

#### U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs Registration Division (7505P) 1200 Pennsylvania Ave., N.W. Washington, D.C. 20460

34704-1167

EPA Reg. Number:

Date of Issuance:

10/20/20

# NOTICE OF PESTICIDE:

X Registration
Reregistration
(under FIFRA, as amended)

Term of Issuance: Conditional

Name of Pesticide Product:

LPI.A021

Name and Address of Registrant (include ZIP Code):

Robert Avalos Manager of Registrations Loveland Products, Inc. P.O. Box 1286 Greeley, CO 80632-1286

**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 under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

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 conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:

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

Continued on page 2

Signature of Approving Official:	Date:
Mindy Ondish	10/20/20
Mindy Ondish, Product Manager 23	
Herbicide Branch, Registration Division (7505P)	

- 2. You are required to comply with the data requirements described in the Generic Data Call-In (GDCI) identified below:
  - a. Clopyralid GDCI-117403-1454

You must comply with all of the data requirements within the established deadlines. If you have questions about the GDCI listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division: http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1

3. Submit one copy of the final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

The alternate brand name "Brawn EC" is noted for the product record.

Please also note that the record for this product currently contains the following CSF:

• Basic CSF dated 03/31/2020 (revised)

If you have any questions, please contact Endia Blunt by phone at 703-347-0788, or via email at Blunt.Endia@epa.gov.

Enclosure

Clopyralid Fluroxypyr GROUP 4 HERBICIDE

# **LPI.A021™**

[Alternate Brand Name: Brawn EC]

For Control of Annual and Perennial Broadleaf Weeds in Wheat, Barley, and Oats Not Underseeded with a Legume, Field Corn, Sweet Corn, Grasses Grown for Seed, Conservation Reserve Program (CRP) Acreage, and Non-Cropland

Active Ingredient:	(% by weight)
Clopyralid MEA Salt: 3,6-dichloro-2-pyridinecarboxylic acid, monoethanolamine salt*	11.3%
Fluroxypyr: 1-methylheptyl ester: ((4-amino-3,5-dichloro-6-fluoro-2-pyridinyl)oxy)	
acetic acid, 1-methylheptyl ester**	12.3%
Other Ingredients:	<u>76.4%</u>
Total	100.0%
Contains petroleum distillates	
Acid Equivalents:	
* Clopyralid: – 8.6% (0.75 lb/gal)	
** Fluroxypyr: – 8.6% (0.75 lb/gal)	

# 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 label booklet for First Aid, Precautionary Statements and Directions for Use.

EPA Reg. No. 34704-1167
EPA Est. No.
NET CONTENTS:
[Label ID Print Code]

# **Manufactured For:**

LOVELAND PRODUCTS, INC. P.O. BOX 1286 GREELEY, COLORADO 80632-1286 ACCEPTED

10/20/2020

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 34704-1167

# { LANGUAGE INSIDE BOOKLET}

FIRST AID	
If in eyes:	Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.
	• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
	Call a poison control center or doctor for treatment advice.
If	Immediately call a poison control center or doctor.
swallowed:	<ul> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> </ul>
	Do not give <b>any</b> liquid to the person.
	Do not give anything by mouth to an unconscious person.
NOTE TO PHYSICIAN	

Contains petroleum distillate. Vomiting may cause aspiration pneumonia.

#### **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 **844-685-9173** for emergency medical treatment information.

For Chemical Emergency
Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS & DOMESTIC ANIMALS CAUTION

Causes moderate eye irritation. Avoid contact with eyes, skin or clothing.

# PERSONAL PROTECTIVE EQUIPMENT (PPE):

# Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of barrier laminate ≥14 mils, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or Viton ≥14 mils.
- 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.

### **Engineering Controls**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agriculture pesticides 40 CFR 170.607(d-e), the handler PPE requirements may be reduced or modified as specified in the WPS

#### **USER SAFETY RECOMMENDATIONS**

#### Users should:

- Wash hands 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.
- 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.

#### **ENVIRONMENTAL HAZARDS**

This product is toxic to fish. Drift or runoff from treated areas may be hazardous to aquatic organisms and non-target plants. Do not apply directly to water, 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. Do not contaminate water used for irrigation or domestic purposes.

Clopyralid is a chemical which can travel (seep or leach) through soil and under certain conditions contaminate groundwater which may be used for irrigation or drinking purposes. Users are advised not to apply clopyralid where soils have a rapid to very rapid permeability throughout the profile (such as loamy sand to sand) and the water table of an underlying aquifer is shallow, or to soils containing sinkholes over limestone bedrock, severely fractured surfaces, and substrates which would allow direct introduction into an aquifer. Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater.

NON-TARGET ORGANISM ADVISORY STATEMENT: This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

# PHYSICAL AND CHEMICAL HAZARDS

Do not mix or allow contact with oxidizing agents. Hazardous chemical reaction may occur

#### **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 State or Tribal agency responsible for pesticide regulation.

#### **Important Restrictions**

- This product is persistent and may be present in plant materials for over 30 days after application. Do not use treated plant material or manure from animals that have grazed or consumed forage from treated areas for compost, mulch, or mushroom spawn until 30 days after application.
- Animals that have been fed fluroxypyr treated forage must be fed forage free of fluroxypyr for at least 3 days before they are moved off the treated property.

#### **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 intervals. 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 12 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 are:

- Coveralls
- Chemical-resistant gloves made of barrier laminate ≥14 mils, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or Viton ≥14 mils.
- 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 Worker Protection Standard 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.

**Entry Restrictions for Non-WPS Uses:** When applied to on-farm non-cropland, keep unprotected persons out of treated areas until sprays have dried.

#### WEED RESISTANCE MANAGEMENT

For resistance management, Fluroxypyr and clopyralid, the active ingredients in this product, are Group 4 herbicides. Any weed population may contain or develop plants naturally resistant to **LPI.A021** and other Group 4 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance take one or more of the following steps:

- Rotate the use of **LPI.A021** or other Group 4 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures from a different group if such use is permitted; where information on resistance
  in target weeds species is available, use the less resistance-prone partner at a rate that will control the
  target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service
  or certified crop advisor if you are unsure as to which active ingredient is currently less prone to
  resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses
  historical information related to herbicide use and crop rotation, and that considers tillage (or other
  mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application
  method and timing to favor the crop and not the weeds), biological (weed-competitive crops or
  varieties) and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method including hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of
  this product, and switch to another management strategy or herbicide with a different mode of action, if
  available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistancemanagement and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance contact Loveland Products, Inc. retailer, representative or call 1-888-574-2878. You can also contact your pesticide distributor or university extension specialist to report resistance.

