Lexicon® Intrinsic® brand fungicide
For championship performance under pressure
Innovation that solves your toughest challenges

BASF is dedicated to investing in research that produces quality solutions. For over 150 years, we have developed innovations that help to solve your most pressing challenges, supported by research and an experienced sales and technical team. We create chemistry that leads to healthy, quality turf, greater efficiency and more sustainable solutions for superintendents.

1 Lexicon® Intrinsic® brand fungicide, the foundation for championship greens
2 Two powerful chemistries for the ultimate in broad-spectrum disease control
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Lexicon® Intrinsic® brand fungicide, the foundation for championship greens

Lexicon Intrinsic brand fungicide delivers peak disease performance under pressure. This industry-leading fungicide optimizes disease control and provides plant health benefits for longer, stronger roots, increased growth efficiency, and greater stress tolerance. The result is championship conditions on your greens, all year long.

A top choice of superintendents around the country, Lexicon Intrinsic brand fungicide controls a wide variety of key turf diseases, including fairy ring, dollar spot, brown patch, Pythium and Bipolaris leaf spot.

Key Features and Benefits:
- Broad-spectrum control of 27* diseases
- Long residual of up to 28 days
- Plant health benefits
- Foundational product for greens

For Use on All Major Turfgrass Sites:
- Golf courses
- Sports and athletic fields
- Parks and recreational areas
- Residential lawns
- Commercial and municipal lawns
- Institutional lawns
- Cemeteries
- Sod farms
- Other maintained turfgrass areas

* Subject to a BASF Recommendation under FIFRA 2(ee) for spring dead spot in certain states.
Two powerful chemistries for the ultimate in broad-spectrum disease control

Lexicon® Intrinsic® brand fungicide is a combination of the active ingredients found in Xzemplar® fungicide and Insignia® SC Intrinsic brand fungicide. These two chemistries provide optimal protection from key turf diseases. They also deliver plant health benefits that help your turf rebound faster from stressors.

above: Lexicon Intrinsic brand fungicide travels systemically within turfgrass leaves, distributing powerful, long-lasting disease control.

Lexicon Intrinsic brand fungicide, for quick knockdown and long residual

Most fungicides on the market provide either quick knockdown or long residual. Lexicon Intrinsic brand fungicide provides both benefits.

In addition to being tightly bound to the waxy leaf surface, making it rainfast, this innovative fungicide is redistributed to areas of the leaf that are not directly sprayed. Its unique molecular design lets it enter the transpiration stream and travel systemically within the leaf. This redistribution, along with its high level of activity, ensures long-lasting preventive and curative effects from Lexicon Intrinsic brand fungicide, resulting in reliable, more consistent disease control.
Greater disease control for greater peace of mind

Healthy turf is strong, disease-resistant and resilient, which is the kind of quality turf you can expect from Lexicon® Intrinsic® brand fungicide. Research has shown that this fungicide provides excellent control of 27* key cool- and warm-season diseases on turfgrass. Whatever the season, your turf has protection from the toughest challenges, and you have peace of mind.

**Powerful residual — Lexicon Intrinsic** brand fungicide controls 27* diseases for up to 28 days, providing the confidence that comes with long-lasting control.

**Broad-spectrum foundation** — With its broad-spectrum control, this fungicide is the perfect foundation for enhancing the overall performance of your spray program.

**More resilient greens — Lexicon Intrinsic** brand fungicide provides championship conditions and faster recovery from stressors like heat, humidity, drought, heavy play and aeration.

* Subject to BASF FIFRA 2(ee) Recommendation for spring dead spot in certain states. See www.cdms.net for BASF Technical Bulletin.
Cool-season turf diseases controlled with Lexicon® Intrinsic® brand fungicide

**Lexicon® Intrinsic® Brand Fungicide**
Delivers Superior Dollar Spot Control Versus Interface and Headway

![Bar chart showing the effectiveness of different fungicides against dollar spot.](chart)

The numbers in parentheses denote the number of rating dates out of 13 when dollar spot lesions were fewer than five in plots. Interface and Headway data reflects disease breakthroughs at 28 days. Applications were made on June 4, July 2 and July 30. Source: Dr. Rick Latin, Purdue University, 2014.

**High Turf Quality Demonstrates Residual Control of Lexicon® Intrinsic® Brand Fungicide**

![Bar chart showing turfgrass quality scores.](chart)

Observations as shown with last rating 28 days after last application. Applications on 21-day interval 5/13, 6/3 and 6/24. Source: Dr. Bruce Martin, Clemson University, 2014.

above:

*Dollar spot*  
*Sclerotinia homoeocarpa*
**Lexicon® Intrinsic® Brand Fungicide**

**Provides Outstanding Brown Patch Control on Bentgrass Fairways**

Initial application on July 13, 2012.

Ratings = brown patch severity index 0 - 10. 10 = >90% brown patch.

