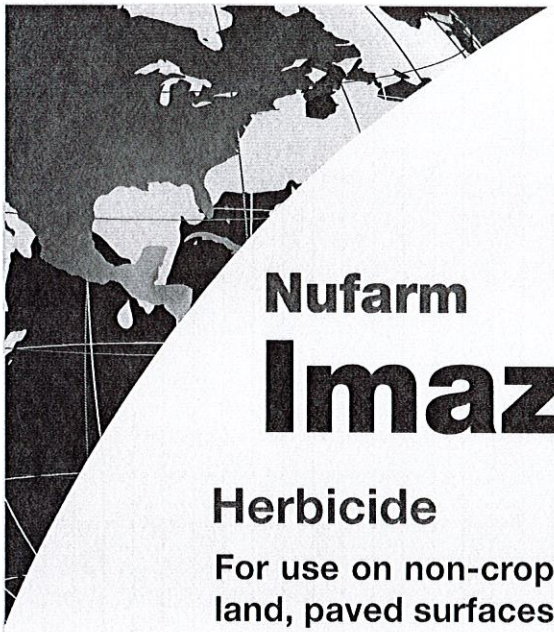

# Nufarm
# Imazapic 2SL

## Herbicide

**For use on non-crop, conservation reserve program (crp) land, paved surfaces, and pasture and rangeland**

**ACTIVE INGREDIENT:**

| | |
|---|---|
| Ammonium salt of imazapic (±)-2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1 *H* imidazol-2-yl]-5-methyl-3-pyridinecarboxylic acid* | 23.3% |
| **OTHER INGREDIENTS:** | 76.7% |
| **TOTAL:** | 100.0% |

*Equivalent to 21.9%(±)-2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1 *H*-imidazol-2-yl]5-methyl-3-pyridinecarboxylic acid

1 Gallon contains 2.0 Pounds of Active Ingredient as the Free Acid

**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 the label, find someone to explain it to you in detail.)

See inside booklet for FIRST AID and additional PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300.
For Medical Emergencies Only, Call (877) 325-1840.

EPA REG. NO. 71368-99

Manufactured for
Nufarm Inc.
150 Harvester Drive
Burr Ridge, IL 60527

Nufarm

## PRECAUTIONARY STATEMENT
## HAZARDS TO HUMANS AND DOMESTIC ANIMALS
## CAUTION / PRECAUCIÓN

Causes moderate eye irritation. Avoid breathing spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

### USER SAFETY RECOMMENDATIONS

**Users Should:**

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

| FIRST AID | |
|---|---|
| **IF IN EYES** | • Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.<br>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.<br>• Call a poison control center or doctor for treatment advice. |
| **IF INHALED** | • Move person to fresh air.<br>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.<br>• Call a poison control center or doctor for further treatment advice. |
| **IF ON SKIN OR CLOTHING** | • Take off contaminated clothing.<br>• Rinse skin immediately with plenty of water for 15 to 20 minutes.<br>• Call a poison control center or doctor for treatment advice. |
| **IF SWALLOWED** | • Call a poison control center or doctor immediately for treatment advice.<br>• Have person sip a glass of water if able to swallow.<br>• Do not induce vomiting unless told to do so by the poison control center or doctor.<br>• Do not give anything by mouth to an unconscious person. |

### 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 1-877-325-1840 for emergency medical treatment information.

## ENVIRONMENTAL HAZARDS

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 cleaning equipment or disposing of equipment washwaters or rinsate.

This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

## DIRECTIONS FOR USE

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

Read the entire label before using this product. Use strictly in accordance with label Use Directions, and adhere to all Precaution and Restriction statements and directions.

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.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 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 statement of this label about personal protective equipment (PPE) and restricted-entry interval (REI). The requirements in this box only apply to users of this product that are covered by the WPS.

Do not enter or allow worker entry into treated areas during the REI of 12 hours.

Exception: If the product is soil-injected or soil-incorporated, the WPS, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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, chemical-resistant gloves made of any waterproof material, and shoes plus socks.

### NON-AGRICULTURAL USE REQUIREMENTS

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

Noncrop weed control is not within the scope of the Worker Protection Standard. See the definition on this label of noncrop sites.

Do not enter or allow others to enter the treated area until sprays have dried.

## 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 determine 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 result in damage to sensitive plants adjacent to the treatment area. Only apply this product when the potential for drift to these and other adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for the threatened

or endangered species, 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.

To minimize spray drift, the applicator should be familiar with and take into account the following drift reduction advisory information. Additional information may be available from state enforcement agencies or the Cooperative Extension on the application of this product.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications:
1. The distance of the outer most operating nozzles on the boom must not exceed 3/4 the length of the rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downward more than 45 degrees.

Where states have more stringent regulations, they must be observed.