# **Spray Drift Advisories**

#### THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.

#### BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

#### • IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

#### Controlling Droplet Size - Ground Boom

- Volume Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

# **Controlling Droplet Size - Aircraft**

Adjust Nozzles - Follow nozzle manufacturers recommendations for setting up nozzles.
 Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

#### BOOM HEIGHT - Ground Boom

For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### RELEASE HEIGHT - Aircraft

Higher release heights increase the potential for spray drift.

#### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

#### TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

#### • TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or 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. Avoid applications during temperature inversions.

### WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

# • Boom-less Ground Applications:

Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

# Handheld Technology Applications:

Take precautions to minimize spray drift.

#### **PRODUCT INFORMATION**

**LPI.A021** provides selective control of annual and perennial broadleaf weeds in wheat, barley, and oats not underseeded with a legume, field corn, sweet corn, grasses grown for seed, Conservation Reserve Program (CRP) acreage, and non-cropland.

#### **Precautions:**

- Avoid applications where proximity of susceptible crops or other desirable plants is likely to result in exposure to spray or spray drift.
- Many forbs (desirable broadleaf forage plants) are susceptible to this product. Do not spray CRP or noncropland containing desirable forbs, especially legumes, unless injury can be tolerated.
- Field Bioassay Instructions: In fields previously treated with this product, plant short test rows of the intended rotational crop across the original direction of application in a manner to sample variability in field conditions such as soil texture, soil organic matter, soil pH, or drainage. The field bioassay can be initiated at any time between harvest of the treated crop and the planting of the intended rotational crop. Observe the test crop for herbicidal activity, such as poor stand (effect on seed germination), chlorosis (yellowing), and necrosis (dead leaves or shoots), or stunting (reduced growth). If herbicidal symptoms do not occur, the test crop can be grown. If there is apparent herbicidal activity, do not plant the field to the test rotational crop; plant only a labeled crop or crop listed in the table below for which the rotational interval has clearly been met.

#### **Restrictions:**

- Do not apply this product directly to, or allow spray drift to come in contact with broadleaf crops or other susceptible broadleaf plants, including, but not limited to, alfalfa, canola, beans, cotton, flowers, grapes, lettuce, lentils, mustard, peas, potatoes, radishes, soybeans, sugar beets, sunflowers, tobacco, tomatoes, vegetables, or other desirable broadleaf crops or ornamental plants or soil where sensitive crops will be planted the same season.
- Do not contaminate irrigation ditches or water used for domestic purposes.
- **Chemigation:** Do not apply this product through any type of irrigation system.
- Do not transfer livestock from treated grazing areas (or feed treated hay) to sensitive broadleaf crop areas without first allowing 7 days of grazing on an untreated pasture (or feeding of untreated hay). If livestock are transferred within less than 7 days of grazing untreated pasture or eating untreated hay, urine and manure may contain enough clopyralid to cause injury to sensitive broadleaf plants.
- Do not use on newly seeded areas until grass is well established as indicated by vigorous growth and development of tillers and secondary roots.

# **Crop Rotation Intervals**

Residues of **LPI.A021** in treated plant tissues, including the treated crop or weeds, which have not completely decayed may affect succeeding susceptible crops.

Crop Rotation Intervals for All States Except California, Idaho, Nevada, Oregon, Utah and Washington

Rotation Crops <sup>1</sup>	Rotation Interval <sup>†</sup>
barley, grasses, field corn, oats, sweet corn, wheat	Anytime
canola (rapeseed), cole crops (Brassica species), flax, garden beet, popcorn, spinach,	
sugarbeet, turnip	120 days
alfalfa, asparagus, dry beans, field peas <sup>2</sup> , grain sorghum, mint, onions, safflower, soybeans,	
strawberries, sunflower	10.5 months
chickpeas, lentils, potatoes (including potatoes grown for seed), and broadleaf crops grown for	
seed (excluding Brassica species)	18 months

<sup>&</sup>lt;sup>1</sup> A field bioassay is recommended prior to planting any broadleaf crops that are not listed. Do not rotate to unlisted crops prior to 10.5 months following application.

<sup>&</sup>lt;sup>2</sup> For rotation to field peas in 10.5 months, precipitation must be greater than 7.0 inches during the 10.5 months following application of this product and greater than 5.5 inches during the June 1 through August 31 time period following application. Otherwise, rotation to field peas is recommended 18 months following application.

#### Crop Rotation Intervals for California, Idaho, Nevada, Oregon, Utah and Washington Only

Rotation Crops <sup>1</sup>	Rotation Interval <sup>†</sup>
barley, grasses, field corn, oats, sweet corn, wheat	Anytime
canola (rapeseed), cole crops (includes Brassica species grown for seed), flax, garden beet,	
popcorn, spinach, sugarbeet, turnip	120 days
alfalfa, asparagus, dry beans, grain sorghum, soybeans, mint, onions, strawberries, sunflower	12 months
broadleaf crops grown for seed (excluding <i>Brassica</i> species), carrots, celery, chickpeas, cotton,	
field peas, lentils, lettuce, melons, potatoes (including potatoes grown for seed), safflower,	
and tomatoes	18 months

<sup>&</sup>lt;sup>1</sup> A field bioassay is recommended prior to planting any broadleaf crops that are not listed. Do not rotate to unlisted crops prior to 12 months following application.

#### **AVOIDING INJURY TO NON-TARGET PLANTS**

This product can affect susceptible broadleaf plants directly through foliage and indirectly by root uptake from treated soil. Do not apply this product directly to, or allow spray drift to come in contact with broadleaf crops, including, but not limited to alfalfa, canola, beans, cotton, flowers, grapes, lettuce, lentils, mustard, peas, potatoes, radishes, soybeans, sugar beets, sunflowers, tobacco, tomatoes, vegetables, or other desirable broadleaf crops or ornamental plants or soil where sensitive crops will be planted the same season. (See guidance in section entitled "Crop Rotation Intervals".)

