

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

June 9, 2016

Michelle Sharpe-Kass Product Registration Manager BASF Corporation 26 Davis Drive P.O. Box 13528 Research Triangle Park, NC 27709

Subject: Label Amendment – Add Minor Revisions

Product Name: Lexicon Intrinsic Brand Fungicide

EPA Registration Number: 7969-350 Application Date: March 04, 2016

Decision Number: 514829

Dear Ms. Sharpe-Kass:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

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 the Federal Insecticide Fungicide and Rodenticide Act 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.

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Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact Driss Benmhend by phone at (703) 308-9525, or via email at <a href="mailto:Benmhend.driss@epa.gov">Benmhend.driss@epa.gov</a>.

Sincerely,

Shaja B. Joyner, Product Manager 20 Fungicide and Herbicide Branch Registration Division (7505P) Office of Pesticide Programs

Zuchung for,

Enclosure



# For disease control and plant health in turfgrass

#### **Active Ingredients:**

fluxapyroxad*: 1H-Pyrazole-4-carboxamide, 3-(difluoromethyl)-1-methyl-N-	
(3',4',5'-trifluoro[1,1'-biphenyl]-2-yl)	14.33%
pyraclostrobin**: (carbamic acid, [2-[[[1-(4-chlorophenyl)-1H-pyrazol-3-yl]oxy]	
methyl]phenyl]methoxy-, methyl ester)	28.58%
Other Ingredients:	57.09%
Total:	100.00%
#E : 1 11 400 1 10	

<sup>\*</sup>Equivalent to 1.39 pounds of fluxapyroxad per gallon.

\*\*Equivalent to 2.78 pounds of pyraclostrobin per gallon.

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**EPA Est. No.** 

# KEEP OUT OF REACH OF CHILDREN CAUTION/PRECAUCION

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 for First Aid, Precautionary Statements, Directions For Use, Conditions of Sale and Warranty, and state-specific crop and/or use site restrictions.

In case of an emergency endangering life or property involving this product, call day or night 1-800-832-HELP (4357).

#### **Net Contents:**



	FIRST AID
If swallowed	<ul> <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 to an unconscious person.</li> </ul>
	HATI ME MUMBER

#### **HOTLINE 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 BASF Corporation for emergency medical treatment information: 1-800-832-HELP (4357).

# **Precautionary Statements**

#### **Hazards to Humans and Domestic Animals**

**CAUTION.** Harmful if swallowed. Avoid contact with skin or clothing.

# Personal Protective Equipment (PPE)

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material (such as nitrile, butyl, neoprene, and/or barrier laminate)
- Shoes plus socks

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

# **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 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/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 pesticide is toxic to fish and aquatic invertebrates. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

**DO NOT** apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment washwaters or rinsate. Observe caution

when spraying in the vicinity of aquatic areas such as lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, and estuaries.

This product may impact surface water quality because of runoff of rain water. This is especially true for poorly draining soils and soils with shallow groundwater.

**DO NOT** discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. **DO NOT** discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

# **Surface Water Advisory**

This product is classified as having high potential for reaching aquatic sediment via runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of this active ingredient or its degradates from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecast to occur within 48 hours. Sound erosion control practices will reduce this product's potential to reach aquatic sediment via runoff.

#### **Sensitive Areas**

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., bodies of water or nontarget crops) is minimal and when wind is blowing away from the sensitive areas.

#### **Groundwater Advisory**

This chemical has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

# Outdoor Residential Consumer Product Statements

To protect the environment, **DO NOT** allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather

when rain is not predicted for the next 24 hours will help ensure wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid runoff to water bodies or drainage systems.

#### **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.

Read the entire **Directions For Use** and **Conditions of Sale and Warranty** before using this product.

#### 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), notification to workers, 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**.