Source: Penn State University, 2012.

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**Lexicon Intrinsic Brand Fungicide**

**Outperforms Velista In Control Of Summer Patch On Bentgrass Greens**

0 = no disease; 100 = total coverage. Initial application on May 19, 2015.

Source: The Ohio State University.
Warm-season turf diseases controlled with Lexicon® Intrinsic® brand fungicide

Lexicon Intrinsic Brand Fungicide Surpasses Briskway and Tartan in Fairy Ring Trials

![Graph showing disease (AUDPC*) comparison between untreated, Lexicon Intrinsic, Briskway, and Tartan]

*AUDPC = Calculated disease severity ratings over the trial period. Lowest rating is the least disease.
Source: Dr. Jim Kerns, Matt Martin, NC State University.

Lexicon Intrinsic Brand Fungicide Outperforms Headway and Velista in Spring Dead Spot Trials

![Graph showing turfgrass quality (1-9) comparison between untreated, Lexicon Intrinsic, Headway, and Velista]

Mini Verde Bermudagrass Green. 1 = completely diseased and dead turf and 9 = no disease and perfect turf. Source: Dr. B. Martin, Clemson University 2015-2016.
Lexicon® Intrinsic® Brand Fungicide
Outperforms On Control Of Large Patch On Zoysiagrass

Two fall applications and one spring application in ‘Zeon’ zoysiagrass. Observations at green-up April 19, 2016. Source: NC State University, Dr. J. Kerns and Lee Butler, 2015 - 2016

Lexicon Intrinsic Brand Fungicide Delivers Control Of Bipolaris Leaf Spot

Source: Clemson University, Dr. B. Martin, 2013.
**Intrinsic®** brand fungicides, for turf that’s healthy and fit

Intrinsic® brand fungicides deliver optimal disease control and plant health benefits that improve turf fitness. These innovative fungicides maximize the photosynthesis process in turfgrass, leading to stronger, longer roots, greater growth efficiency and turf that recovers more quickly from stress. Your turf will have the resilience to bounce back from tough environmental conditions like heat, humidity and heavy play, as well as mechanical stresses like aeration.

Intrinsic brand fungicides provide broad-spectrum control of 27* diseases, with up to 28 days of residual control. Wherever your region and whatever your challenges, Intrinsic brand fungicides deliver quality that keeps disease in check and turf healthy.

**Overview of Intrinsic Brand Fungicides**

<table>
<thead>
<tr>
<th>Product</th>
<th>Primary Use Sites</th>
<th>Key Benefits</th>
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<tbody>
<tr>
<td>Lexicon® Intrinsic</td>
<td>Greens, approaches, surrounds, new sod</td>
<td>Premier greens foundation: Industry-leading foundation for disease control and plant health in cool- or warm-season greens, or any high-value playing surface where disease control and turfgrass quality are critical</td>
</tr>
<tr>
<td>Honor® Intrinsic</td>
<td>Fairways, roughs, tees, bunker faces, primary roughs</td>
<td>Superior disease control for fairways &amp; tees: Excellent fairway disease control with a focus on dollar spot and patch diseases</td>
</tr>
<tr>
<td>Insignia® SC Intrinsic</td>
<td>Fairways, primary roughs, tees</td>
<td>Broad-spectrum control that delivers value: Controls a wide array of diseases course wide</td>
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**Lexicon® Intrinsic Brand Fungicide Provides Enhanced Coverage at Grow-In**

Pixels are a measure of vegetative growth. A higher percentage indicates growth in sprigs versus bareground area. Source: BASF study. Dr. R. Keese, Dr. S. Anas, BASF Biology, RTP, NC.

Consult label for full list of diseases controlled. Spring dead spot control is subject to BASF FIFRA 2(ee) Recommendation. See www.cdms.net for BASF Technical Bulletin.
Lexicon® Intrinsic® Brand Fungicide
Promotes Substantially Superior Root Length

Root cores were analyzed with WinRhizo software in July 2013, two months following green-up and five months after the last application. Source: Clemson University, Dr. B. Martin, 2013.

Lexicon Intrinsic Brand Fungicide Turf Quality
Superior to Headway and Chipco Signature


top to bottom:
Root systems of turf treated with Lexicon Intrinsic brand fungicide (center), compared to those of untreated turf (at left) and turf treated with competitive fungicides at right: Briskway fungicide, Daconil Action fungicide, Heritage TL fungicide, Interface fungicide and Tartan fungicide.

Demonstrations conducted in a greenhouse under greenhouse conditions. All treatments were made at the manufacturer’s recommended labeled rates.
The Holiday Spray program, anchored by Lexicon® Intrinsic® brand fungicide

Cool-Season Greens Holiday Spray Program

The Holiday Spray program from BASF has become the industry’s foremost fungicide program for the control of summer stress in bentgrass turf. Research demonstrates that three applications\(^1\) of Lexicon Intrinsic brand fungicide before major summer holidays will promote optimal disease control while boosting plant health, enabling turfgrass to survive and thrive during the hot summer months.