#### **Residues in Plants or Manure:**

Do not use plant residues, including hay or straw from treated areas, or manure or bedding straw from animals that have grazed or consumed forage from treated areas, for composting or mulching, where susceptible plants may be grown the following season. Do not spread manure from animals that have grazed or consumed forage or hay from treated areas on land used for growing susceptible broadleaf crops. To promote herbicidal decomposition, plant residues should be evenly incorporated or burned. Breakdown of clopyralid in crop residues or manure is more rapid under warm, moist soil conditions and may be enhanced by supplemental irrigation.

#### **Avoid Movement of Treated Soil:**

Avoid conditions under which soil from treated areas may be moved or blown to areas containing susceptible plants. Wind-blown dust containing clopyralid may produce visible symptoms, such as epinasty (downward curving or twisting of leaf petioles or stems) when deposited on susceptible plants; however, serious injury is unlikely. To minimize potential movement of clopyralid on wind- blown dust, avoid treatment of powdery dry or light sandy soils until soil has been settled by rainfall or irrigation or irrigate shortly after application.

# PRECAUTIONS FOR AVOIDING SPRAY DRIFT

Spray drift, even very small quantities of the spray that may not be visible, may severely injure susceptible crops whether dormant or actively growing. When applying **LPI.A021**, use low-pressure equipment capable of producing sprays of uniform droplet size with a minimum of fine spray droplets. Under adverse weather conditions, fine spray droplets that do not settle rapidly onto target vegetation may be carried a considerable distance from the treatment area. A drift control or spray thickening agent may be used with this product to improve spray deposition and minimize the potential for spray drift. If used, follow all use instructions, restrictions and precautions on the product label.

**Ground Applications:** To minimize spray drift, apply **LPI.A021** in a total spray volume of 10 gallons or more per acre using spray equipment designed to produce large-droplet, low pressure sprays. Refer to the spray equipment

<sup>†</sup> **Note:** The above crop rotation intervals are based on average annual precipitation, regardless of irrigation practices. Observance of stated crop rotation intervals should result in adequate safety to rotational crops. However, this product is dissipated in the soil by microbial activity and the rate of microbial activity is dependent on several interrelating factors including soil moisture, temperature and organic matter. Therefore, accurate prediction of rotational crop safety is not possible. In areas of low organic matter (<2.0%) and less than 15 inches average annual precipitation, potential for crop injury may be reduced by burning or removal of plant residues, supplemental fall irrigation and deep moldboard plowing prior to planting the sensitive crop.

manufacturer's recommendations for detailed information on nozzle types, arrangement, spacing and operating height and pressure. Spot treatments should be applied only with a calibrated boom to prevent over application. Operate equipment at spray pressures no greater than is necessary to produce a uniform spray pattern. Operate the spray boom no higher than is necessary to produce a uniformly overlapping pattern between spray nozzles.

#### Restriction

• Do not apply with hollow cone-type insecticide nozzles or other nozzles that produce a fine-droplet spray.

#### **Aerial Application:**

To minimize spray drift, apply **LPI.A021** in a total spray volume of 3 gallons or more per acre. Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high potential for temperature inversion. Spray drift from aerial application can be minimized by applying a coarse spray at spray boom pressure no greater than 30 psi; by using straight-stream nozzles directed straight back; and by using a spray boom no longer than 3/4 the rotor or wing span of the aircraft. Spray pattern and droplet size distribution can be evaluated by applying sprays containing a water-soluble dye marker or appropriate drift control agents over a paper tape (adding machine tape). Mechanical flagging devices may also be used.

Do not apply under conditions of a low level air temperature inversion. A temperature inversion is characterized by little or no wind and lower air temperature near the ground than at higher levels. The behavior of smoke generated by an aircraft mounted device or continuous smoke column released at or near site of application will indicate the direction and velocity of air movement. A temperature inversion is indicated by layering of smoke at some level above the ground and little or no lateral movement.

#### 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. The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

- The distance of the outer most nozzles on the boom must not exceed 75% the length of the wingspan or 90% of rotor width.
- Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.
- Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the "Spray Drift Advisories" section.

#### **Sprayer Clean-Out:**

To avoid injury to desirable plants, equipment used to apply this product should be thoroughly cleaned before reusing to apply any other chemicals.

- 1. Rinse and flush application equipment thoroughly at least 3 times with water after use. Dispose of rinse water by application to treatment area or in non-cropland area away from water supplies.
- 2. During the second rinse, add 1 quart of household ammonia for every 25 gallons of water. Circulate the solution through the entire system so that all internal surfaces are contacted (15 to 20 minutes). Let the solution stand for several hours, preferably overnight.
- 3. Flush the solution out of the spray tank through the boom.
- 4. Rinse the system twice with clean water, recirculating and draining each time.
- 5. Remove nozzles and screens and clean separately

#### **MIXING INSTRUCTIONS**

Allow time for thorough mixing of each spray ingredient before adding the next. If allowed to stand after mixing,

agitate spray mixture before use.

- 1. Fill spray tank with water equal to 1/2 to 3/4 of the required spray volume and start agitation.
- 2. Add the required amount of **LPI.A021**.
- 3. Add any surfactants, adjuvants or drift control agents according to manufacturer's label.
- 4. Agitate during final filling of the spray tank and maintain sufficient agitation during application to ensure uniformity of the spray mixture.

#### Tank Mixing:

This product may be applied in tank mix combination with labeled rates of other products provided (1) the tank mix product is labeled for the timing and method of application for the use site to be treated; and (2) tank mixing with products containing fluroxypyr or clopyralid is not prohibited by the label of the tank mix product. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

#### **Tank Mixing Precautions:**

- Read carefully and follow all applicable use directions, precautions, and limitations on the respective product labels.
- Prior to final use, perform a (jar) test to verify the compatibility of tank mix partner products (see instructions below).

# **Tank Mixing Restrictions:**

- Do not exceed labeled application rates.
- Do not tank mix with another pesticide product that contains the same active ingredient as this product unless the label of either tank mix partner specifies the maximum dosages that may be applied.
- For products packaged in water soluble packaging, do not tank mix with products containing boron or mix in equipment previously used to apply a product mixture containing boron unless the tank and spray equipment has been adequately cleaned. (See instructions for "Sprayer Clean-Out".)

