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# BASF

# Turf Solutions

## Product Range Guide

 **BASF**

We create chemistry

# BASF are dedicated to investing in the research and development for complete quality turf solutions.

**Our team strive to maintain a focus in our research and development on creating a rounded portfolio of weed, disease and turf management solutions. For over 150 years BASF have developed innovations that focus on current and pressing challenges.**

This BASF Turf Product Range Guide is a culmination of research in this industry segment and showcases the unique technologies, unmatched in efficacy and performance, which lay the foundation for quality turf management.

Golf Courses, sports fields and parks are dynamic, high throughput growing environments placing them at risk of a range of evolving challenges. BASF Turf Solutions are developed to support good cultural practices to ensure you present the best quality turf with sustainability in mind.

BASF have invested and developed solutions to address key market needs and provide options that not only outperform current technologies, but provide solutions which manage resistance, integrate with cultural and IPM programs and meet customer needs.

We are excited to introduce these technologies to you in a comprehensive, solution focused guide, and look forward to bringing new technologies and innovations to compliment this suite in the near future.

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*Technical Development Specialist*

*BASF Professional and Specialty Solutions*



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# Innovative packaging from BASF for a sustainable future

## BASF Eco-packaging

At BASF Professional and Specialty Solutions, we are committed to sustainability and developing better solutions that will directly benefit our industry partners and their customers. The development and adoption of eco-packaging technology is an example of this commitment. This innovative packaging solution allows for at least a 20% reduction in plastics\*, is more convenient, user friendly and decreases wastage\*\*.





## Who said sustainability had to come at a cost?

- The large central opening allows pouring without glugging which improves speed of use, as well as making the eco-packs easy to rinse and empty
- The flexible handle (5 & 10L packs) is ergonomically shaped and rotates smoothly
- The gripping surface allows slip free holding and pouring, decreasing the chance of spillage when using
- All materials are made from Polyethylene (PE) with a plastic lid, improving recycling capability
- The lightweight design reduces plastic by a minimum of 20% and makes the package easier to compact after use
- The integrated seal reduces hazardous waste, makes the package safer and easier to open, and eliminates induction sealing
- Grooves at defined millilitre intervals with the printed scale on the label make dosage of product convenient and simple



Eco-packaging is a positive choice for our customers by improving safety, efficiency and sustainability. Sustainability is a growing focus of the sports and turf management industry. Environmentally friendly packaging is a key step in reaching sustainability goals as an industry, and within local facilities.

For more information visit [turf-solutions.basf.com.au/sustainability-pss](https://turf-solutions.basf.com.au/sustainability-pss)



Scan for more  
information



# Complete knockdown and long-term pre-emergent weed control made easy

Arsenal® Super Herbicide with Transport Technology™ is a unique formulation that provides superior long-term pre and post-emergent weed control on a wide range grass and broadleaf weeds. Arsenal Super has been specifically designed for non-crop situations where long-term vegetation management is required. The unique formulation provides greater active ingredient uptake, more effective translocation and superior rainfastness when compared to other herbicides. Arsenal Super is effective as a stand-alone solution and is also highly compatible with a broad range of herbicides.

- Long-term pre and post-emergent control for up to six months
- Unique Transport Technology™ enables rapid uptake and translocation throughout target weeds resulting in optimised efficiency
- Treatment flexibility with suitability for application through a small knapsack or large boomspray
- Suitable as a stand-alone solution or tank mix partner with BASF's Basta® Non-Selective Herbicide



## Situational use pattern

A broad spectrum weed control solution, Arsenal Super offers a diverse use pattern around structures where long-term weed control is imperative. Applications can be made pre or post-emergence via handgun or knapsack. Arsenal Super stops growth rapidly although symptoms may take over 30 days to develop. Affected plants are discoloured and growth is distorted. Arsenal Super is rapidly absorbed through foliage and roots and translocated throughout the plants. Arsenal Super consistently controls unwanted vegetation with residual for up to 6 months.