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, butyl, neoprene, and/or barrier laminate)
- Shoes plus socks

# NONAGRICULTURAL 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, nurseries, or greenhouses.

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

#### STORAGE AND DISPOSAL

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

# **Pesticide Storage**

Store in original containers only. Keep container closed when not in use. **DO NOT** store near food or feed.

# **Pesticide Disposal**

Wastes resulting from using this product may be disposed of on-site or at an approved waste disposal facility. If these wastes cannot be disposed of according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representatives at the nearest EPA Regional Office for quidance.

#### **Container Handling**

Nonrefillable Container. DO NOT reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying; then offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Triple rinse containers small enough to shake (capacity ≤ 5 gallons) 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.

Triple rinse containers too large to shake (capacity > 5 gallons) 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.

Pressure rinse as follows: Empty the remaining contents into application equipment or 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.

(continued)

#### STORAGE AND DISPOSAL (continued)

#### Container Handling (continued)

**Refillable Container.** Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

**Triple rinse as follows:** 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% 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.

When this container is empty, replace the cap and seal all openings that have been opened during use; return the container to the point of purchase or to a designated location. This container must only be refilled with a pesticide product. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transport. **DO NOT** transport if this container is damaged or leaking. If the container is damaged, or leaking, or obsolete and not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling, if available, or dispose of container in compliance with state and local regulations.

# In Case of Emergency

In case of large-scale spill of this product, call:

• CHEMTREC 1-800-424-9300

• BASF Corporation 1-800-832-HELP (4357)

In case of medical emergency regarding this product, call:

- Your local doctor for immediate treatment
- Your local poison control center (hospital)
- BASF Corporation 1-800-832-HELP (4357)

#### Steps to take if material is released or spilled:

- In case of spill on floor or paved surfaces, mop and remove to chemical waste storage area until proper disposal can be made if product cannot be used according to label.
- Dike and contain spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal.
- Remove contaminated clothing, and wash affected skin areas with water.
- Wash clothing before reuse.
- Keep spill out of all sewers and open bodies of water.

#### **Product Information**

This package contains **Lexicon® Intrinsic® brand fungicide**, a suspension concentrate (SC) containing the active ingredients fluxapyroxad and pyraclostrobin. The

active ingredients in **Lexicon Intrinsic** belong to two classes of fungicides, the succinate-dehydrogenase (SDHI) inhibitor and the strobilurins or quinone outside inhibitor (QoI) classes. To maximize disease control, apply **Lexicon Intrinsic** in a regularly scheduled protective spray program and use in a rotation program with other fungicides.

Preventive applications optimize disease control resulting in improved plant health.

Because of its high specific activity, **Lexicon Intrinsic** has good residual activity against target fungi.

#### **Modes of Action**

Fluxapyroxad and pyraclostrobin, the active ingredients in **Lexicon Intrinsic**, belong to the groups of respiration inhibitors classified by the U.S. EPA and Canada PMRA as target site of action **Group 7** and **Group 11** fungicides, respectively.

### **Resistance Management**

Lexicon Intrinsic contains fluxapyroxad and pyraclostrobin, a premix of a Group 7 and a Group 11 fungicide, and is effective against pathogens resistant to fungicides with modes of action different from those of Qol fungicides (target site Group 7 and Group 11), such as the dicarboximides, sterol inhibitors, benzimidazoles, or phenylamides. Fungal isolates resistant to Group 7 or Group 11 fungicides may eventually dominate the fungal population if Group 7 or Group 11 fungicides are used predominantly and repeatedly in the same turfgrass area in successive years as the primary method of control for the targeted pathogen species. This may result in reduction of disease control by Lexicon Intrinsic or other Group 7 or Group 11 fungicides.

To maintain the performance of **Lexicon Intrinsic** in turfgrass, **DO NOT** exceed the total number of sequential applications of **Lexicon Intrinsic**. Follow label instructions for sequential use of **Lexicon Intrinsic** or other target site of action **Group 7** or **Group 11** fungicides with a similar site of action on the same pathogens.

