozzles to avoid spraying a fine mist, use pressures less than 50 psi and **DO NOT** spray under gusty or windy conditions (also refer to **SPRAY DRIFT MANAGEMENT** section). Use an anti-foam agent, if needed, and a spray pattern indicator, if desired. Thoroughly clean application equipment after using this product by thoroughly flushing with water. Prolonged exposure of uncoated/unpainted steel (except stainless steel) surfaces to this product may result in corrosion and failure of the exposed part.

When making applications to rights-of-way corridors where roots of desirable vegetation may extend, apply 1 to 3 pints of **Imazapyr 2 SL** per acre in combination with recommended tank-mixes. It is not recommended to use rates higher than 3 pints per acre in such situations as injury or death of desirable vegetation may occur.

Side Trimming: DO NOT side trim with **Imazapyr 2 SL** unless severe injury or death of the treated vegetation is acceptable. **Imazapyr 2 SL** is readily translocated and can result in death of the entire tree.

Low Volume: Use equipment calibrated to deliver 5 to 20 gallons of spray solution per acre. Thoroughly mix 0.5 to 5% (v/v) **Imazapyr 2 SL** in water plus surfactant (See the **ADJUVANT** section of this label for recommendations). Use an anti-foam agent at the recommended rate, if needed. For difficult to control brush species (See **WEEDS CONTROLLED** section for relative susceptibility of weed species), apply the higher concentrations of herbicide and/or spray volumes but **DO NOT** apply more than 6 pints of **Imazapyr 2 SL** per acre. Excessive wetting of

foliage is not recommended. See the **MIXING GUIDE** below for suggested volumes of **Imazapyr 2 SL** and water.

SUGGESTED TANK-MIXES AND APPLICATION RATES*

Target Vegetation	Rate of Imazapyr 2 SL	Tank Mix
Mixed hardwoods without elm, locust, or pine	1.0 – 1.5% by volume	Surfactant
Mixed hardwoods containing elm, locust, and pine	0.5 – 1.0% by volume	Accord® at 2 – 3% by volume plus surfactant
Mixed hardwoods with locust and pine but no elm	0.5 – 1.0% by volume	Krenite® at 2 – 5% by volume plus surfactant
Mixed hardwoods with locust and elm but no pine	0.5 – 1.0% by volume	Escort® at 2 oz./Acre or 2.3 grams/gal. plus surfactant

* Tank mixes with products containing 2,4-D have resulted in reduced efficacy of **Imazapyr 2 SL.**

MIXING GUIDE

% Solution	Amount Imazapyr 2 SL per Gallon of mix	Amount Imazapyr 2 SL per 4 Gallon Backpack
0.5%	0.6 oz	2.6 oz
1.0%	1.3 oz	5.1 oz
2.0%	2.6 oz	10.2 oz
3.0%	3.8 oz	15.4 oz
5.0%	6.4 oz	25.6 oz

MEASURING CHART

128 ounces	=	1 gallon
16 ounces	=	1 pint
8 pints	=	1 gallon
4 quarts	=	1 gallon
2 pints	=	1 quart

Application Tips: For low volume applications, select appropriate nozzles to avoid over-application. Proper application is critical to ensure desirable results. Optimum results are achieved when the spray covers the crown and approximately 70 percent of the plant. The use of a flat fan nozzle tip with a spray angle of 40 degrees or less will aid in proper deposition.

Recommended nozzle tip sizes include 4004E or 1504E. For a straight stream and cone pattern, use adjustable cone nozzles such as 5500 X3 or 5500 X4. Attaching a roll-over valve onto a Spraying Systems Model 30 gunjet or other similar spray guns allows for the use of both a flat fan and cone tips on the same gun.

Proper Spray Pattern: Moisten, but **DO NOT** drench target vegetation. **DO NOT** spray to run-off.

Low Volume with Backpacks: For brush up to 4 feet tall, spray downward to cover approximately 70% of the plant foliage and the crown.

For brush 4 to 8 feet tall, apply a directed spray in a smooth vertical motion from the crown upward on at least two sides of the target vegetation, making sure to cover the crown whenever possible.