**Do not use where water will be collected for irrigation, or in areas where potted plants roots will be in contact with treated surfaces.**

Situation	Weed	States	Rate	Critical Comments
Around agricultural buildings and other farm non-crop situations, commercial, industrial, and public service areas, rights of way and waste land, away from desirable vegetation.	Arsenal <sup>®</sup> Super controls a broad range of pre and post emergent grass and broadleaf weeds.	All states	<b>Boom:</b> 4 L/ha <b>Hand gun * :</b> 400ml/ 100L <b>Knapsack * :</b> 40ml/10L	Applications can be made pre or post-emergence. Post-emergence applications also provide pre-emergence control.  (refer to label for full application instructions)
	Please refer to the product label for full weed species listings and directions for use.	All states	<b>Boom:</b> 6 L/ha <b>Hand gun * :</b> 4600ml/ 100L <b>Knapsack * :</b> 60ml/10L	Applications can be made pre or post-emergence. Post-emergence applications also provide pre-emergence control.  (refer to label for full application instructions)
Irrigation channels – supply channels and tail drains leading to recirculation dams only.	Residual activity is maximised when applied to bare or low weed cover situations.	All states	<b>Boom:</b> 3 L/ha <b>Hand gun * :</b> 300ml/ 100L <b>Knapsack * :</b> 430ml/10L	Apply during the non-crop season and when the channel is not in use. Drain channels to be treated prior to use. Apply only to irrigation delivery and recirculation channels which may be flushed to a recirculation dam or settling pond. Do NOT apply where flushing water cannot be disposed of safely on-farm. Water from the initial flushing of treated channels must be retained on-farm.  Applications can be made pre or post-emergence. Post-emergence applications also provide pre-emergence control.  (refer to label for full application instructions)

\* 100L & 10L Hand Gun and Knapsack rates provided in the table above are calculated on 1000L spray volume per hectare. Any deviation in spray volumes above or below 1000L/ha will require recalibration.

**Refer to the product label for full directions for use table.**

## Packaging

Available in 10L bottles





# The powerful knockdown alternative

Basta® Herbicide is a non-selective knockdown with a well-deserved reputation for versatility, effectiveness and a high level of non-target plant safety. Basta is a partially systemic herbicide which is labelled for the control of over 80 of the toughest weeds. Basta also provides users with faster weed control and improved levels of non-target safety when compared to glyphosate alternatives.

- A powerful broad-spectrum alternative to glyphosate which controls over 80 troublesome weeds
- Superior non-target safety and target weed control of the toughest weeds whilst minimising damage to desired non-target plants
- Effective control for glyphosate resistant weeds with an alternative mode of action – Group N
- Broad use pattern across a range of non-crop situations
- Compatible with BASF's Arsenal® Super for up to 6 months of broad-spectrum pre-emergent weed control



## Situational use pattern

Basta Herbicide offers a versatile situational use pattern perfect for industrial weed control spray programs. Suitable for use around commercial and industrial areas, rights of way and other non-agricultural areas. Basta Herbicide controls over 80 troublesome weeds and offers an alternative mode of action to glyphosate resistant weeds.

### B. COMMERCIAL, INDUSTRIAL, NON-AGRICULTURAL AREAS, FENCELINES IN AGRICULTURAL AREAS and FORESTRY PLANTATIONS

Crop/Situation	Weeds	State	Rate	WHP	Critical Comments
Commercial and industrial areas, forest plantations, rights-of-way and other non-agricultural areas	Please refer to the product label for full list of weeds controlled.	All States	1.0 to 5.0 L/ha	-	Determine the recommended rate of use by considering the criteria WEED SPECIES, WEED STAGE OF GROWTH, WEED DENSITY and CLIMATIC CONDITIONS as described above in <b>Part A</b> of the Directions for Use table, under Critical Comments.
Fencelines in agricultural areas				- (8 weeks if grazing)	Warnings: Do not allow spray or spray drift to contact desirable plants. To avoid potential crop damage, refer to the label sections on <b>Application</b> and <b>PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS</b> .
Commercial & industrial areas, forest plantations, rights-of-way and other non-agricultural areas	Volunteer or wildling <i>Pinus spp.</i>		Handgun and knapsack application 500 mL/ 100 L water 5 L /ha	-	Basta is a non-selective herbicide and will affect most weeds. Its forestry use is designed to improve the control of <i>Pinus spp.</i> wildings when pre-plant weed control is carried out. To broaden the weed spectrum, mixing with other herbicides such as glyphosate and metsulfuron-methyl at labelled rates may be necessary.
Forestry plantations (pre-plant plantation establishment)					<p><b>APPLICATION</b></p> <p>Apply with an adjuvant. The addition of an adjuvant e.g. Nu-Film® P or Exit® may assist in improving performance.</p> <p>High water volumes or nozzle systems should be used to achieve complete coverage of weeds, which is essential for good control.</p> <p>Handgun and knapsack rates are based on the application of 1000 L of spray mixture per sprayed hectare. This is usually adequate to thoroughly wet dense stands of weeds. Less dense stands will require lower water rates. Basta does not provide residual weed control. Refer also to comments in the General Instructions which relate to application.</p> <p><b>WEED GROWTH STAGE AND CONDITION</b></p> <p>Use on <i>Pinus spp.</i> ≤ 15 cm is recommended to maximise efficacy. Apply when weeds are actively growing. Results will be reduced if treated plant is under stress due to very dry, very wet, frosty or diseased conditions.</p> <p><b>COVERAGE</b></p> <p>Complete coverage of target is essential for good control. Poor coverage may result in re-growth.</p> <p><b>CLIMATIC CONDITIONS</b></p> <p><b>Best results are achieved when applied under warm, humid conditions</b> (temperatures below 33 °C with a relative humidity above 50 %). Good results will be achieved under most other conditions, however poor results may occur under hot, dry conditions.</p> <p>Trials have shown better results from autumn and winter applications than from spring and summer applications.</p> <p><b>SYMPTOMS</b></p> <p>Visible symptoms will appear within 3 weeks; tree death may take several months depending on initial coverage and size of tree. Follow up treatments may be necessary to control re-growth in some cases.</p>