The following recommendations may be considered to delay the development of fungicide resistance:

- 1. Tank mixtures Lexicon Intrinsic provides more effective resistance management of most of its target pathogens because it is a premix of two fungicides with different modes of action. If Lexicon Intrinsic is used in tank mixes with fungicides from different target site of action groups that are registered/permitted for the same use and effective against the pathogens of concern, use at least the minimum labeled rates of each fungicide in the tank mix.
- 2. Integrated Pest Management (IPM) Integrate Lexicon Intrinsic into an overall disease and pest management program. Follow cultural practices known to reduce disease development. Consult your local extension specialist, certified crop advisor, and/or BASF representative for additional IPM strategies established for your area. Lexicon Intrinsic may be used in

- agricultural extension advisory (disease forecasting) programs, which recommend application timing based on environmental factors favorable for disease development.
- 3. **Monitoring** Monitor efficacy of all fungicides used in the disease management program against the targeted pathogen and record other factors that may influence fungicide performance and/or disease development. If a **Group 7** or **Group 11** target-site fungicide such as **Lexicon® Intrinsic® brand fungicide** appears to be less or no longer effective against a pathogen that it previously controlled or suppressed, contact a BASF representative, local extension specialist, or certified crop advisor for further investigation.

#### **Restrictions and Limitations**

- Maximum seasonal use rate DO NOT apply more than a total of 1.95 fl ozs of Lexicon Intrinsic per 1,000 sq ft per year (85 fl ozs Lexicon Intrinsic per acre per year) [2.77 lb ai/A/year].
- Aerial Applications When spraying in the vicinity of aquatic areas:
  - DO NOT apply more than a total of 1.7 fl ozs of Lexicon Intrinsic per 1,000 sq ft per year (74 fl ozs Lexicon Intrinsic per acre per year)
     [2.14 lbs ai/A/year].
  - Use medium-to-coarse spray droplet size spectrum.
- Ground Applications When spraying in the vicinity of aquatic areas:
  - No buffer required for nozzle heights 20 inches or less.
  - Maintain a 15 foot buffer when setting spray boom height greater than 20 inches above the crop canopy.
  - Use fine-to-medium/coarse spray droplet size spectrum.
- Refer to Application Rates and Intervals table for sequential application intervals of Lexicon Intrinsic.
- For use on turfgrass only.
- · After application, allow foliage to dry before mowing.
- **DO NOT** apply through any type of irrigation equipment to turfgrass, except on sod farms.
- This product cannot be used to formulate or reformulate any other pesticide product.
- Aerial application is permitted on sod farms only.
- For aerial application in New York State, DO NOT apply within 100 feet of aquatic habitats (such as, but not limited to lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fishponds).
- Lexicon Intrinsic is not for sale, distribution, or use in Nassau and Suffolk counties in New York State.

# **Tank Mixing**

# **Tank Mix Partners/Components**

**Lexicon Intrinsic** can be tank mixed with recommended fungicides, insecticides, herbicides, liquid fertilizers, biological control products, adjuvants, and additives.

Physical incompatibility, reduced disease control, or crop injury may result from mixing **Lexicon Intrinsic** with other products. Therefore, before using any tank mix (fungicides, insecticides, herbicides, liquid fertilizers, biological control products, adjuvants, and additives), test the combination on a small portion of the area to be treated to ensure that a phytotoxic response will not occur as a result of application.

When an adjuvant is to be used with this product, BASF recommends the use of a Chemical Producers and Distributors Association certified adjuvant.

# Consult a BASF representative or local agricultural authorities for more information concerning additives.

If tank mixes are used, follow most restrictive language for rates, label instructions, and precautions on all labels.

#### **Additives**

Use of organosilicate-based adjuvants with **Lexicon Intrinsic** may cause turfgrass injury. User accepts liability when using organosilicone adjuvants. Due to the large number of additives or adjuvants that may be used, neither the manufacturer nor the seller has determined whether **Lexicon Intrinsic** can be used safely with all additives.

