



U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Registration Division (H7505C)

401 "M" St., S.W.  
Washington, D.C. 20460

EPA Reg. Number:  
34704-931

Date of Issuance:  
APR 20 2006

Term of Issuance: Conditional

Name of Pesticide Product:  
Imidacloprid 4F

NOTICE OF PESTICIDE:

Registration  
 Reregistration

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Ms. Kelly Herrick  
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/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

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

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A). Once a pesticide is registered, however, it is not regarded as permanently acceptable. Registration does not eliminate the need for continual reassessment of pesticides. If the Agency determines that, at any time, additional data are required to maintain in effect an existing registration, the Agency will require submission of such data under FIFRA section (3)(c)(2)(B).

- 1. Revise the EPA Registration Number to read, "EPA Reg. No. 34704-931".

Signature of Approving Official:

Dani Daniel  
Insecticide-Rodenticide Branch  
Registration Division (7505C)

Date

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3. Add a "Note to Physician" statement to read as: No specific antidote is available. Treat the patient symptomatically.

2. Submit two copies of your final printed labeling before you release the product for shipment.

A stamped copy of the label is enclosed for your records. If you have any questions regarding this notice, please contact me at (703) 305-5409.

Enclosure:



# IMIDACLOPRID 4F

**For protection of cotton from certain insects and promoting enhanced plant health and yield.**

**ACTIVE INGREDIENT:**  
 Imidacloprid, 1-((6-Chloro 3-pyridinyl)methyl)-  
 N-nitro-2-imidazolindinimine ..... 40.7%

**INERT INGREDIENTS:** ..... 59.3%

**TOTAL** ..... **100.0%**

Contains 4 pounds of active ingredient per gallon.  
 Shake well before using.  
 Encore

## KEEP OUT OF REACH OF CHILDREN CAUTION

### FIRST AID

<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If inhaled:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>

Have a product container or label with you when calling a poison control center or doctor, or going for treatment.  
**FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL:**  
 1-800-301-7976.

EPA REG. NO. 34704-

EPA EST. NO. 34704-MS-1

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## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed, absorbed through skin, or inhaled. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

### PERSONAL PROTECTIVE EQUIPMENT (PPE):

Some materials that are chemical resistant to this product are listed below. More options can be obtained by following the instructions for Category C on an EPA chemical-resistance category selection chart.

**Applicators and other handlers must wear:** Long sleeved shirt and long pants, chemical resistant gloves made of any waterproof material such as, nitrile rubber, butyl rubber, neoprene rubber, barrier laminate, polyethylene, polyvinyl chloride (PVC) or viton, shoes plus socks.

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

### ENGINEERING CONTROLS STATEMENT

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170-240 (d)(4-6)), 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 immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.  
 Remove Personal Protective Equipment 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

Do not apply directly to water, areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. This product is toxic to wildlife and highly toxic to aquatic invertebrates.

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.

OBSERVE THE FOLLOWING PRECAUTIONS WHEN MIXING AND APPLYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES; RESERVOIRS; RIVERS; PERMANENT STREAMS, MARSHES OR NATURAL PONDS; ESTUARIES AND COMMERCIAL FISH FARM PONDS.

### DIRECTIONS FOR USE

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and the Worker Protection Standard, 40 CFR part 170.

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours following application.

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 such as, nitrile rubber, butyl rubber, neoprene rubber, barrier laminate, polyethylene, polyvinyl chloride (PVC) or viton, and shoes plus socks.

**ACCEPTED  
 with COMMENTS  
 In EPA Letter Dated**

APR 20 2006  
 Under the Federal Insecticide,  
 Fungicide, and Rodenticide Act,  
 as amended, for the pesticide  
 registered under EPA Reg. No.  
 34704-931

Some insects are known to develop resistance to insecticides after repeated use. As with any insecticide, the use of this product should conform to resistance management strategies established for the use area.

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## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a cool, dry place, out of direct sunlight, and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food and feed. Store in original container and out of reach of children, preferably in a locked storage area. Handle and open container in a manner as to prevent spillage. If the container is leaking, invert to prevent leakage. If container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

### Spray Drift Management

The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator is responsible for considering all of these factors when making application decisions. Avoiding spray drift is the responsibility of the applicator.

### Mixing and Loading

To avoid potential of groundwater, the use of properly designed and maintained containment pad for mixing and loading of any pesticide into application equipment is recommended. If containment pad is not used, maintain a minimum distance of 25 feet between mixing and loading areas and potential surface to groundwater conduits such as field sumps, uncased well head, sinkholes or field drains.

### For Aerial Applications

The spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length should be used, and must not exceed 75% of the wing span or rotor diameter.