For brush over 8 feet tall, apply a directed spray in a smooth zig-zag motion from the crown upward on at least two

sides of the target brush.

Low Volume with Hydraulic Handgun Application Equipment: Use same technique as described above for Low Volume with Backpacks.

For broadcast applications, simulate a gentle rain near the top of target vegetation, allowing spray to penetrate the target foliage and contact the crown without run-off onto understory vegetation. **DO NOT** spray to run-off. Herbicide spray that contacts understory vegetation may result in severe injury or death of understory plants.

MIXING GUIDE FOR LOW VOLUME APPLICATIONS

AMOUNT OF SPRAY SOLUTION BEING PREPARED	DESIRED CONCENTRATION (fluid volume)				
	0.5%	0.75%	1.0%	1.5%	5.0%
	(Amount of Imazapyr 2 SL to use)				
1 gallon	0.6 oz	0.9 oz	1.3 oz	1.9 oz	6.5 oz
3 gallons	1.9 oz	2.8 oz	3.8 oz	5.8 oz	1.2 pints
4 gallons	2.5 oz	3.8 oz	5.1 oz	7.7 oz	1.6 pints
5 gallons	3.2 oz	4.8 oz	6.5 oz	9.6 oz	2 pints
50 gallons	2 pints	3 pints	4 pints	6 pints	10 quarts
100 gallons	4 pints	6 pints	8 pints	6 quarts	5 gallons
2 tablespoons = 1 fluid ounce					

High Volumes: For optimum performance when spraying medium to high density brush, use equipment calibrated to deliver up to 100 gallons of finished spray per acre (GPA). Application volumes exceeding 100 GPA may result in excessive spray run-off, causing injury to desirable ground cover species. Thoroughly mix **Imazapyr 2 SL** at 2 to 6 pints per acre in water and include a surfactant (See **ADJUVANT** section for surfactant recommendations). Use an anti-foam agent according to its label, if needed. For hard-to-control species (See **WEEDS CONTROLLED** section for relative susceptibility of weeds), use the higher concentrations of herbicide and/or spray volumes but **DO NOT** apply more than 6 pints of **Imazapyr 2 SL** per acre. Uniformly cover the foliage of the target vegetation but **DO NOT** apply to run-off.

TANK MIXES FOR BRUSH CONTROL:
Imazapyr 2 SL may be tank-mixed with Accord®, Roundup®, Krenite®, Escort®, Telar®, Tordon™ K, Garlon™ 3A, Banvel® and Vanquish® to provide control of **Imazapyr 2 SL**-tolerant species.
Consult manufacturer's labels for specific rates and weeds controlled. Always follow the more restrictive label when making an application involving tank-mixes. Tank-mixing with products that contain 2,4-D may reduce the performance of **Imazapyr 2 SL**.

INVERT EMULSIONS:
Imazapyr 2 SL can be applied as an invert emulsion (water-in-oil emulsion) to minimize spray drift and spray run-off, thereby delivering more herbicide to the target foliage. The spray emulsion may be formed in a single tank (batch mixing) or injected (in-line mixing). Refer to the invert chemical label for proper mixing directions.

CUT STUBBLE:

Imazapyr 2 SL can be applied within 2 weeks after mechanical mowing or cutting of brush to suppress or control resprouting. Apply **Imazapyr 2 SL** at 1 to 2 pints per acre to the cut area. **Imazapyr 2 SL** may be tank-mixed with Tordon™ K to aid in control or suppression of brush. The addition of 5% (v/v) or more of a penetrating agent (surfactant) can aid herbicide uptake through the bark or exposed roots.

Since cut stubble applications are made to the soil and cut brush stumps, ground cover injury may occur. However, vegetation will recover. **NOTE** that applications of **Imazapyr 2 SL** directly to the soil beneath desirable trees can result in root uptake and cause injury or death to desirable trees.

To reduce potential root uptake by desirable vegetation, allow target brush to first regrow some foliage, then apply **Imazapyr 2 SL** to brush foliage. See the **BRUSH CONTROL** section of this label.