# **Compatibility Test for Tank Mix Components**

Add components in the following sequence using 2 teaspoons for each pound or 1 teaspoon for each pint of recommended label rate per acre.

- Water For 87 gallons per acre (2 gallons per 1,000 square feet) spray volume, use 14.4 cups (3.5 liters) of water. For other spray volumes, adjust rates accordingly. Use only water from the intended source at the source temperature.
- 2. **Water-dispersible products** (dry flowables, wettable powders, suspension concentrates, or suspensions) Cap the jar and invert 10 cycles.
- 3. **Water-soluble products** Cap the jar and invert 10 cycles.
- Emulsifiable concentrates (oil concentrate or methylated seed oil when applicable) - Cap the jar and invert 10 cycles.
- 5. **Water-soluble additives** Cap the jar and invert 10 cycles.
- 6. Let the solution stand for 15 minutes.
- 7. Evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, nor thick (clabbered) texture. DO NOT use any spray solution that could clog spray nozzles.

# **Mixing Order**

Maintain constant agitation throughout mixing and application. Make sure that each component is thoroughly mixed and suspended before adding tank mix partners. Maintain constant agitation during application.

- 1. **Water** Begin by agitating a thoroughly clean sprayer tank 3/4 full of clean water.
- 2. **Inductor** If an inductor is used, rinse it thoroughly after each component has been added.
- Products in PVA bags Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
- 4. Water-dispersible products (such as dry flowables, wettable powders, suspension concentrates including Lexicon® Intrinsic® brand fungicide, or suspo-emulsions):
  - Containers 5 gallons or less: shake well before use.
  - Containers larger than 5 gallons: recirculate before use
  - Consult BASF Representatives for additional information regarding agitation and recirculation.
- 5. Water-soluble products
- 6. **Emulsifiable concentrates** (such as oil concentrates when applicable)
- 7. **Water-soluble additives** (such as ammonium sulfate [AMS] or urea ammonium nitrate [UAN] when applicable)
- 8. Remaining quantity of water

# **Cleaning Spray Equipment**

Spraying equipment must be cleaned thoroughly before and after applying this product, particularly if a product with the potential to injure turfgrass was used prior to **Lexicon Intrinsic**.

# **Application Instructions**

Use **Lexicon Intrinsic** for disease control in the following turfgrass sites:

- Golf courses
- Residential, institutional, commercial, and municipal lawns
- Parks
- Recreational areas including sports and athletic fields
- Cemeteries
- Sod farms

**Lexicon Intrinsic** controls a range of diseases. See **Application Rates and Intervals** table for specific use instructions.

# **Application Rates**

Apply **Lexicon Intrinsic** before disease development or in the early stages of development. Apply **Lexicon Intrinsic** at the rates specified in the **Application Rates and Intervals** 

table. Calibrate sprayer prior to use. Apply Lexicon **Intrinsic** in 1 to 4 gallons of water per 1,000 square feet (44 to 174 gallons per acre). For maximum efficacy under heavy disease pressure or on higher cuts of turf, 2 to 4 gallons of water per 1,000 square feet is recommended. Use the shorter specified application interval and/or the higher specified rate when prolonged favorable disease conditions exist, or when target disease is **persistent.** Repeat applications at the specified interval, as necessary. **DO NOT** exceed the specified application rate or fail to follow the use restrictions listed in the Resistance Management and Restrictions and Limitations sections. All applications must be made according to the use directions. Failure to follow directions and precautions on this label may result in turfgrass injury and/or inferior disease control. For root and crown diseases such as fairy ring and bermudagrass decline, see specific requirements and recommendations in the **Application Rates and Intervals** Table.

# **Ground Application**

Apply **Lexicon Intrinsic** using sufficient water volume and pressure for thorough coverage of turfgrass foliage. Apply **Lexicon Intrinsic** at the rates specified in the **Application Rates and Intervals** table.