### Importance of Droplet Size

An important factor influencing drift is droplet size. Small droplets (<150-200 microns) drift to a greater extent than large droplets. Within typical equipment specifications, applications should be made to deliver the largest droplet spectrum that provides sufficient control and coverage. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible and by avoiding excessive spray boom pressure.

Spray should be released at the lowest possible height consistent with good pest control and flight safety. Applications more than 10 feet above the crop canopy should be avoided.

### Winds Speed Restrictions

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size, canopy and equipment specifications determine drift potential at any given wind speed. Do not apply when winds are greater than 15 mph and avoid gusty and windless conditions. Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.

### Restrictions During Temperature Inversions

Do not make aerial or ground applications during temperature inversions. Drift potential is high during temperature inversions. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature 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 presences can be indicated by ground fog; however if fog is not present, inversion can also be identified by movement of smoke from a ground source. 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 mixing.

### No-Spray Zone Requirements for Foliar Applications

Do not apply by ground within 25 feet, or by air within 150 feet of lakes; reservoirs; rivers; permanent streams; marshes or natural ponds; estuaries and commercial fish farm ponds.

### Runoff Management

Do not cultivate within 10 feet of the aquatic areas to allow growth of a vegetative filter strip.

When used on erodible soils, best management practices for minimizing runoff should be employed. Consult your local Natural Resources Conservation Service for recommendations in your use area.

### Endangered Species Notice

Under the Endangered Species Act, it is a Federal Offense to use any pesticide in a manner that results in the death of a member of an endangered species. Consult your local county bulletin, County Extension Agent or Pesticide State Lead Agency for information concerning endangered species in your area.

Imidacloprid 4F Insecticide contains a Group 4A Insecticide called imidacloprid. Insect biotypes with acquired or inherent tolerance to Group 4A products may eventually dominate the insect population if Group 4A products are used repeatedly as the predominant method of control for targeted species. This may eventually result in partial or total loss of control of those species by Imidacloprid 4F and to other Group 4A products.

The active ingredient in Imidacloprid 4F is a member of neonicotinoid chemical group. Avoid using a block of more than three consecutive applications of Imidacloprid 4F and/or other Group 4A products having the same or similar mode of action. Following a neonicotinoid block of treatments, Loveland Products, Inc. strongly encourages the rotation to a block of applications with effective products form a different mode of action before using additional applications of neonicotinoid products. Using a block of rotation or windowed approach, along with other IPM practices, is considered an effective use strategy for preventing or delaying an insect pest's ability to develop resistance to this class of chemistry.

Foliar applications of Imidacloprid 4F or other Group 4A products from the neonicotinoid chemical class should not be used on crops previously treated with a long-residual, soil-applied product from the neonicotinoid chemical class.

Other Group 4A neonicotinoid products used as foliar treatments include: Actara, Assail, CALYPSO, Centric, Intruder, LEVERAGE and PROVADO. Other 4A Group neonicotinoid products used as soil treatment include: ADMIRE and Platinum.

Contact your local extension specialist, certified crop advisor and/or product manufacturer for additional insect resistance management recommendations. Also, for more information on Insect Resistance Management (IRM), visit the Insecticide Resistance Action Committee (IRAC) on the web at <http://irac-online.org/>.

## GENERAL USE INSTRUCTIONS

Do not apply Imidacloprid 4F through any type of irrigation system

Do not apply Imidacloprid 4F in enclosed structures such as greenhouses or plant houses.

## MIXING INSTRUCTIONS

To prepare the application mixture, add a portion of the required amount of water to the spray tank and with agitation add Imidacloprid 4F. Complete filling tank with balance of water needed. Maintain sufficient agitation during both mixing and application. Imidacloprid 4F may also be used with other pesticides and/or fertilizer solutions. Please see Compatibility Note below. When tank mixtures of Imidacloprid 4F and other pesticides are involved, prepare the tank mixture as recommended above and follow suggested Mixing Order below.

### Mixing Order

When pesticide mixtures are needed, add wettable powders first, Imidacloprid 4F or other flowables second, and emulsifiable concentrates last. Ensure good agitation, as each component is added. Do not add an additional component until the previous is thoroughly mixed. If a fertilizer solution is added, a fertilizer-pesticide compatibility agent may be needed. Maintain constant agitation during both mixing and application to ensure uniformity of spray mixture.

### Compatibility Note

Test compatibility of the intended tank mixture before adding Imidacloprid 4F to the spray or mix tank. Add proportionate amounts of each ingredient in the appropriate order, to a pint or quart jar, cap, shake for 5 minutes, and let set for 5 minutes. Poor mixing or formation of precipitates that do not readily re-disperse indicates an incompatible mixture that should not be used. For further information, contact your local Loveland Products, Inc. representative.