STUMP AND CUT STEM TREATMENTS:
Imazapyr 2 SL may be used to control undesirable woody vegetation on non-cropland by application to the

cambium area of freshly-cut stump surfaces or to fresh cuts on the stem of the target woody vegetation. Applications can be made at any time of the year except during periods of heavy sap flow in the spring. Tree injection and cut stem treatments are most effective in late summer and early fall. **DO NOT** over-apply to cause run-off or puddling of spray solution.

Mixing: Mix **Imazapyr 2 SL** as either a concentrate or dilute solution for stump and cut stem treatments. Apply dilute solutions to the surface of the stump or to cuts on the stem of the target woody vegetation. Apply concentrate solutions to cuts on the stem. Use of the concentrate solutions permits application to fewer cuts on the stem, especially for large diameter trees. Follow the application directions below to determine proper application techniques for each type of solution.

To prepare a dilute solution, mix 8 to 12 fluid ounces of **Imazapyr 2 SL** with one gallon of water. The use of a surfactant or penetrating agent may improve herbicide uptake through partially callused cambium tissue.

To prepare a concentrated solution, mix 2 quarts of **Imazapyr 2 SL** with no more than 1 quart of water.

APPLICATION WITH DILUTE SOLUTIONS: For cut stump treatments: Spray or brush the solution onto the cambium area of the freshly cut stump surface. Thoroughly wet the entire cambium area (the wood just inside the bark of the stump).

For tree injection treatments: Using standard injection equipment, apply 1 milliliter of solution at each injection site around the tree with no more than one inch intervals between cut edges. Insure that the injector completely penetrates the bark at each injection site.

For frill or girdle treatments: Use a hatchet, machete or similar implement to make cuts through the bark around the tree at intervals no more than two inches between cut edges. Spray or brush **Imazapyr 2 SL** solution into each cut until thoroughly wet.

APPLICATION WITH CONCENTRATED SOLUTIONS:
For tree injection treatments: Using standard injection equipment, apply 1 milliliter of solution at each injection site. Make at least one injection cut for every 3 inches of Diameter at Breast Height (DBH) on the target tree. For example, a 3 inch DBH tree will receive 1 injection cut while a 6 inch DBH tree will receive 2 injection cuts. On trees requiring more than one injection site, place the injection cuts at approximately equal intervals around the tree.

For frill or girdle treatments: Use a hatchet, machete or similar implement to make cuts at a downward angle through the bark at approximately equal intervals around the tree. Make at least one cut for every 3 inches of DBH on the target tree as described above, then spray or brush **Imazapyr 2 SL** solution into each cut until thoroughly wet ensuring that the solution does not run out of the cut.

NOTE: Injury may occur to desirable woody plants if the shoots extend from the same root system or their root systems are grafted to those of the treated tree.

TOTAL VEGETATION CONTROL IN NON-CROP AREAS WHERE BAREGROUND IS DESIRED

Imazapyr 2 SL is an effective herbicide for preemergence or postemergence control of many annual and perennial broadleaf and grass weeds in non-crop areas where bareground is desired, including areas such as railroad, utility, pipeline and highway rights-of-way, utility plant sites, petroleum tank farms, pumping installations, fence rows, storage areas, and non-irrigation ditchbanks. **Imazapyr 2 SL** is particularly effective on hard-to-control perennial grasses. **Imazapyr 2 SL** can be used alone at 1.5 to 6 pints per acre or in tank-mixes with Roundup®, Finale®, MSMA, Diuron, Karmex®, Pendulum®, Simazine, Banvel®, Vanquish®, or Oust® herbicides. The degree and duration of control are dependent on the rate of **Imazapyr 2 SL** used, the tank-mix partner, the volume of carrier, soil texture, rainfall and other conditions.

Apply **Imazapyr 2 SL** at anytime of the year. Use equipment calibrated to deliver desired gallons per acre spray volume and uniformly distribute the spray pattern over the treated area.