# **Aerial Application**

Aerial application is permitted on sod farms only.

Apply **Lexicon Intrinsic** at the rates specified in the **Application Rates and Intervals** table in no less than 10 gallons of spray solution per acre. Repeat applications at the specified interval as necessary. **DO NOT** apply when conditions favor drift from target area.

For aerial application in New York State, DO NOT apply within 100 feet of aquatic habitats (such as, but not limited to lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fishponds).

#### **Spray Drift Management**

**DO NOT** spray when conditions favor drift beyond the area intended for application. Conditions that contribute to drift include thermal inversion, wind speed and direction, spray nozzle/pressure combinations, spray droplet size, temperature/humidity, etc. Contact your state extension agent for spray drift prevention guidelines in your area. All application equipment must be properly maintained and calibrated using appropriate carriers. Avoiding spray drift at the application site is the responsibility of the applicator. When drift may be a problem, take measures to reduce drift, including:

- DO NOT spray if wind speed is more than 10 mph. If non-target crops are downwind, use caution when spraying if wind is present.
- 2. Use caution when conditions are favorable for drift (high temperatures and or low relative humidity).

 DO NOT apply when a temperature inversion exists. If inversion conditions are suspected, consult local weather services before applying.

# **Aerial Application Methods and Equipment**

The interaction of many equipment-related and weatherrelated factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

**DO NOT** apply when possible drift can occur to: unprotected persons; to food, forage, or other plantings that might be damaged; or crops that would then be rendered unfit for sale, use or consumption.

Applicators must follow these requirements to avoid offtarget drift movement from aerial applications to agricultural field crops.

- 1. The distance of the outermost nozzles on the boom must not exceed 3/4 the length of the fixed wingspan or 75% of rotor blade diameter.
- 2. Nozzles must always point backward parallel with the airstream and never be pointed downward more than 45 degrees.

Spray should be released at the lowest possible height consistent with good pest control and flight safety. Aerial applications more than 10 feet above the crop canopy should be avoided. Ground applications more than 20 inches above the crop canopy should be avoided. Make aerial or ground applications when wind velocity favors on-target product deposition (approximately 3 to 10 mph). **DO NOT** apply when wind velocity exceeds 10 mph. Avoid applications when wind gusts approach 10 mph. Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.

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

# **Information on Droplet Size**

The most effective way to reduce drift potential is to apply large droplets. Use the largest droplet size consistent with acceptable efficacy. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly or under unfavorable environmental conditions (see **Wind**; **Temperature and Humidity**; and **Temperature Inversion**).

#### Controlling droplet size:

- Volume Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure DO NOT exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of Nozzles** Use the minimum number of nozzles that provide uniform coverage.

- Nozzle Orientation Orienting nozzles so the spray is released parallel to the airstream produces larger droplets than other orientations and is recommended practice. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- Nozzle Type Use a nozzle type designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid-stream nozzles oriented straight back produce the largest droplets and the lowest drift.

#### Wind

Drift potential is lowest when wind speed does not exceed 10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application must be avoided below 2 mph due to variable wind direction and high inversion potential. Local terrain can influence wind patterns. Every applicator must be familiar with local wind patterns and how they affect spray drift.

# **Temperature and Humidity**

Low humidity and high temperatures increase the evaporation of spray droplets and, therefore, the likelihood of increased spray drift. Avoid spraying during conditions of low humidity and/or high temperatures. When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

# **Temperature Inversion**

Application must not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions because of the light, variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light-to-no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

#### **Sensitive Areas**

Apply **Lexicon® Intrinsic® brand fungicide** only when the potential for drift to adjacent sensitive areas (e.g. bodies of water or nontarget crops) is minimal and when wind is blowing away from the sensitive areas.