Warm-Season Greens Holiday Spray Program

Lexicon® Intrinsic® brand fungicide delivers effective broad-spectrum disease control on Bermudagrass greens during the winter stress period. This innovative fungicide also provides a plant health foundation so that warm-season turf can withstand colder temperatures. BASF recommends four applications of Lexicon Intrinsic brand fungicide during the fall-winter months to protect against Bipolaris leaf spot, fairy ring, spring dead spot\(^2\) and large patch.

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\(^1\) Lexicon Intrinsic brand fungicide can be applied in 3-4 applications at 0.34 - 0.47 fl oz not to exceed 1.7 total fl oz of product (74 fl oz/a) per calendar year.

\(^2\) Now subject to BASF FIFRA 2(ee) Recommendation for spring dead spot in certain states.
Technical facts about **Lexicon® Intrinsic®** brand fungicide

- **Lexicon Intrinsic brand fungicide active ingredients**: fluxapyroxad 14.33% + pyraclostrobin 28.58%
- **Fungicide class**: Group 7 (SDHI) and Group 11 (Strobilurin)
- **Formulation**: Suspension concentrate (SC)
- **Packaging**: 4 x 21 fl oz
- **Rate**: 0.34 fl oz to 0.47 fl oz/1,000 sq ft on 14- to 28-day intervals
- **Signal word**: CAUTION
- **REI**: Wait until sprays are dried for all uses other than sod farms.
  On sod farms, REI is 12 hours.
- **PPE**: Long-sleeved shirt and pants; chemical-resistant gloves; shoes plus socks

### Diseases Controlled With Lexicon Intrinsic Brand Fungicide

<table>
<thead>
<tr>
<th>Diseases</th>
<th>Cool-Season Turf</th>
<th>Warm-Season Turf</th>
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<tbody>
<tr>
<td>Anthracnose</td>
<td></td>
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<tr>
<td>Bentgrass dead spot</td>
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<tr>
<td>Bermudagrass decline</td>
<td></td>
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<tr>
<td>Brown patch</td>
<td></td>
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<tr>
<td>Brown ring patch</td>
<td></td>
<td></td>
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<tr>
<td>Dollar spot</td>
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<tr>
<td>Fairy ring</td>
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<tr>
<td>Fusarium patch/pink snow mold</td>
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<tr>
<td>Grey leaf spot</td>
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<tr>
<td>Large patch</td>
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<tr>
<td>Melting out</td>
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<tr>
<td>Pink patch</td>
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<tr>
<td><strong>Pythium</strong> blight</td>
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<tr>
<td><strong>Pythium</strong> root rot</td>
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<td><strong>Pythium</strong> root dysfunction</td>
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<tr>
<td>Rapid blight</td>
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<tr>
<td>Red thread</td>
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<tr>
<td><em>Rhizoctonia</em> leaf or sheath spot (<em>Bipolaris</em> spp.)</td>
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<tr>
<td>Rust</td>
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<tr>
<td>Gray snow mold</td>
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<tr>
<td><strong>Spring dead spot</strong></td>
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<tr>
<td>Summer patch</td>
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<tr>
<td>Take-all patch</td>
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<tr>
<td>Yellow tuft</td>
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<tr>
<td>Zoysia patch</td>
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</tbody>
</table>

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The beautiful greens, fairways and roughs of Oakmont Country Club
Testimonials

“We look at the trials - we look at field days at Rutgers and Penn State and other universities - and we see how products perform in those settings. We kind of take a scientific approach. Lexicon [Intrinsic brand fungicide] and Xzemplar [fungicide] have obviously developed very well over the years and have shown that they can do a job and be very efficient and very effective.”

– Mark Kuhns, Director of Grounds, Baltusrol Golf Club

“During the PGA we expect to have firm, fast conditions. A product like Lexicon [Intrinsic brand fungicide] allows us to develop roots and plant health in order to push the greens to their limits. The broad range of diseases controlled has made choosing it an easy decision on our part.”

– Dan Kilpatrick, Superintendent, Lower Course, Baltusrol Golf Club

“Lexicon [Intrinsic brand fungicide] definitely goes a long way in helping us achieve that balance — which can be sometimes tough to do — of keeping the plant right on that edge of great playability, but we also want to keep it relatively healthy at the same time.”

– Trent Inman, CGCS, Old Memorial Golf Club

“At the end of the day, what we’re doing, what we’re applying to the golf course, is about one thing, and that’s results. And BASF products have been an integral part in not only our day-to-day maintenance of the golf course, but also in preparation for the U.S. Open.”

- David Delsandro, Director of U.S. Open Operations and Projects, Oakmont Country Club
Always read and follow label directions.