Refer to the product label for full directions for use table.

## Packaging

Available in 20L bottles





# Improved performance through patented technology

Drive® XL Herbicide provides superior post-emergent control of Summer grass, White clover and effective suppression of Kikuyu. BASF's patented soluble liquid formulation results in improved product performance, and reliability whilst remaining safe on a wide variety of turf grass species. This unique formulation results in rapid take up of the active ingredient, leading to faster and improved levels of weed control. The acceleration of active ingredient uptake achieved by the unique SL formulation not only improves efficacy but also results in improved levels of rainfastness when compared to traditional DF formulations providing turf managers with greater flexibility and improved usability.

- Unmatched post-emergent control of Summer grass and Clover in turf
- Unique soluble liquid formulation which improves leaf penetration, efficacy and rainfastness
- Drive XL offers superior flexibility in its ability to be mixed with pre-and post-emergent products to increase the spectrum of control
- Rapid rain fast technology in as little as 30 minutes



## Situational use pattern

Drive XL will provide post-emergent control of Summer grass and clover in turf. Quinclorac is rapidly absorbed through the foliage and translocated throughout the plant. Death of sensitive weeds usually occurs between 1 and 2 weeks after treatment. Kikuyu can be suppressed by applying two post-emergent treatments. Best results will be achieved if Kikuyu is treated in Autumn.

Situation	Weed Controlled	Rate	Critical Comments
Established turf of: Common couch ( <i>Cynodon dactylon</i> x <i>C. transvaalensis</i> ), Japanese lawnglass ( <i>Zoysia japonica</i> ), Marine couch ( <i>Sporobolus virginicus</i> ), Perennial ryegrass ( <i>Lolium perenne</i> ), Creeping bentgrass ( <i>Agrostis stolonifera</i> ), Kentucky Bluegrass ( <i>Poa pratensis</i> )  See also "Protection of crops, native and other non-target plants section"	Summer grass ( <i>Digitaria</i> spp.)	4.6 L per 400 L water	<u>One application:</u> Weeds at cotyledon stage up to prior to second tiller OR Weeds at 5 tillers and greater  <u>Two applications, 21 to 28 days apart:</u> Weeds from 2 to 4 tillers The addition of a crop oil adjuvant may improve weed control in unfavourable weather conditions
	Kikuyu ( <i>Pennisetum clandestinum</i> )  (Suppression only)		For Kikuyu suppression, apply twice, 14 to 21 days apart. Best results are gained from Autumn applications.  The addition of a crop oil adjuvant may improve weed control in unfavourable weather condition.
	White clover ( <i>Trifolium repens</i> )		Apply to actively growing weeds.

Refer to the product label for full directions for use table.

## Packaging

Available in 5L bottles





# Powerful pre-emergent control for the toughest weeds

Freehand® Herbicide offers the turf manager a new tool for pre-emergent weed control of broadleaf and grassy weeds. Its two unique active ingredients, pendimethalin and dimethenamid-P, prevent weeds from growing and multiplying by inhibiting cell growth in seedling shoots and impeding plant cell microtubule assembly in roots. This powerful herbicide is labelled for the control and suppression of more than 60 of the toughest, most troublesome weeds. Freehand Herbicide promotes higher quality and more attractive turf.

- Unique combination of two modes of action (Groups D and K) for broader spectrum weed control and resistance management
- Safe on warm season turfs providing up to three months of control and suppression of weeds
- Easy-to-use granular formulation and particle distribution allows for easy spreading and flexible application rates
- Extended residual control for up to three months



## Situational use pattern

With two unique active ingredients, Freehand offers a new tool for pre-emergent weed control of broadleaf and grass weeds. Freehand may be applied and distributed using a granule applicator or gloved hand. Oscillating spout or rotary type fertiliser spreaders are recommended for large areas. For best results ensure area is clean of debris prior to application. Even application is important for good weed control. If using a granule applicator, ensure they are properly calibrated to apply granules evenly. Freehand application should be followed by irrigation or rainfall, before weeds germinate. If Freehand is not activated by rainfall or irrigation within 30 days, erratic weed control may result.