**Information on Droplet Size:** The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest 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 air stream produces larger droplets than other orientations and is the recommended practice. Significant deflection from 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.
- **Boom Length:** For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

**Application Height:** Making applications at the lowest height that is safe 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 upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, 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:** Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud 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 the 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.

**Sensitive Areas:** The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

**Wind Erosion:** Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surfaces should first be settled by rainfall or irrigation.

**Aerial Applications:** When aerial applications are permitted, aerial applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety.

## PRODUCT INFORMATION
## NONCROP AND CONSERVATION RESERVE PROGRAM (CRP) USES

For weed control and/or turf height suppression, mix with water and an adjuvant and spray it on non-cropland areas specified on this label, on grassland that may be grazed or cut for hay, which can include Federal Conservation Reserve Program (CRP) land released for grazing and haying, and on rangeland (see "Instructions for Rangeland Use" elsewhere in the label), and pasture grasses.

**This Product May Be Applied to the Following Noncropland Use Sites:**

- rights-of-way (railroad, utility, pipeline and highway)
- railroad crossings
- utility plant sites
- petroleum tank farms
- pumping installations
- non-agricultural fence rows
- storage areas
- non-irrigation ditch banks
- prairie sites
- airports
- turf areas (on industrial, golf courses, recreation and non-residential sites)

This product may be used for weed control in order to release certain legumes, wildflowers, native prairiegrass, Wheatgrass, "wildtype" common Kentucky Bluegrass, Smooth Bromegrass, Bahiagrass, Bermudagrass and other grasses.

For weed control during the establishment of native prairiegrass and other grasses, use this product as described in the "Revegetation with Prairiegrasses and other Forage Grasses" part of the label.

This product kills plants because the herbicide inhibits the activity of the enzyme acetohydroxy acid synthase (AHAS or ALS). Plant leaves, stems and roots readily absorb this product and translocate it throughout the plant where it accumulates in the meristematic tissue. Treated plants stop growing soon afterwards.

Chlorosis appears first in the newest leaves, and tissue death spreads from these points. It may require several days to several weeks for susceptible weeds to die. Knowing about the activity on the AHAS or ALS enzyme is important because some naturally occurring weed biotypes of labeled weeds may not be controlled by this product or other herbicides with the same inhibiting mode of action. If resistant weed biotypes are present in the field then this product and other herbicides with the same mode of action should be tank-mixed or applied sequentially with a registered herbicide with a different mode of action.

Soil moisture is critical for optimum weed control. With adequate soil moisture this product will provide residual control of susceptible germinating weeds. Control of established weeds is dependent on the weed species and depth of the root system. This product is rainfast within one hour after application.

This product can be applied preemergence or postemergence to control annual and perennial grasses, broadleaf weeds and vine species and provide control of labeled weeds which germinate in the treated area. Direct application to the foliage of certain brush species and ornamentals could lead to injury. The best weed control is achieved when this product is applied as a postemergence application, especially on perennial species. Since this product must be taken up by the plant and translocated to the meristematic tissue before it becomes effective, weeds should be actively growing at the time of postemergence applications. All spray solutions should include an adjuvant (see "Spray Adjuvants for Postemergence Applications" section of this label). Applications may be made as broadcast treatments with ground spray equipment or as spot treatments with backpack sprayers. Even though this product may be applied in the dormant or growing season, the weeds need to be actively growing for maximum control.

This product can cause injury to desirable grass species if the application is made to grasses that are under stress due to disease, insect damage and/or other causes. Some yellowing of desirable grasses may occur after an application of this product made during the growing season. This is dependent upon weather conditions and is usually short lived (2 to 4 weeks). Newly seeded or sprigged grass stands should not be treated with this product unless approved on this label (see "Revegetation with Prairiegrass and other Forage Grasses" section of this label) or authorized by Nufarm in a supplemental label.

**Precautions and Restrictions:**

1. Do not apply to residential lawns, and residential areas.
2. Desirable trees and ornamental plants can be injured if rinsate from spray equipment used to apply this product is allowed to wash or move into contact with plant roots.
3. Do not apply this product to the inside of irrigation ditches.
4. This product may be applied to non-irrigation ditches and low lying areas as long as water has drained.
5. Do not use in greenhouses.

**Precautions and Restrictions to Follow When Making Applications of This Product for Weed Control, Native Grass Establishment, and Grass Growth, Suppression on Pastures, Rangeland, and Noncrop Areas:**

- Do not use on food or feed crops except as specified on this or supplemental labeling provided by Nufarm.
- Do not cut treated area for hay within seven days after application.
- Do not use organophosphate insecticides on newly seeded areas treated with this product unless severe injury or loss of stand can be tolerated.
- Do not exceed 12 ounces of this product per acre in one year.
- When tank-mixing with other products, read and carefully follow all applicable use directions, precautions, restrictions, and limitations on the respective product labels. In interpreting the labels of tank-mixed products, the most restrictive label limitations must apply.