# **Tank Mix Compatibility Testing:**

The following jar test is recommended prior to tank mixing to ensure the compatibility of this product with other tank mix partner products:

- 1. Mix the desired tank mix ingredients in their relative proportions in a clear glass quart jar with lid.
- 2. Invert the jar containing the mixture several times and observe the mixture for approximately 1/2 hour.
- 3. If the mixture balls-up, forms flakes, sludges, gels, oily films or layers, or other precipitates, it is not compatible and the tank mix combinations should not be used.

#### **Tank Mixing Instructions:**

Fill spray tank with water to 1/2 to 3/4 of the required spray volume. Start agitation. Add different formulation types in the order indicated, allowing time for complete mixing and dispersion after addition of each.

- 1. Add dry flowables; wettable powders; aqueous suspensions, flowables or liquids.
- 2. Maintain agitation and fill spray tank to 3/4 of total spray volume and then add **LPI.A021** and other emulsifiable concentrates and any solutions.

Finish filling the spray tank. Maintain continuous agitation during mixing, final filling and throughout application. If spraying and agitation must be stopped before the spray tank is empty, the materials may settle to the bottom. Settled materials must be resuspended before spraying is resumed. A sparger agitator is particularly useful for this purpose. Settled material may be more difficult to resuspend than when originally mixed.

### **APPLICATION DIRECTIONS**

# **Application Timing:**

Apply to actively growing weeds. Extreme growing conditions such as drought or near freezing temperatures prior to, at, or following application may reduce weed control and increase the risk of crop injury at all stages of growth. Only weeds that have emerged at the time of application will be controlled. If foliage is wet at the time of

application, control may be decreased. Applications of LPI.A021 are rainfast within 6 hours after application.

#### **Effect of Temperature on Herbicidal Activity:**

Herbicidal activity of **LPI.A021** is influenced by weather conditions. Optimum activity requires active plant growth. The temperature range for optimum herbicidal activity is 55°F to 75°F. Reduced activity will occur when temperatures are below 45°F or above 85°F. Frost before application (3 days) or shortly after (3 days) may reduce weed control and crop tolerance.

#### **Application Rates:**

Generally, application rates at the lower end of the labeled rate range will be satisfactory for young, succulent growth of susceptible weed species. For less sensitive species, perennials, and under conditions where control is more difficult (plant stress conditions such as drought or extreme temperatures, dense weed stands and/or larger weeds), the higher rates within the rate range will be needed. Weeds in fallow land or other areas where competition from crops is not present will generally require higher rates for control or suppression.

#### **Spray Coverage:**

Use sufficient spray volume to provide thorough coverage and a uniform spray pattern. Do not broadcast apply in less than 3 gallons of total spray volume per acre. For best results and to minimize spray drift, apply in a spray volume of 10 gallons or more per acre. As vegetative canopy and weed density increase, spray volume should be increased to obtain equivalent weed control. Use only nozzle types and spray equipment designed for herbicide application. To reduce spray drift, follow precautions under "Avoiding Injury to Non-Target Plants."

#### Adjuvants:

Generally, this product does not require the use of an adjuvant to achieve satisfactory weed control. However, the addition of an adjuvant may optimize herbicidal activity when applications are made (a) at lower use rates or lower carrier volumes, (b) under conditions of cool temperature, low relative humidity or drought, or (c) to small, heavily pubescent kochia.

#### **Use with Sprayable Liquid Fertilizer Solutions:**

**LPI.A021** is compatible with most non-pressurized liquid fertilizer solutions; however, if liquid fertilizer solutions are to be applied with this product, a compatibility test (jar test) should be made prior to mixing. Jar tests are particularly important when a new batch of fertilizer or pesticide is used, when the water source changes, or when tank mixture ingredients or concentrations are changed. A compatibility test is performed by mixing the spray components (in the desired order and proportions) into a clear glass jar before mixing in the spray tank. Use of a compatibility aid may help obtain and maintain a uniform spray solution during mixing and application. Agitation in the spray tank must be vigorous to compare with jar test agitation. For best results, liquid fertilizer should not exceed 50% of the total spray volume. Premix this product with water and add to the liquid fertilizer/water mixture while agitating contents of the spray tank. Apply the spray the same day it is prepared while maintaining continuous agitation.

#### **Precaution:**

• Foliar-applied liquid fertilizers, used as a carrier for this product, can cause yellowing or leaf burn of crop foliage.

# **Spot Treatments:**

To prevent misapplication, it is recommended that spot treatments be applied only with a calibrated boom or with hand sprayers according to directions provided below.

#### Hand-Held Sprayers:

Hand-held sprayers may be used for spot applications. Care should be taken to apply the spray uniformly and at a rate equivalent to a broadcast application. Application rates in the table are based on an area of 1000 sq. ft. Mix the amount of **LPI.A021** (fl. oz. or ml) corresponding to the desired broadcast rate in 1 or more gallons of spray. To calculate the amount of **LPI.A021** required for larger areas, multiply the table value (fl. oz. or ml) by the area to be treated in "thousands" of square feet, e.g., if the area to be treated is 3,500 sq. ft., multiply the table value by 3.5 (calc.  $3,500 \div 1,000 = 3.5$ ). An area of 1000 sq. ft. is approximately 10.5 x 10.5 yards (strides) in size.

Amount of LPI.A021 per Gallon of Spray Equal to Specified Broadcast Rate	
1.0 pt/acre	1.33 pt/acre
0.375 fl. oz.	0.50 fl. oz.
(11 ml)	(15 ml)

1 fl. oz. = 29.6 (30) ml

# **Broadleaf Weeds Controlled or Suppressed**

#### Weeds Controlled

Alfalfa, volunteer (from seed) Flax, volunteer Nightshade, Eastern black<sup>5</sup> Nightshade, hairy<sup>5</sup> Artichoke, Jerusalem<sup>1</sup> Galinsoga Beans, volunteer Peas, volunteer Grape species Bedstraw (cleavers)<sup>2</sup> Groundsel, common Puncturevine Buckwheat, wild3 Hawksbeard, narrowleaf Purslane, common Burdock, common Hawkweed, orange Ragweed, common<sup>1</sup> Chamomile, false (scentless) Hawkweed, yellow Ragweed, giant<sup>1</sup>

Chamomile, mayweed (dogfennel) Hemp dogbane Salsify, meadow (goatsbeard)