Situation	Weeds	Rate	Critical Comments
<b>Container &amp; in-ground Ornamental plants</b>  <b>Recreational Turf:</b> Including but not limited to: fairways, golf tees, municipal sports fields, industrial commercial and domestic lawns.  <b>Warm Season Turf species only:</b> Hybrid Couch <i>(Cynodon dactylon</i> <i>Cynodon transvaalensis)</i>  Common Couch <i>(Cynodon dactylon)</i>  QLD Blue Couch <i>(Digitaria didactyla)</i>  Carpet Grass <i>(Axonopus compressus)</i>  Kikuyu <i>(Pennisetum clandestinum)</i>  Buffalo <i>(Stenotaphrum secundatum)</i>  Zoysia <i>(Zoysia japonica</i> and <i>Zoysia matrella)</i>	Freehand Herbicide controls and suppresses a wide range of broadleaf and grassy weeds.  Please refer to the product label for full weed species listings and directions for use.	100 kg/ha or 1 kg/100 square metres or 10 g/square metres	Apply evenly over the area or pots to be treated preferably using a properly calibrated mechanical granule spreader. Apply to the surface of weed free soil preferably after cultivation or just after potting up.  Freehand will not control established weeds. Apply to dry foliage only and then sprinkler irrigate or hose (10- 15 mm) to wash granules from foliage and incorporate the herbicide into the soil.  Do not apply Freehand to wet foliage – should this happen irrigate or hose immediately to remove granules from the leaf surface.  Follow the precautions listed below to avoid unnecessary plant damage and to obtain optimum weed control.  One application will last for 2- 3 months depending upon rainfall, irrigation, soil type (potting mix), temperature and weed seed burden.  Retreat when the first signs of weed growth are seen but no sooner than 2 months and no later than 3 months after the first application.
		200 kg/ha or 2.0 kg/100 square metres or 20 g/square metres	<b>Ornamentals</b> Do not apply Freehand 2 weeks prior to or 2 weeks after leaf bud break or during periods of flush growth. Newly formed leaves are sensitive to this product. Spotting or leaf drop may result from such applications.  Do not apply directly on to bare roots of woody ornamentals as injury may occur.  <b>Turf</b> Apply prior to germination of weeds (typically from early spring through to late summer early Autumn).  Delay overseeding of treated turfgrass for at least 3 months after last application.  Application of Freehand to newly sodded areas must be delayed until turfgrass root system has been well established and turfgrass mowed at least 2 times.

**Refer to the product label for full directions for use table.**

## Packaging

Available in 22.7kg bags





# Strikingly Effective

Pylex® Herbicide offers a new use pattern for the active constituent, Topramezone, for the control of warm season grass and broadleaf weeds in cool season turf. This new and unique use pattern enables the safe and efficient removal of broadleaf weed species and warm season turf species, including Buffalo grass, Kikuyu, Couch and Queensland blue couch, in cool season turf.

As the only solution for selective weed control on greens, Pylex is pioneering an unmatched combination of turf safety and exceptional efficacy. Featuring pre-measured packaging and highly selective control, Pylex increases labour efficiencies and turf safety, minimising chemical calculation risks.

- New and unique chemistry use pattern for Bent grass greens
- Unmatched control of warm season grass and broadleaf weeds in cool season turf
- Targeted treatment with clear visual symptoms for exceptional performance and efficacy
- Highly selective herbicide presented in pre-measured syringes for easy application and greater turf safety



## Situational use pattern

Pylex herbicide offers a new use pattern for Topramezone. Offering versatile application through a boom spray or knapsack, Pylex Herbicide is suitable for spot spray, broad area application, or inner green perimeter treatments to control target weeds. For optimised weed control apply in conditions conducive to maximised photosynthesis.