# **Use Precautions for Sprinkler and Drip Irrigation Application**

# **Drip Irrigation**

Apply **Lexicon Intrinsic** through drip irrigation systems to turfgrass for soilborne disease control. Apply 8 to 16 fluid

ounces **Lexicon® Intrinsic® brand fungicide** per acre as a preventive disease application. The soil must have adequate moisture capacity before drip application.

Stop drip irrigation at fungicide depletion from the main feed supply tank or after 6 hours from start, whichever is shorter. For maximum efficacy, delay subsequent irrigation (water only) for at least 24 hours after drip application.

# **Sprinkler Irrigation**

Apply **Lexicon Intrinsic** through sprinkler irrigation to turfgrass and sod farms. Apply this product through sprinkler irrigation systems, including center pivot, lateral move, end tow, side [wheel] roll, traveler, big gun, solid set, or hand move irrigation systems. **DO NOT** apply this product through any other type of irrigation system except as specified on this label.

Apply with center pivot or continuous-move equipment distributing 1/2 acre-inch or less during treatment. In general, use the least amount of water required for proper distribution and coverage. If stationary systems (solid set, handlines, or wheel lines other than continuous-move) are used, inject this product into no more than the last 20 to 30 minutes of the set.

**DO NOT** apply when wind speed favors drift beyond the area intended for treatment. Plant injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water. Adequate coverage of foliage is required for control.

Maintain good agitation during the entire application period. If you have questions about calibration, contact a state extension service specialist, equipment manufacturers or other experts.

The system must contain a functional check valve, vacuum-relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water-source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

**DO NOT** connect an irrigation system used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

# Specific Instructions for Public Water Systems

- Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- 2. Chemigation systems connected to public water systems must contain a functional reduced-pressure zone backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, discharge the water from the public water system into a reservoir tank before pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- 3. The pesticide injection pipeline must contain a functional, automatic quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 4. The pesticide injection pipeline must contain a functional, normally closed solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7. **DO NOT** apply when wind speed favors drift beyond the area intended for treatment.

# **Turfgrass Tolerance**

Because of variability within turfgrass species, application techniques and possible tank mixes, neither the manufacturer nor the seller has determined if **Lexicon Intrinsic** can be safely used on all turfgrasses under all conditions. Therefore, determine if **Lexicon Intrinsic** can be used safely before broad application by applying the specified use rate of **Lexicon Intrinsic** and any potential tank mix

on a small test area of turfgrass under conditions expected to be encountered. Monitor for any adverse effects for 14 days after application.

# **Application Rates and Intervals**

<u> </u>	intervals				
<b>Disease</b> Pathogen	Application Rate (fl oz product/ 1,000 sq ft)	Application Rate (fl ozs product/A)	Application Interval (days)	Maximum Number of Sequential Applications*	Application Information
Anthracnose Colletotrichum graminicola	0.34 to 0.47	15 to 21	14 to 28	2	Use preventively. Begin applications when conditions are favorable for fungal infection, prior to disease symptom development.
Bentgrass dead spot Ophiosphaerella agrostis	0.34 to 0.47	15 to 21	14 to 28	3	Use preventively. Begin applications when conditions are favorable for fungal infection, prior to disease symptom development.
Bermudagrass decline Gaeumannomyces graminis var graminis	0.34 to 0.47	15 to 21	14 to 28	3	Aids in control of Bermudagrass decline when integrated with appropriate cultural practices such as raised mowing height, proper fertilization and core aeration. Make 2 applications, 14 to 28 days apart, in the spring following greenup and 2 applications, 14 to 28 days apart, in the fall when air temperatures remain above 80°F and humidity is 75% or higher. Apply in 2 to 4 gallons of water per 1,000 sq ft.
Brown patch Rhizoctonia solani	0.34 to 0.47	15 to 21	14 to 28	3	Apply when conditions are favorable for disease development.
Brown ring patch Rhizoctonia circinata var. circinata (previously called 'Waitea patch')	0.34 to 0.47	15 to 21	14 to 28	3	Begin applications preventively or when early yellow ring development is symptomatic. Late curative applications will not be effective. Use 2 to 4 gallons of spray volume per 1,000 sq ft and a soil wetting agent as needed. Provide short irrigation cycle directly following treatment to move fungicide through thatch.
<b>Dollar spot</b> Sclerotinia homoeocarpa	0.34 to 0.47	15 to 21	14 to 28	2	Make applications prior to infection or in the early stages of disease development. Apply in 2 to 4 gallons of water.
Fairy ring various Basidiomycete fungi	0.47	21	28	3	Apply as soon as possible after fairy ring symptom development. Use 2 to 4 gallons of spray volume per 1,000 sq ft and appropriate soil wetting agent at time of application. Reapplication after 28 days may be required. BASF recommends 1/4 inch of irrigation following fungicide application.
Fusarium patch Microdochium nivale or Fusarium spp.	0.34 to 0.47	15 to 21	14 to 28	3	Apply preventively, prior to snow cover. Begin applications when conditions are favorable for fungal infection, prior to disease symptom development.