Postemergence Applications: Always use a spray adjuvant (See **ADJUVANT** section of this label) in postemergence applications. For optimum performance on hard-to-control annual grasses, apply 100 gallons per acre or less. For quicker burndown of target weeds, tank mix **Imazapyr 2 SL** with products such as Roundup®, Finale®, or MSMA. Tank mixes with products that contain 2,4-D have reduced performance of **Imazapyr 2 SL**. Always follow the more restrictive label when tank-mixing.

Spot Treatments: **Imazapyr 2 SL** may be used as a follow-up treatment to control escapes or weed encroachment in a bareground situation. To prepare the spray solution, thoroughly mix 0.5 to 5% **Imazapyr 2 SL** plus an adjuvant in a gallon of water. For increased burndown, tank mix with Roundup®, Finale®, MSMA, or similar products. For extended residual weed control or to increase the weed spectrum, add Pendulum® or Diuron. Always follow the more restrictive label when tank-mixing.

FOR CONTROL OF UNDESIRABLE WEEDS UNDER PAVED SURFACES

Imazapyr 2 SL can be used under asphalt, pond liners and other paved areas, but ONLY in industrial sites or where the pavement has a suitable barrier along the perimeter that prevents encroachment of roots from desirable plants.

Imazapyr 2 SL should only be used where the area to be treated has been prepared according to good construction practices. Before application of **Imazapyr 2 SL,** rhizomes, stolons, tubers or vegetative plant parts should be removed from the treatment site by scalping with a grader blade to a depth sufficient to insure their complete removal.

IMPORTANT: Paving should follow **Imazapyr 2 SL** applications as soon as possible. **DO NOT** apply where the chemical may contact the roots of desirable trees or other plants.

This product is not recommended for use under pavement on residential properties such as driveways or parking lots, nor in recreational areas such as under bike or jogging paths, golf cart paths, tennis courts, or where landscape plantings could be anticipated. Injury or death of desirable plants may result if this product is applied where roots are present or where they may extend into the treated area. **NOTE** that roots of trees and shrubs may extend a considerable distance beyond the branch extremities; i.e., drip line.

APPLICATION DIRECTIONS FOR UNDER PAVED SURFACES:
Applications should be made to the soil surface only when final grade is established. **DO NOT** move soil following **Imazapyr 2 SL** application.

Apply **Imazapyr 2 SL** in at least 100 gal. water per acre to ensure thorough and uniform wetting of the soil surface, including the shoulder areas. Prepare spray solution by thoroughly mixing **Imazapyr 2 SL** at 6 pints per acre (2.2 fluid ounce per 1000 square feet) into clean water in the spray tank

If the soil is not moist before treatment, **Imazapyr 2 SL** should be incorporated into the soil to a depth of 4 to 6 inches using a roto-tiller or disc. Rainfall or irrigation of 1 inch will also provide uniform incorporation. **DO NOT** allow treated soil to wash or move from treated areas into untreated areas.

FOR CONTROL OF UNDESIRABLE WEEDS IN UNIMPROVED BERMUDAGRASS AND BAHIAGRASS

Imazapyr 2 SL may be used on established Common Bermudagrass, Coastal Bermudagrass and Bahiagrass turf on roadsides, utility rights-of-way and other non-cropland industrial sites to control the weeds listed below. Such treatment of Bermudagrass with **Imazapyr 2 SL** will result in a compacted growth habit and seedhead inhibition.

Uniformly apply **Imazapyr 2 SL** with properly calibrated ground equipment using at least 10 gallons of water per acre and a spray pressure 20 to 50 psi.

IMPORTANT: Temporary yellowing of grass may occur when treatment is made after growth commences. **DO NOT** add surfactant in excess of 1 oz. per 25 gallons of spray solution. **DO NOT** apply to grass during its first growing season. **DO NOT** apply to grass that is under stress from drought, disease, insects or other causes.