Situation	Weed Controlled	Rate	Critical Comments
Bentgrass / Creeping Bentgrass ( <i>Agrostis capillaris</i> )	Warm season grass weeds including: Buffalo ( <i>Stenotaphrum secundatum</i> ), Couch ( <i>Cynodon dactylon</i> ), Hybrid couch ( <i>Cynodon dactylon</i> x <i>Cynodon transvaalensis</i> ), Crowsfoot grass ( <i>Eleusine indica</i> ), Kikuyu ( <i>Pennisetum clandestinum</i> ),	0.375 mL/100 m <sup>2</sup> in 4-6 L water + 0.5% MSO	Apply to actively growing weeds. Two repeat applications 21-28 days apart are required for optimum control. Some minor transient bleaching of Bentgrass may be observed 7-14 days post application.  For best results do not water or irrigate for 24 hours post application.
Fine fescue ( <i>Festuca</i> spp.), Tall fescue ( <i>Festuca arundinacea</i> ), Perennial Ryegrass ( <i>Lolium perenne</i> ), Kentucky blue grass ( <i>Poa pratensis</i> )	Qld blue couch / Summer grass ( <i>Digitaria</i> spp), Broadleaf weeds including: <i>Amaranthus</i> spp, Bindy eye ( <i>Soliva sessilis</i> ), Creeping oxalis ( <i>Oxalis corniculata</i> ), Everlasting (cudweed) ( <i>Gamochaeta pensylvanica</i> ), Fleabane/ Horseweed ( <i>Conyza bonariensis</i> ), Scarlet Pimpernel ( <i>Anagallis arvensis</i> ), Sowthistle ( <i>Sonchus oleraceus</i> ), White clover ( <i>Trifolium repens</i> ), Wild Carrot ( <i>Daucus carota</i> )	0.75 mL/100 m <sup>2</sup> in 4-6 L water + 0.5% MSO	Apply to actively growing weeds. Under some conditions a single application of Pylex may not be sufficient for complete control. A sequential application 21-28 days post application may be required.  Some minor transient bleaching of turf may be observed 7-14 days post application.  For best results do not water or irrigate for 24 hours post application.

Refer to the product label for full directions for use table.

## Packaging

Available in 5x 0.375mL syringe packs



# The improved formula for successful pre-emergent protection

Stomp® Xtra is an advanced, low-staining formulation of pendimethalin, a well established and widely used pre-emergent herbicide. With less volatility and a higher concentration than other commercially available herbicides, Stomp Xtra is one of the most efficient and convenient formulations available. Offering unmatched control of Crowsfoot, Summer grass and Winter grass in various turf situations, Stomp Xtra is essential for inclusion in your weed control program.

- Unmatched pre-emergent control Crowsfoot (Crab grass), Summer grass and Winter grass in a liquid formulation
- Virtually no odour with reduced risk of staining
- Low volatility enabled by a unique capsule formulation
- Concentrated formulation reduces application rates and simplifies transport, storage and handling



## Situational use pattern

Stomp Xtra Herbicide is a selective pre-emergent herbicide for the control of most annual grasses and certain broadleaf weeds. Stomp Xtra controls weeds by inhibiting seedling development; it will not control established weeds. For best results, seedbeds should be free of weeds, trash and clods at the time of application.

Crop	Weeds Controlled	State	Rate/ Treated Ha	Critical Comments
<b>TURF WARM SEASON SPECIES.</b>  Bahia grass, buffalo grass, couch, Kikuyu, salt water couch and Zoysia grass turf	Crowsfoot (crab grass), summer grass, winter grass	All States	3.3 L/ha or 33 mL/ 100 m <sup>2</sup>	The product should be incorporated by 10-15 mm of spray irrigation or rainfall as soon as possible within one day of application.  Apply once every 10 weeks from early September to the end of February.
Queensland blue couch, hybrid couch cv. Tifdwarf			2.2 L/ha or 22 mL/ 100 m <sup>2</sup>	
<b>TURF COOL SEASON SPECIES.</b>  Kentucky blue grass			3.3 L/ha or 33 mL/ 100 m <sup>2</sup>	The product should be incorporated by 10 –15 mm of spray irrigation or rainfall as soon as possible within one day of application.
Bent grass, perennial ryegrass			2.2 L/ha or 22 mL/ 100 m <sup>2</sup>	Do NOT make more than one application of STOMP Xtra per year. (Refers to ryegrass, bent grass only)

Refer to the product label for full directions for use table.

## Packaging

Available in 20L bottles



# Perfect turf, powered from within

Lexicon® Intrinsic® Brand Fungicide is an effective, broad spectrum turf fungicide that provides the ultimate protection for your turf. This innovative fungicide and its powerful dual chemistry combination delivers best in class disease control with advanced plant health benefits. Lexicon Intrinsic Brand Fungicide is the foundation product you can count on for consistent, longer-lasting protection with advanced, proven plant health benefits including increased photosynthesis, stronger roots, improved turf vitality and resilience. Simply put Lexicon Intrinsic Brand Fungicide is the ultimate tool in turf disease management.