# **Application Rates and Intervals** (continued)

<b>Disease</b> Pathogen	Application Rate (fl oz product/ 1,000 sq ft)	Application Rate (fl ozs product/A)	Application Interval (days)	Maximum Number of Sequential Applications*	Application Information
<b>Gray leaf spot</b> Pyricularia grisea	0.34 to 0.47	15 to 21	14 to 28	2	Use preventively. Begin applications when conditions are favorable for fungal infection, prior to disease symptom development.
Gray snow mold Typhula incarnata or T. ishikariensis	0.47	21	14 to 28	3	Make 2 applications, 14 to 28 days apart, in late fall just prior to snow cover. For optimum control before extended periods of snow cover, tank mix <b>Lexicon® Intrinsic® brand fungicide</b> with another effective (non-strobilurin) fungicide.
Large patch Brown patch of warmseason turfgrasses, including Zoysia patch Rhizoctonia solani	0.34 to 0.47	15 to 21	14 to 28	3	Apply prior to or directly at initial signs of infection in fall and make at least 2 sequential applications until turfgrass goes into dormancy. An additional 2 applications may be made in spring at time of greenup if necessary. Curative applications are not recommended.
Leaf and sheath spot Waitea circinata var. zeae or W. circinata var. oryzae Chrysorhiza zeae or C. oryzae, formerly known as Rhizoctonia zeae and R. oryzae	0.34 to 0.47	15 to 21	14 to 28	3	Rhizoctonia infection can occur under warm, humid conditions on both cool-season and warmseason turfgrass. This disease has been associated with localized dry spots, and necrotic (brown) ring symptoms can form. Apply preventively when conditions are favorable for disease development.
Leaf spot Bipolaris spp.	0.34 to 0.47	15 to 21	14 to 28	3	Apply when conditions are favorable for disease development.
Melting out Drechslera poae	0.34 to 0.47	15 to 21	14 to 28	3	Apply when conditions are favorable for disease development.
Necrotic ring spot Leptosphaeria korrae	0.47	21	14 to 28	3	Aids in control of necrotic ring spot. Make applications in spring, fall or winter when conditions are present for outbreaks.
Pink patch Limonomyces roseipellis	0.34 to 0.47	15 to 21	14 to 28	3	Apply preventively when conditions are favorable for disease development.
<b>Pink snow mold</b> <i>Microdochium nivale</i> or <i>Monographaella</i> spp.	0.47	21	14 to 28	3	Make 2 applications, 14 to 28 days apart, in late fall just prior to snow cover. For optimum control before extended periods of snow cover, tank mix <b>Lexicon Intrinsic</b> with another effective (non-strobilurin) fungicide such as <b>Trinity</b> ® <b>fungicide</b> .
Powdery mildew Blumeria graminis	0.34 to 0.47	15 to 21	14 to 28	3	Use preventively. Begin applications when conditions are favorable for fungal infection, prior to disease symptom development.

