

# Improved putting green plant health during periods of stress

## Best uses

Weekly or bi-weekly applications on greens for preventative control of basal rot and foliar anthracnose along with Pythium blight and root-infecting Pythium spp.

## Key strengths

Improved putting green plant health during periods of stress.

Signature<sup>®</sup> XTRA Stressgard<sup>®</sup> is a true systemic fungicide that enhances plant health and minimizes stress from both abiotic and biotic sources. Signature XTRA Stressgard uses a new, improved formulation of fosetyl-Al. Fosetyl-Al is the same active ingredient used in Chipco<sup>®</sup> Aliette<sup>®</sup> Signature<sup>®</sup> that has provided over 20 years of proven Pythium control and consistently high turf-quality ratings, along with no documented reports of resistance development in the field.

Signature XTRA Stressgard delivers enhanced plant health benefits and flexible use patterns, even under the most severe environmental conditions. It's often used as the cornerstone for anthracnose management programs on annual bluegrass and creeping bentgrass golf greens.

## Attributes of Signature XTRA Stressgard

- Enhanced Stressgard<sup>®</sup> Formulation Technology for proven plant health effects:
  - Increased photosynthesis and chlorophyll production
  - Recovery from mechanical damage (i.e. aeration, scalping)
  - Healthier roots, leading to better water and nutrient utilization
  - Induced systemic resistance
- Supports earlier spring green-up, turf fill-in, improved colour and density
- Protects the plant from the adverse effects of UV radiation
- Wider application window – flexible rate structure allows for applications on 7–21 day intervals

- No documented disease resistance
- Upwards and downwards systemic mobility
- Documented turf safety with applications in high temperatures

## Solutions for tough diseases

- Signature XTRA Stressgard tank-mixes are effective for:
  - Anthracnose and summer decline management
  - Improving turf quality under situations of high and low intensity light stress
- Provides preventative control of Pythium blight and Pythium root rot



**Active ingredients**  
aluminum tris  
(O-ethyl phosphonate)  
[fosetyl-Al] (60%)



**FRAC code**  
33 (phosphonates)



**Systemicity**  
systemic  
penetrant



**Formulation**  
water-dispersible  
granule



**Signal word**  
caution



**Packaging**  
case = 2.5 kg x 4

## How to use Signature XTRA Stressgard

**Alone** | Signature XTRA Stressgard should be used to improve plant health and mitigate summer decline on a 7–14 day interval during periods of abiotic stress. During periods of high disease pressure, tank-mixing with an additional mode of action is recommended.

**For summer decline and anthracnose control** | Tank-mix Signature XTRA Stressgard with Mirage<sup>®</sup> Stressgard<sup>®</sup> and rotate with Signature XTRA Stressgard + Daconil<sup>®</sup> 2787 tank-mix for optimal summer decline management and anthracnose control.

**For prevention of foliar Pythium diseases** | Apply Signature XTRA preventatively on a 7–14 day interval during periods of weather conducive for disease development.

**For the prevention of root-infecting Pythium spp.** | Apply at higher water volumes or irrigate in with 2.5 mm of water for root-infecting Pythium spp. Tank-mix with Banol<sup>®</sup> Fungicide for early season applications. North Carolina State University suggests that Banol and Signature XTRA Stressgard can be part of a rotational program to control Pythium root dysfunction of creeping bentgrass caused by Pythium volutum.

**Tank-Mix Compatibility** | We recommend incorporating Signature XTRA last into a tank-mix after all other products have been added to the tank. Please refer to our Suggested Mixing Sequence Guide for Canadian Turf Products for more details. The guide can be found in the Golf Resources tab on [ca.envu.com](http://ca.envu.com).

## Signature XTRA Stressgard rate chart

Use rate (g/100 m <sup>2</sup> )	Recommended intervals	Coverage per container (100 m <sup>2</sup> )	Coverage per container (Ha)	Coverage per container (acre)	Maximum application (per year)
60	7	42	0.42	1.00	10
120	7–14	21	0.21	0.51	5
180	7–14	14	0.14	0.34	4

**Creeping bentgrass treated with Signature XTRA Stressgard under traffic stress and 60% shaded conditions.**  
**Trial conducted at Rutgers University in 2018.**



**Signature XTRA Stressgard (120g – 14 day)**

Photo: Envu



**Nontreated Control**

Photo: Envu

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