- Broad spectrum control of major turf diseases
- Low use rates with uncompromised efficacy
- Confidently and consistently controls disease with a quick knockdown and long residual
- Advanced plant health benefits including stronger, longer roots, greater growth efficacy, and resilience to stress





## Situational use pattern

Lexicon Intrinsic brand fungicide is a combination of two unique chemistries. These two chemistries provide optimal protection from key turf diseases and deliver plant health benefits that help your turf rebound faster from stressors. 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.

Situation	Disease	Rate	Water Volume	Maximum # of Sequential Applications	Critical Comments
Turf	Anthraxnose ( <i>Colletotrichum graminicola</i> )	1.5 L/ha	Preventative Treatments: 400-1600 L/ha	2	<b>Preventative Treatments:</b> Begin application when conditions are favourable for fungal infection, prior to disease symptom development. Apply at application intervals of between 14-28 days. <b>Curative Treatments:</b> Apply at application intervals of between 14-28 days.
	Brown Patch, Large Patch and Brown Ring Patch ( <i>Rhizoctonia</i> spp.)	1-1.5 L/ha		3	
	<i>Curvularia</i> spp.	1.5 L/ha		2	
	Dollar spot ( <i>Clariireedia homeocarpa</i> formally known as <i>Sclerotinia homeocarpa</i> )	1-1.5 L/ha	Curative Treatments: 600-2000 L/ha	2	Apply prior to fungal infection or in early stages of disease development. Apply at application intervals of between 14-28 days.
	Fairy ring ( <i>Basidiomycete fungi</i> )	1.5 L/ha		3	<b>Preventative Treatments:</b> Begin application when conditions are favourable for fungal infection, prior to disease symptom development. Apply at application intervals of between 14-28 days. <b>Curative Treatments:</b> Apply at application intervals of between 14-28 days.
	Fusarium patch ( <i>Microdochium nivale</i> or <i>Fusarium</i> spp.)	1-1.5 L/ha		3	Apply LEXICON in a preventative fungicide program. Begin application when conditions are favourable for fungal infection, prior to disease symptom development. Apply at application intervals of between 14-28 days.
	Helminthosporium Complex ( <i>Drechslera</i> spp., <i>Bipolaris</i> spp., <i>Exserohilum</i> spp.)	1.5 L/ha		2	<b>Preventative Treatments:</b> Begin application when conditions are favourable for fungal infection, prior to disease symptom development. Apply at application intervals of between 14-28 days. <b>Curative Treatments:</b> Apply at application intervals of between 14-28 days.
	Leaf and Sheath Spots ( <i>Waitea circinate</i> var. <i>zeae</i> or <i>W. circinate</i> var. <i>oryzae</i> ) also known as <i>Rhizoctonia zeae</i> or <i>R oryzae</i> )	1-1.5 L/ha		2	<b>Curative Treatments:</b> Apply at application intervals of between 14-28 days.
	<i>Lepista</i> spp.	1.5 L/ha		3	
	Pythium blight ( <i>Pythium</i> spp.)	1.5 L/ha		2	Apply LEXICON in a preventative fungicide program. Begin application when conditions are favourable for fungal infection, prior to disease symptom development. Apply at application intervals of 14 days. For maximum control during severe disease pressure tank mix with another non-strobilurin fungicide labelled for Pythium blight control.
	Pythium root dysfunction ( <i>Pythium</i> spp.)	1.5 L/ha		2	Apply LEXICON in a preventative or early curative program. Begin application when conditions are favourable for fungal infection, prior to disease symptom development. Apply at application intervals of between 14-28 days. Following sequential applications rotate another effective fungicide prior to follow-up LEXICON applications. Make 2 applications in the Autumn followed by 2 applications in the Spring. Irrigate immediately following applications.
	Rust ( <i>Puccinnia</i> spp.)	1-1.5 L/ha		2	<b>Preventative Treatments:</b> Begin application when conditions are favourable for fungal infection, prior to disease symptom development. Apply at application intervals of between 14-28 days. <b>Curative Treatments:</b> Apply at application intervals of between 14-28 days.
	Ectotrophic Root Infecting Fungi (ERI) including: Spring Dead Spot ( <i>Ophiostoma narmari</i> ), Take-all patch ( <i>Gaeumannomyces graminis</i> f. <i>sp. avenae</i> ), Take-all Root Rot ( <i>Gaeumannomyces graminis</i> f. <i>sp. Graminis</i> )	1.5 L/ha		3	Apply LEXICON in a preventative fungicide program. Begin application when conditions are favourable for fungal infection, prior to disease symptom development. Apply 2 applications in the Autumn and 2 applications in the Spring at application intervals of 14-28 days.

Refer to the product label for full directions for use table.

### Packaging

Available in 500mL bottles



Any turf.  
Any temperature.  
Anywhere.