(continued)

# **Application Rates and Intervals** (continued)

<b>Disease</b> Pathogen	Application Rate (fl oz product/ 1,000 sq ft)	Application Rate (fl ozs product/A)	Application Interval (days)	Maximum Number of Sequential Applications*	Application Information
Pythium blight Pythium aphanidermatum, Pythium spp.	0.47	21	14	2	Use preventively. Begin applications when conditions are favorable for fungal infection, prior to disease symptom development. For maximum control during severe disease pressure or when symptoms are already present, tank mix <b>Lexicon® Intrinsic® brand fungicide</b> with another (non-strobilurin) fungicide labeled for Pythium blight control.
Pythium root dysfunction Pythium volutum, Pythium spp.	0.47	21	14 to 28	2	Apply preventively or early curative for control. Following sequential application, rotate to other effective fungicides for this disease prior to additional <b>Lexicon Intrinsic</b> application. Make 2 applications in the fall, 14 to 28 days apart, followed by 2 applications in the spring, 14 to 28 days apart. Irrigate immediately following application.
Rapid blight Labyrinthula terrestris	0.34 to 0.47	15 to 21	14 to 28	3	Use preventively. Begin applications when conditions are favorable for fungal infection, prior to disease symptom development. Follow the shorter spray interval when using the lower application rate. Applications can be alternated or tank mixed with mancozeb depending on disease pressure.
Red thread Laetisaria fuciformis	0.34 to 0.47	15 to 21	14 to 28	3	Apply when conditions are favorable for disease development.
Rust Puccinia and Uromyces spp.	0.34 to 0.47	15 to 21	14 to 28	3	Apply when conditions are favorable for disease development.
Southern blight Sclerotium rolfsii	0.34 to 0.47	15 to 21	21 to 28	3	Initiate application in the summer to fall as soon as conditions favor the disease. Reduce thatch and provide good aerification to ensure effectiveness of application.
Spring dead spot Ophiosphaerella spp. such as O. korrae, O. herpotricha and/or O. narmari	0.47	21	21 to 28	3	Use preventatively. Make 2 applications in the fall prior to disease symptom development using interval appropriate for your conditions. Curative spring applications will not be effective. Apply in 2 gallons per 1,000 sq ft water and provide sufficient irrigation following application to move fungicide into the crown and roots of the turfgrass.

(continued)

# **Application Rates and Intervals** (continued)

<b>Disease</b> Pathogen	Application Rate (fl oz product/ 1,000 sq ft)	Application Rate (fl ozs product/A)	Application Interval (days)	Maximum Number of Sequential Applications*	Application Information
Summer patch Magnaporthe poae	0.47	21	21 to 28	3	Initiate applications in the spring when soil temperatures reach 60 to 65°F at a 2-inch soil depth, or as dictated by local recommendations.
Take-all patch Gaeumannomyces graminis var. avenae	0.47	21	28	3	Use preventively. Begin applications when conditions are favorable for fungal infection, prior to disease symptom development. Make 2 applications in the fall, 28 days apart, followed by 2 applications in the spring, 28 days apart.
Yellow tuft (Downy mildew) Scleophthora	0.34 to 0.47	15 to 21	14 to 28	3	Use preventively. Begin applications when conditions are favorable for fungal infection, prior to disease symptom development.

**DO NOT** apply more than a total of 1.95 fl ozs of **Lexicon® Intrinsic® brand fungicide** per 1,000 sq ft per year (85 fl ozs **Lexicon Intrinsic** per acre per year).

<sup>\*</sup> Following a sequential application of **Lexicon Intrinsic**, **DO NOT** reapply until after another effective **non-Group 7** or **non-Group 11** fungicide has been used.

# **Conditions of Sale and Warranty**

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

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