Horseweed (marestail) Chickweed Sicklepod Sorrel, red Clover, black medic Jimsonweed<sup>1</sup> Clover, hop Kochia<sup>4</sup> Sowthistle, annual Clover, red Lentils, volunteer Starthistle, yellow Clover, sweet Lettuce, prickly Sunflower<sup>1</sup> Clover, white Locoweed, Lambert Teasel, common

Cocklebur, common<sup>1</sup>

Cocklebur, common<sup>1</sup>

Coffeeweed

Cornflower (bachelor button)

Daisy, oxeye

Dandelion

Locoweed, tambert

Treaser, common<sup>1</sup>

Reaser, common<sup>1</sup>

Thistle, bull

Thistle, Canada<sup>6</sup>

Thistle, musk

Velvetleaf

Velvetleaf

Vetch

Dock, curly Nightshade, cutleaf<sup>5</sup> Wormwood, biennial

**Weeds Suppressed** 

Alfalfa, volunteer (from perennial Knotweed Pineappleweed

plants)

Bindweed, field Ladysthumb<sup>5</sup> Potato, volunteer
Buffalobur<sup>5</sup> Mallow, common Smartweed, green<sup>5</sup>

Canola, volunteer Field horsetail Knapweed, Russian

**Suppression** is expressed as a reduction in weed competition (reduction population or vigor) as compared to untreated areas. The degree of weed control and duration of effect may vary with weed size, density, application rate, coverage, and growing conditions before, during and after treatment.

#### **Perennial Weeds:**

**LPI.A021** will control the initial top growth and inhibit regrowth during the season of application (season-long control). At higher use rates shown on this label, this product may cause a reduction in shoot regrowth in the season following application; however, plant response may be inconsistent due to inherent variability in shoot regrowth from perennial root systems.

<sup>&</sup>lt;sup>1</sup> For best control, apply up to 5 leaf stage of growth.

<sup>&</sup>lt;sup>2</sup> For best control, apply in the 1 to 4 leaf "whorl" stage of growth.

<sup>&</sup>lt;sup>3</sup> For best control, apply in the 1 to 3 leaf stage of growth, before vining.

<sup>&</sup>lt;sup>4</sup> Includes herbicide tolerant or resistant biotypes. Best control is achieved when weeds are at least 1 inch tall.

<sup>&</sup>lt;sup>5</sup> For best control or suppression, apply at the 2 to 4 leaf stage of growth.

<sup>&</sup>lt;sup>6</sup> For best control or suppression, apply from rosette to bud (pre-flower) stage of growth.

#### **Management of Kochia Biotypes:**

Research has suggested that many biotypes of kochia can occur within a single field. While kochia biotypes can vary in their susceptibility to this product, all will be suppressed or controlled by the 1 pint per acre labeled rate. Application of this product at rates below the 1 pint per acre rate can result in a shift to more tolerant biotypes within a field.

# **Best Resistance Management Practices:**

Extensive populations of dicamba tolerant kochia have been identified in certain small grain and corn production regions (such as Chouteau, Fergus, Liberty, Toole, and Treasure counties in the state of Montana). For optimal control of dicamba tolerant kochia in these counties, apply **LPI.A021** at a minimum rate of 1.33 pint per acre. In addition, use of **LPI.A021** should be rotated with products that do not contain dicamba to minimize selection pressure. Use of these practices will preserve the utility of this product for control of dicamba tolerant kochia biotypes.

#### **CROP USES**

# WHEAT (INCLUDING DURUM), BARLEY, OATS

# **Application Timing:**

Apply as a broadcast postemergence treatment to actively growing wheat, barley or oats, from the 3 leaf crop growth stage up to and including flag leaf emergence (Zadoks scale 39) for control of listed broadleaf weeds. Apply when weeds are actively growing, but before weeds are 4 inches tall or vining. To obtain season-long control of perennial weeds such as Canada thistle, apply when the majority of the basal leaves have emerged from the soil up to bud stage. For suppression of volunteer potatoes, apply before potato plants are 6 inches tall.

#### **Spot Application:**

Spot applications may be made; however, to prevent over-application spot treatments should be applied at rates and spray volumes equivalent to broadcast application. See instructions for "Spot Application" in "Application Directions" section.

#### **Broadcast Application Rates**

Weed Size or Species <sup>1</sup>	Application Rate (pt/acre)
susceptible broadleaf weed seedlings less than 4 inches tall <sup>2</sup>	1.0
susceptible broadleaf weed seedlings less than 8 inches tall or vining; dicamba tolerant kochia biotypes	1.33
volunteer potatoes, mayweed chamomile (dog fennel), pineappleweed	1.33

<sup>&</sup>lt;sup>1</sup> See "Weeds Controlled or Suppressed" section for a complete listing of weeds controlled or suppressed.

# Tank Mixtures for Wheat (including Durum), Barley, Oats:

**LPI.A021** may be applied in tank mix combination with labeled rates of other products registered for postemergence application in wheat, barley, and oats. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. See "Tank Mixing Precautions" under "Mixing Instructions".

#### **Precautions:**

<sup>&</sup>lt;sup>2</sup> A rate of 1 pint per acre will provide satisfactory control of kochia seedlings less than 4 inches tall (including ALS resistant biotypes). However, when conditions for control are less favorable, such as under drought or cool temperatures, a rate of 1.33 pints per acre will provide more consistent control of kochia seedlings 1 to 4 inches tall. Control of small kochia will be more consistent if kochia is at least 1 inch tall. A rate of 1.33 pints per acre should be used for optimal control of dicamba tolerant kochia populations (see "Management of Kochia Biotypes" in the "Broadleaf Weeds Controlled" section above).

- Only weeds emerged at the time of application will be controlled.
- Extreme growing conditions such as drought or near freezing temperatures prior to, at, and following time of application may reduce weed control and increase the risk of crop injury at all stages of growth.

#### **Restrictions:**

- Do not apply more than 1.33 pint of this product per acre per growing season.
- Do not allow livestock to graze treated areas or harvest treated forage within 7 days of application.
- **Preharvest Interval:** Do not apply closer than 14 days before cutting of hay or 40 days before harvesting of grain and straw.
- Do not use if cereal crop is underseeded with a legume.
- When tank mixing, do not exceed label application rates.