Maxtima® Fungicide is a revolutionary, broad spectrum DMI that can be applied on any turf, at any temperature and anywhere on your course. Featuring Revysol® technology, Maxtima Fungicide provides advanced turfgrass safety, with no limitations to its versatility of application.

- Revysol technology protects the entire plant without any PGR effect in hot summer months
- Unrivalled broad-spectrum disease control through advanced binding power
- A unique DMI for use throughout the seasons offering optimum versatility of application
- Powerful residual — long-lasting control of the diseases that affect warm and cool season turf



## Situational use pattern

A unique DMI for use throughout all seasons. Applications of Maxtima Fungicide are not limited by temperature, nor turf variety, rather it can be applied anywhere, at any temperature and on any turf. Maxtima is powered by the active ingredient Revysol, which works quickly to control fungal infections in turf plants. The chemical structure of Revysol is highly flexible, ensuring excellent binding capacity and adaptability. After uptake, Revysol is well protected within the inner-leaf reservoir and is drawn on for long-lasting protection. Though powerful when used as a standalone, Maxtima provides even better protection when rotated with Lexicon Intrinsic Brand Fungicide and Xzemplar Fungicide. Include all 3 fungicides in your turf management program for superior all-round disease control and resistance management.

Situation	Disease	Rate	Water Volume	Application Intervals (Days)	Critical Comments
Turf	Anthracnose ( <i>Colletotricum graminicola</i> )	1.25-1.8 L/ha	<b>Preventative Treatments:</b> 400-1600 L/ha  <b>Curative Treatments:</b> 600-2000 L/ha	14	Apply prior to fungal infection or in early stages of disease development.
	Brown patch, Large patch and Brown ring patch ( <i>Rhizoctonia</i> spp)	1.8-1.25 L/ha		14	Apply prior to fungal infection or in early stages of disease development.
	Dollar spot ( <i>Sclerotinia homeocarpa</i> )	1.25 L/ha		14-28	Apply prior to fungal infection or in early stages of disease development. Use shorter application intervals and higher rate when prolonged disease conditions exist.
	Spring Dead Spot ( <i>Ophiosphaerella</i> spp)	1.8-2.5 L/ha		21-28	Apply when conditions are favourable for fungal infection, or in early stages of disease development.
	Take-all patch ( <i>Gaeumannomyces graminis</i> f. sp. <i>avenae</i> )  Take-all root rot ( <i>Gaeumannomyces graminis</i> f. sp. <i>graminis</i> )	2.5 L/ha		28	Apply prior to fungal infection or in early stages of disease development.

Refer to the product label for full directions for use table.


## Packaging

Available in 1.25L & 5L bottles





# Take control of diseases FAST!



From the same stable as Lexicon® Intrinsic® Brand Fungicide, Xzemplar® Fungicide features unique Xemium® carboxamide technology for outstanding performance you can count on in the toughest of situations.

- Broad spectrum curative and preventative control of key diseases
- Combines perfectly with Lexicon Intrinsic Brand Fungicide and Maxtima® Fungicide for the ultimate rotation program in all situations
- Unmatched rapid knockdown and superior residual control of Dollar spot
- High-performing and consistently effective at low use rates to ensure the protection of turf health

## Situational use pattern

Xzemplar is powered by the active ingredient Fluxapyroxad, which disrupts the energy supply and biosynthesis of fungal building blocks and is highly systemic in the plant. Fluxapyroxad is redistributed from the waxy layer to other areas of the plant enabling long lasting curative and preventative control. Though powerful when used as a standalone, Xzemplar provides even better protection when rotated with Lexicon Intrinsic Brand Fungicide and Maxtima Fungicide. Include all 3 products in your turf management program for superior all-round disease control and resistance management.