## ROTATIONAL CROPS

Treated areas may be replanted with any crop specified on an imidacloprid label, or any crop for which a tolerance exists for imidacloprid, as soon as practical following the last application. For crops not listed on an imidacloprid label, or for crops for which no tolerances for the active ingredient have been established, a 12-month plant-back interval should be observed. Cover crops for soil building or erosion control may be planted any time, but do not graze or harvest for food or feed.

### IMMEDIATE PLANT-BACK

All crops on this label plus the following crops:

Barley	Head & stem Brassica vegetables	Root Vegetables
Canola	Leafy vegetables	Sorghum
Corn (field, pop and sweet)	Leafy petiole vegetables	Strawberry
Corn Vegetables	Legume vegetables	Sugarbeet
Cucurbit Vegetables	(except soybean, dry)	Tobacco
Fruiting vegetables	Potato	Tuberous vegetables
Globe artichoke	Rape Seed	Wheat

### 30-DAY PLANT-BACK

Cereals (including buckwheat, millet, oats, rice, rye, and triticale)  
Safflower  
Soybean, Dry

### 12-MONTH PLANT BACK

All Other Crops

**IMIDACLOPRID 4F**  
**EPA REG. NO. 34704-**

LAW, WRITTEN NOTICE OF SUCH CLAIM TO THE FOLLOWING ADDRESS: LOVE-  
 LAND PRODUCTS, INC., ATTENTION: LAW DEPARTMENT, 7251 WEST 4TH  
 STREET, GREELEY, CO 80634. 5/5

**RECOMMENDED APPLICATIONS — IMIDACLOPRID 4F**

Imidacloprid 4F may be applied with properly calibrated ground or aerial application equipment. Apply specified rate per acre as directed or broadcast spray to infested area at earliest threshold for target pest, as population begins to develop. Thorough uniform coverage of all plant parts is required to achieve optimum control. Scout fields and retreat if needed. Make multiple applications of Imidacloprid 4F to promote plant health and yield.

The lower rates can be used early season when pest pressures are low or when tank-mixing with other effective products registered for target insect control. Degree of control or suppression of additional labeled pests will be determined, in part, by the stage of pest development at application and infestation level of those pests. Imidacloprid 4F provides optimal performance against early instar and early nymphal stages of insects as well as bollworm/budworm eggs. Applications made with less than 5 gallons per acre may result in slower activity and/or less overall control from a single application than an application made with higher gallonages. The addition of an organosilicone-based spray adjuvant is recommended for applications targeting aphids and whiteflies.

Regardless of formulation or method of application, apply no more than 0.5 lb active ingredient of imidacloprid per acre per season, including seed treatment, soil and foliar uses.

**COTTON**

Pests Controlled	Rate Fluid Ounces/Acre
Cotton aphid Cotton fleahopper Bandedwinged whitefly Plant bugs (excludes <i>Lygus Hesperus</i> ) Green stink bug Southern green stink bug Bollworm/Budworm (ovicidal effect)	1.0-1.5
<b>Pests Suppressed</b> Lygus bug ( <i>Lygus Hesperus</i> ) Whiteflies (other than bandedwinged whitefly)	1.5

**Notes and Restrictions**

Pre-Harvest (PHI): 14 days  
 Minimum interval between applications: 7 days  
 Maximum Imidacloprid 4F allowed per season: 7.5 fluid ounces/Acre (0.235 lb. AI/A)  
 Maximum number of Imidacloprid 4F applications per season: 5

Do not graze treated fields after any application of Imidacloprid 4F.

**Tank Mix Recommendations**

Pests Controlled (In addition to pests listed above)	Imidacloprid 4F Rate Fl.Oz./A	Bidrin® 8 Rate Fl.Oz./A
For early season control of: Thrips	1.0	1.6 - 3.2
For mid to late season control of: Plant bugs Stink bugs (including Brown stink bug) Grasshoppers Saltmarsh caterpillar Cotton leafperforator	1.0	4.0 - 8.0

**Notes and Restrictions** (in addition to Notes and Restrictions listed above)

Refer to the Bidrin® 8 product label for specific use recommendations; observe all restrictions and precautions that appear on the label.

**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. 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, THIS PRODUCT IS SOLD AS IS TO THE EXTENT ALLOWED BY APPLICABLE LAW. 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, BUYER OR USER MUST SEND, TO THE EXTENT REQUIRED BY APPLICABLE

TO THE EXTENT ALLOWED BY 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 ALLOWED BY APPLICABLE LAW, LOVELAND PRODUCTS, INC. AND THE SELLER SHALL NOT BE LIABLE TO THE BUYER OR USER OF THIS PRODUCT FOR ANY CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES, OR DAMAGES IN THE NATURE OF A PENALTY.

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FORMULATED FOR



P.O. BOX 1286, GREELEY, COLORADO 80632-1286