DOSAGE RATES AND TIMING:
Bermudagrass: Apply **Imazapyr 2 SL** at 6 to 12 oz. per acre when the Bermudagrass is dormant. Apply **Imazapyr 2 SL** at 6 to 8 oz. per acre after the Bermudagrass has reached full green-up. Applications made during green-up will delay green-up. Include a surfactant in the spray solution.

For broader spectrum or longer preemergence control of annual grasses and small seeded broadleaf weeds, add Pendulum® herbicide at 3.3 to 6.6 lbs. per acre. Consult the Pendulum® label for weeds controlled and for other use directions and precautions.

For control of Johnsongrass in Bermudagrass turf, apply **Imazapyr 2 SL** at 8 oz. per acre plus Roundup® herbicide

at 12 oz. per acre plus surfactant. For additional control of broadleaves and vines, add Garlon™ 3A to the above mix at 1-2 pints per acre. Observe all precautions and restrictions on the Garlon™ 3A and Roundup® labels.

Bahiagrass: Apply **Imazapyr 2 SL** at 4 to 8 oz. per acre when the Bahiagrass is dormant or after the grass has initiated green-up but has not exceeded 25% green-up. Include a surfactant in the spray solution (See **ADJUVANT** section for surfactant recommendations).

WEEDS CONTROLLED:
Bedstraw (*Galium* spp.)
Bishopweed (*Ptilimnium capillaceum*)
Buttercup (*Ranunculus parviflorus*)
Carolina geranium (*Geranium carolinianum*)
Fescue (*Festuca* spp.)
Foxtail (*Setaria* spp.)
Little barley (*Hordeum pusillum*)
Seedling Johnsongrass (*Sorghum halepense*)
Wild carrot (*Daucus carota*)
White clover (*Trifolium repens*)
Yellow woodsorrel (*Oxalis stricta*)

GRASS GROWTH AND SEEDHEAD SUPPRESSION

Imazapyr 2 SL will suppress growth and seedhead development of certain turfgrasses in unimproved areas. When applied to desirable turf, **Imazapyr 2 SL** may result in temporary turf damage and/or discoloration, depending on environmental conditions. For optimum performance, apply **Imazapyr 2 SL** before culm elongation, either before or after mowing. If applied before mowing, allow at least three days of active growth before mowing. If following a mowing, allow sufficient time for the grasses to recover before applying **Imazapyr 2 SL** or injury may be amplified.

DO NOT apply to turf under stress (drought, cold, insect damaged, etc.) or severe injury or death may occur.

Bermudagrass: Apply **Imazapyr 2 SL** at 6 to 8 oz. per acre from early green-up to prior to seed head initiation. **DO NOT** use a surfactant for this application.

Cool Season Unimproved Turf: Apply **Imazapyr 2 SL** at 2 oz. per acre plus 0.25% nonionic surfactant. For increased suppression, tank mix **Imazapyr 2 SL** with products such as Campaign® (24 oz. per acre) or Embark® (8 oz. per acre).

Tank-mixes may increase injury to desired turf. Consult each product label for recommended turf species, use directions and precautions. Tank mixes with products that contain 2,4-D may decrease the effectiveness of **Imazapyr 2 SL**.

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: DO NOT store below 10°F. **PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING:
Nonrefillable Container (five gallons or less): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.
Nonrefillable Container (greater than five gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its

other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Refillable Container: Refillable container. Refill this container with [common chemical name] only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK, OR FIRE), CALL INFOTRAC AT 1-800-535-5053.

LIMITATION OF WARRANTY AND LIABILITY

Read the entire directions for use, conditions of warranties and limitations of liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following **CONDITIONS**, **DISCLAIMER OF WARRANTIES,** and **LIMITATIONS OF LIABILITY**.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Makhteshim Agan of North America, Inc. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, Makhteshim Agan of North America, Inc. makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of Makhteshim Agan of North America, Inc. is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, Makhteshim Agan of North America, Inc. disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

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Embark is a registered trademark of PBI/Gordon Corporation.
Finale is a registered trademark of Bayer.
Vanquish is a trademark of a Syngenta Group Company.

EPA 042406

Imazapyr 2 SL (66222-166)(revised for RED 11-07-08)