#### **GRASSES GROWN FOR SEED**

# **Application Timing:**

Apply to established grasses in the spring from the tiller stage prior to early boot stage. New grass seed plantings may be treated from the 2 true leaf stage to just before early boot stage of growth. Applications in the boot stage and beyond can result in increased potential for injury. Apply when weeds are actively growing, but before weeds are 4 inches tall or vining. For control of late-emerging Canada thistle or kochia, a preharvest treatment may be made after grass seed fully developed. Treatment of Canada thistle at the bud stage or later, or treatment of kochia greater than 8 inches tall may result in less consistent control. Post-harvest treatments in the fall may be made to actively growing Canada thistle after the majority of basal leaves have emerged.

**Broadcast Application Rates** 

Weed Size or Species <sup>1</sup>	Application Rate (pt/acre)
susceptible broadleaf weed seedlings less than 4 inches tall <sup>2</sup>	1.0
susceptible broadleaf weed seedlings less than 8 inches tall or vining; dicamba tolerant kochia biotypes	1.33
volunteer potatoes, mayweed chamomile (dog fennel), pineappleweed	1.33

<sup>&</sup>lt;sup>1</sup> See "Weeds Controlled or Suppressed" section for a complete listing of weeds controlled or suppressed. In newly seeded grass stands with minimal crop competition, mayweed (dog fennel) and pineappleweed may not be adequately controlled.

# Retreat as necessary, but do not exceed 2.66 pints per acre per growing season.

#### **Tank Mixtures for Grasses Grown for Seed:**

This product may be tank mixed with 2,4-D, MCPA, dicamba, or bromoxynil to control additional broadleaf weeds. Refer to the manufacturer's label for use rates and tank mix guidelines. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. See "Tank Mixing Precautions" under "Mixing Instructions".

#### **Precautions:**

- Dicamba or bromoxynil tank mixes may be useful in broadening the annual weed control spectrum, but may reduce long-term control of perennials such as Canada thistle.
- Do not tank mix this product with 2,4-D, MCPA, or dicamba unless the risk to crop injury is acceptable.

<sup>&</sup>lt;sup>2</sup> A rate of 1 pint per acre will provide satisfactory control of kochia seedlings less than 4 inches tall (including ALS resistant biotypes). However, when conditions for control are less favorable, such as under drought or cool temperatures, a rate of 1.33 pints per acre will provide more consistent control of kochia seedlings 1 to 4 inches tall. Control of small kochia will be more consistent if kochia is at least 1 inch tall. A rate of 1.33 pints per acre should be used for optimal control of dicamba tolerant kochia populations (see "Management of Kochia Biotypes" in the "Broadleaf Weeds Controlled" section above).

#### **Restrictions:**

- Do not exceed 2.66 pints per acre per growing season.
- Do not apply to bentgrass unless injury can be tolerated.
- Grazing restrictions: There are no grazing restrictions for lactating or non-lactating dairy animals.
- Harvest restrictions: Do not harvest grass for hay or silage from treated areas within 7 days of application.
- **Slaughter restrictions:** Meat animals must be withdrawn from treated forage at least 2 days before slaughter.
- When tank mixing, do not exceed label application rates.

#### **FIELD CORN**

#### **Application Timing:**

Apply as a broadcast or band treatment to field corn up to, and including, 5 fully exposed leaf collars (V5 growth stage). Applications to field corn beyond the V5 growth stage should be made as a directed spray using drop nozzles (see "Crop Tolerance Precaution" below). Apply when broadleaf weeds are actively growing, but before weeds are 8 inches tall. To obtain season-long control of perennial weeds such as Canada thistle, apply after the majority of the weed's basal leaves have emerged up to bud stage. If wild buckwheat is present, apply before vining stage of growth.

# **Broadcast Application Rates**

Weed Size or Species <sup>1</sup>	Application Rate (pt/acre)
susceptible broadleaf weed seedlings less than 8 inches tall or vining; dicamba tolerant kochia biotypes <sup>2</sup>	1.33
volunteer potatoes	1.33

<sup>&</sup>lt;sup>1</sup> See "Weeds Controlled or Suppressed" section for a complete listing of weeds controlled or suppressed.

# **Options for Suppression or Control of Volunteer Potatoes:**

- **Pre-Plant Application (Suppression):** Apply 1.33 pints per acre prior to planting when the majority of volunteer potato plants are 4 to 8 inches tall. For best results, leave soil undisturbed and plant field corn two weeks following application.
- **Post emergence Application (Suppression):** Apply 1.33 pints per acre when the majority of volunteer potato plants are 4 to 8 inches tall.
- **Pre-Plant and Postemergence Application (Control):** To control heavy populations of volunteer potato, a pre-plant application of 1.33 pints per acre of this product may be followed by a postemergence application of 1.33 pints per acre.

# **Crop Tolerance Precaution:**

Crop injury (stem curvature, stunting and brace root injury) may occur with some corn hybrids or lines when **LPI.A021** is applied as a broadcast treatment. Hybrids or lines that are susceptible to phenoxy injury may also be susceptible to injury from this product. Use of dicamba or 2,4-D (tank mixed or applied sequentially) may increase the potential for injury. Consult current seed corn company herbicide management guidelines for further information.

#### **Tank Mixtures for Field Corn:**

**LPI.A021** may be applied alone or in tank mix combination with other herbicides registered for preemergence or post emergence application in field corn unless tank mixing is specifically prohibited by the label of the tank mix product. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each

<sup>&</sup>lt;sup>2</sup> A rate of 1.33 pints per acre will provide satisfactory control of kochia seedlings less than 8 inches tall (including ALS resistant biotypes). Control of small kochia will be more consistent if kochia is at least 1 inch tall. A rate of 1. 33 pints per acre should be used for optimal control of dicamba tolerant kochia populations (see "Management of Kochia Biotypes" in the "Broadleaf Weeds Controlled" section above).

product in the tank mixture. See "Tank Mixing Precautions" under "Mixing Instructions". Refer to "Crop Tolerance Precaution" (above) for additional information regarding combinations with dicamba or 2,4-D. If an adjuvant is added to the spray mixture as a requirement of the tank mix partner, follow label directions for both the tank mix partner and the adjuvant product.

#### **Precaution:**

Only weeds emerged at the time of application will be controlled or suppressed.

#### **Restrictions:**

- Do not make more than two applications or apply more than 2.66 pints per acre per crop season.
- Do not allow livestock to graze treated areas or harvest treated forage within 47 days of application.
- Do not broadcast apply to field corn with 6 fully exposed leaf collars (V6 growth stage).
- Preharvest Interval: Do not apply less than 90 days before harvest of grain and stover.
- **Pre-Plant and Postemergence Application (Control) Volunteer Potatoes:** Do not exceed two applications per season.