Situation	Disease	Rate	Water Volume	Application Intervals (Days)	Critical Comments
Turf	Brown Patch or Large Patch ( <i>Rhizoctonia spp</i> )	0.65-0.8 L/ha	Preventative Treatments: 400-1600 L/ha  Curative Treatments: 600-2000 L/ha	14-21	<i>Preventative Treatments:</i> Begin application when conditions are favourable for fungal infection, prior to disease symptom development.  <i>Curative Treatments:</i> Use shorter application intervals and higher rate when disease conditions exist.
	Dollar spot ( <i>Sclerotinia homeocarpa</i> )	0.65-0.8 L/ha		14-28	Apply prior to fungal infection or in early stages of disease development. Use shorter application intervals and higher rate when prolonged disease is established.
	Fairy ring ( <i>Basidiomycete fungi</i> )	0.8 L/ha		14-28	Apply prior to fungal infection or in early stages of disease development. Use shorter application intervals and higher rate when prolonged disease is established.  Best results are achieved when applications are made in higher water rates (1000L/ha or higher). Immediate irrigation post application may also assist.
	Helminthosporium Complex ( <i>Drechslera spp, Bipolaris spp, Exserohilum spp</i> )	0.8 L/ha		14-28	Apply prior to fungal infection or in early stages of disease development. Use shorter application intervals and higher rate when prolonged disease is established.
	Leaf and sheath spot ( <i>Waitea circinata</i> var. <i>zeae</i> or <i>W. circinata</i> var. <i>oryzae</i> ) also known as <i>Rhizoctonia zeae</i> or <i>Roryzae</i>	0.8 L/ha		14-28	Apply when conditions are favourable for fungal infection, prior to disease symptom development. Best results are achieved when applications are made in higher water rates (1000L/ha or higher).

Refer to the product label for full directions for use table.

## Packaging

Available in 800ml bottles





# Naturally green turf that won't wash off

Green Lawnger® is an efficient turf paint and divot mix colourant which adds a healthy appearance to warm and cool season turf grasses. This innovative, natural pigment will not wash off or wear on turf, restoring the green colour for up to four months (120+ days) after a single application. Green Lawnger replaces expensive over-seeding programs, offering a cost effective, efficient and natural solution to extend golf play into the cooler months of winter. Not only is Green Lawnger non-phytotoxic to turf, it can also be pre-applied to divot mix sand for optimum blending with turf. Green Lawnger is the perfect solution to naturally green turf, all year round.

- Natural restoration of green turf colour with a pigment, not a dye, prolonging the healthy appearance of turf
- Long lasting, natural green colour which lasts up to four months (120+ days) after a single application
- A durable colour that won't fade to blue even under prolonged UV exposure
- Replacing expensive over-seeding programs, Green Lawnger is efficient and cost effective in extending turf use into the cooler months
- Suitable for use in the pre-treatment of divot mix sand to optimise blending with treated turf

## Situational use pattern

Before applying Green Lawngr, mow turf area to desired height. 1L of Green Lawngr covers between 100 and 300m<sup>2</sup> of turf. The wide coverage range is due to the type of condition of grass being treated, and turf colour desired. Some experimentation may be required with ratios; rate depends on desired colour. For best results on discoloured areas, two applications are recommended to blend the applied area with the existing healthy turf.

<b>Directions for use</b>	<p>Before applying Green Lawngr®, mow turf area to desired height. 1L of Green Lawngr covers between 100 and 300m<sup>2</sup> of turf. The wide coverage range is due to the type of condition of grass being treated, and turf colour desired. For fall application on dormant turf, dilute 1L of Green Lawngr with 7 to 9 L of water. For a darker colour, a lower volume of water is recommended. Some experimentation may be required with ratios.</p> <p>For summer application on discoloured turf, dilute 1L with 15 to 20 L of water. Rate depends on desired colour. For best results on discoloured areas, two applications are recommended to blend the applied area with the existing healthy turf.</p>
<b>Equipment notice</b>	<p>BASF recommends the use of Teflon seals to aid in the prevention of leaks when using Green Lawngr® in centrifugal pumps. Standard ceramic seals may leak during operation. A spray shield is recommended for application if overspray or drift is a potential problem. Avoid overspray on concrete, masonry, or any other objects where colour is not desired. Permanent staining may occur. Accidental overspray may be removed by a water rinse prior to drying. To prevent ruboff on uniforms, allow Green Lawngr to dry prior to using athletic field. Rinse spray tank. Spray nozzles, and screens thoroughly with water immediately following use. For best results, use low to medium sprayer pressure.</p> <p>DIVOT MIX SAND Mix 200mL of Green Lawngr with the same volume of water. Spray or pour the solution onto 50kg of divot mix sand in a cement-type mixer.</p>

Refer to the product label for full directions for use table.

## Packaging

Available in 10L bottles





## Industrial Vegetation Management



**Arsenal Super**

Herbicide



**Basta**

Herbicide

## Weed Management



**Drive XL**

Herbicide



**Freehand**

Herbicide



**Pylex**

Herbicide



**Stomp Xtra**

Herbicide

## Disease Management



**Lexicon**

Intrinsic<sup>®</sup> Brand Fungicide



**Maxtima**

Fungicide



**Xzemplar**

Fungicide

## Golf Course Management



**Green Lawngr**

Turf Colourant

For more information  
visit [turf-solutions.basf.com.au](https://turf-solutions.basf.com.au)  
or call **1800 558 399**



 **BASF**  
We create chemistry