#### **SWEET CORN**

#### **Application Timing:**

Apply as a broadcast or band treatment to sweet corn up to, and including, 4 fully exposed leaf collars (V4 growth stage). Applications to sweet corn beyond the V4 growth stage should be made as a directed spray using drop nozzles (see "Crop Tolerance Precaution" below). Apply when broadleaf weeds are actively growing, but before weeds are 8 inches tall. To obtain season-long control of perennial weeds such as Canada thistle, apply after the majority of the weed's basal leaves have emerged up to bud stage. If wild buckwheat is present, apply before vining stage of growth.

#### **Broadcast Application Rates**

Weed Size or Species <sup>1</sup>	Application Rate (pt/acre)
susceptible broadleaf weed seedlings less than 8 inches tall or vining; dicamba tolerant kochia biotypes <sup>2</sup>	1.33
volunteer potatoes	1.33

<sup>&</sup>lt;sup>1</sup> See "Weeds Controlled or Suppressed" section for a complete listing of weeds controlled or suppressed.

#### **Options for Suppression or Control of Volunteer Potatoes:**

- **Pre-plant Application (Suppression):** Apply 1.33 pints per acre prior to planting when the majority of volunteer potato plants are 4 to 8 inches tall. For best results, leave soil undisturbed and plant sweet corn two weeks following application.
- **Post emergence Application (Suppression):** Apply 1.33 pints per acre when the majority of volunteer potato plants are 4 to 8 inches tall.
- **Pre-Plant and Postemergence Application (Control):** To control heavy populations of volunteer potato, a pre-plant application of 1.33 pints per acre of this product may be followed by a postemergence application of 1.33 pints per acre.

#### **Crop Tolerance Precaution:**

All sweet corn hybrids have not been screened for tolerance to **LPI.A021**. Crop injury (stem curvature, stunting and brace root injury) may occur with some corn hybrids or lines when **LPI.A021** is applied as a broadcast treatment. Take particular care to manage for environmental conditions such as unfavorable combinations of temperature and humidity. Hybrids or lines that are susceptible to phenoxy injury may also be susceptible to injury from this product. Consult current seed corn company herbicide management guidelines for further information.

<sup>&</sup>lt;sup>2</sup> A rate of 1.33 pints per acre will provide satisfactory control of kochia seedlings less than 8 inches tall (including ALS resistant biotypes). Control of small kochia will be more consistent if kochia is at least 1 inch tall. A rate of 1.33 pints per acre should be used for optimal control of dicamba tolerant kochia populations (see "Management of Kochia Biotypes" in the "Broadleaf Weeds Controlled" section above).

#### **Tank Mixtures for Sweet Corn:**

**LPI.A021** may be applied alone or in tank mix combination with other herbicides registered for preemergence or post emergence application in sweet corn unless tank mixing is specifically prohibited by the label of the tank mix product. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. See "Tank Mixing Precautions" under "Mixing Instructions".

#### **Use of Spray Adjuvants in Tank Mixes:**

The addition of spray adjuvants is not recommended when applying this product alone. Use of an adjuvant may increase effectiveness on weeds but may reduce selectivity to the crop, particularly under conditions of plant stress such as drought or cold temperatures. If an adjuvant is added to the spray mixture as a requirement of a tank mix partner, follow all manufacturer guidelines.

#### **Precautions:**

- Only weeds emerged at the time of application will be controlled or suppressed.
- Do not apply this product in combination with crop oil concentrates, petroleum-based oils or methylated seed oils unless the risk of injury is acceptable.

#### **Restrictions:**

- Do not make more than two applications or apply more than 2.66 pints per acre per crop season.
- Do not allow livestock to graze treated areas or harvest treated forage within 31 days of application.
- Do not broadcast apply to sweet corn with 5 fully exposed leaf collars (V5 growth stage).
- Preharvest Interval: Do not apply less than 31 days before harvest of grain and stover.
- Pre-Plant and Postemergence Application (Control) Volunteer Potatoes: Do not exceed two applications
  per season.

# **NON-CROP USES**

# CONSERVATION RESERVE PROGRAM (CRP) ACREAGES - PERMANENT GRASSES ONLY NON-CROPLAND: INCLUDING FENCEROWS, FARM BUILDING SITES AND EQUIPMENT PATHWAYS

# **Application Timing:**

Apply as a broadcast postemergence treatment control of broadleaf weeds in established perennial grasses. Apply when weeds are actively growing, but before weeds are 8 inches tall or are vining. To obtain season-long control of perennial weeds such as Canada thistle, apply after the majority of the weed's basal leaves have emerged up to bud stage. Later applications may result in less consistent control.

Conditions of plant stress, such as drought, will increase potential for injury to grasses at all stages of growth. Do not apply to newly seeded areas grasses until well established. Perennial grasses are considered well established tillers and secondary roots have developed and growing vigorously.

# **Broadcast Application Rates**

Weed Size or Species <sup>1</sup>	Application Rate (pt/acre)
Susceptible broadleaf weed seedlings less than 8 inches tall or vining <sup>2</sup>	1.33 – 2.66

<sup>&</sup>lt;sup>1</sup> See "Weeds Controlled or Suppressed" section for a complete listing of weeds controlled or suppressed.

# Tank Mixtures for Conservation Reserve Program (CRP) Acreages and Non-Cropland:

This product can also be tank mixed with 1/2 to 1 lb per acre of 2,4-D where target weeds are susceptible to 2,4-D. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. See "Tank Mixing Precautions" under "Mixing Instructions".

<sup>&</sup>lt;sup>2</sup> Control of small kochia will be more consistent if kochia is at least 1 inch tall.

#### **Restrictions:**

- Do not apply more than 5.33 pints of this product per acre per use season on non-cropland areas or CRP acres.
- Do not use on CRP acreages or non-cropland that is underseeded with desirable legumes, clovers, or other sensitive broadleaf plants.

# **Rotation to Broadleaf Crops:**

Do not plant broadleaf crops in treated areas until an adequately sensitive bioassay shows that no detectable clopyralid is present in the soil. (See "Crop Rotation Intervals" in the "Product Information" section.)

# STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

**Pesticide Storage:** Store above 20°F or warm and agitate before use. Store in original containers only. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with sand, earth, or synthetic absorbent. Remove to chemical waste area.

**Pesticide Disposal:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

### CONTAINER HANDLING:

Nonrefillable Containers (≤ 5 gallons): Do not reuse or refill this container. Triple rinse container (or equivalent) 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 1/4 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. Offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Containers (> 5 gallons): Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 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. Offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Pressure rinse as follows (all sizes): Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable Containers: Refill this container with pesticide 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. Offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

#### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

BEFORE BUYING OR USING THIS PRODUCT, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVELAND PRODUCTS, INC. or the seller is authorized to vary in any way.

Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other chemicals not specifically identified in this product's label, or use of this product contrary to the label instructions, all of which are beyond the control of LOVELAND PRODUCTS, INC. and the seller. To the extent consistent with applicable law, the buyer or user of this product assumes all such inherent risks.

Subject to the foregoing inherent risks, LOVELAND PRODUCTS, INC. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use when the product is used in strict accordance with such Directions for Use under normal conditions of use. EXCEPT AS WARRANTED IN THIS LABEL AND TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THIS PRODUCT IS SOLD "AS IS," AND LOVELAND PRODUCTS, INC. MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ELIGIBILITY OF THIS PRODUCT FOR ANY PARTICULAR TRADE USAGE.

IN THE UNLIKELY EVENT THAT BUYER OR USER BELIEVES THAT LOVELAND PRODUCTS, INC. HAS BREACHED A WARRANTY CONTAINED IN THIS LABEL AND TO THE EXTENT REQUIRED BY APPLICABLE LAW, BUYER OR USER MUST SEND WRITTEN NOTICE OF ITS CLAIM TO THE FOLLOWING ADDRESS: LOVELAND PRODUCTS, INC., ATTENTION: LAW DEPARTMENT, P.O. BOX 1286, GREELEY, CO 80632-1286.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE BUYER'S OR USER'S EXCLUSIVE REMEDY FOR ANY INJURY, LOSS, OR DAMAGE RESULTING FROM THE HANDLING OR USE OF THIS PRODUCT, INCLUDING BUT NOT LIMITED TO CLAIMS OF BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, STRICT LIABILITY, OR OTHER TORTS, SHALL BE LIMITED TO ONE OF THE FOLLOWING, AT THE ELECTION OF LOVELAND PRODUCTS, INC. OR THE SELLER: DIRECT DAMAGES NOT EXCEEDING THE PURCHASE PRICE OF THE PRODUCT OR REPLACEMENT OF THE PRODUCT. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, LOVELAND PRODUCTS, INC. AND THE SELLER SHALL NOT BE LIABLE TO THE BUYER OR USER OF THIS PRODUCT FOR ANY CONSEQUENTIAL.

[LPI.A021 is a trademark of Loveland Products, Inc.]

Clopyralid Fluroxypyr GROUP 4 HERBICIDE

# **LPI.A021™**

# [Alternate Brand Name: Brawn EC]

For Control of Annual and Perennial Broadleaf Weeds in Wheat, Barley, and Oats Not Underseeded with a Legume, Field Corn, Sweet Corn, Grasses Grown for Seed, Conservation Reserve Program (CRP) Acreage, and Non-Cropland

Active Ingredient:	(% by weight)
Clopyralid MEA Salt: 3,6-dichloro-2-pyridinecarboxylic acid, monoethanolamine salt*	11.3%
Fluroxypyr: 1-methylheptyl ester: ((4-amino-3,5-dichloro-6-fluoro-2-pyridinyl)oxy)	
acetic acid, 1-methylheptyl ester**.	12.3%
Other Ingredients:	<u>76.4%</u>
Total	100.0%
Contains petroleum distillates	
Acid Equivalents:	
* Clopyralid: – 8.6% (0.75 lb/gal)	
** Fluroxypyr: – 8.6% (0.75 lb/gal)	

# 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 label booklet for additional Precautionary Statements and Directions for Use.

FIRST AID	
If in eyes:	Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.
	• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
	Call a poison control center or doctor for treatment advice.
If	Immediately call a poison control center or doctor.
swallowed:	Do not induce vomiting unless told to do so by a poison control center or doctor.
	Do not give <b>any</b> liquid to the person.
	Do not give anything by mouth to an unconscious person.
NOTE TO PHYSICIAN	
Contains petroleum distillate. Vomiting may cause aspiration pneumonia.	
HOT LINE NUMBER	
•	duct container or label with you when calling a poison control center or doctor, or going You may also contact <b>844-685-9173</b> for emergency medical treatment information.

# For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night

Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS & DOMESTIC ANIMALS CAUTION

Causes moderate eye irritation. Avoid contact with eyes, skin or clothing.

#### **ENVIRONMENTAL HAZARDS**

This product is toxic to fish. Drift or runoff from treated areas may be hazardous to aquatic organisms and non-target plants. Do not apply directly to water, 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. Do not contaminate water used for irrigation or domestic purposes.

Clopyralid is a chemical which can travel (seep or leach) through soil and under certain conditions contaminate groundwater which may be used for irrigation or drinking purposes. Users are advised not to apply clopyralid where soils have a rapid to very rapid permeability throughout the profile (such as loamy sand to sand) and the water table of an underlying aquifer is shallow, or to soils containing sinkholes over limestone bedrock, severely fractured surfaces, and substrates which would allow direct introduction into an aquifer. Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater.

NON-TARGET ORGANISM ADVISORY STATEMENT: This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

# STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

**Pesticide Storage:** Store above 20°F or warm and agitate before use. Store in original containers only. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with sand, earth, or synthetic absorbent. Remove to chemical waste area.

**Pesticide Disposal:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

#### **CONTAINER HANDLING:**

Nonrefillable Containers (≤ 5 gallons): Do not reuse or refill this container. Triple rinse container (or equivalent) 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 1/4 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. Offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Containers (> 5 gallons): Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 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. Offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Pressure rinse as follows (all sizes): Empty the remaining contents into application equipment or a mix tank and

continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. **Refillable Containers:** Refill this container with pesticide 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. Offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

EPA Reg. No. 34704-1167
EPA Est. No.
NET CONTENTS:
[Label ID Print Code]

# **Manufactured For:**

LOVELAND PRODUCTS, INC.
P.O. BOX 1286
GREELEY, COLORADO 80632-1286