

Product Information sheet

- Active Ingredients: Aluminum tris (O-ethyl phosphonate) [fosetyl-Al] (60%)
- FRAC Code: P07 (Phosphonates)
- Systemicity: Systemic penetrant
- Formulation: Water-dispersible granule with Stressgard
- Signal Word: Caution

Best Uses

Pythium blight, root infecting Pythium spp., anthracnose, summer decline and bacterial wilt

Key Strengths

- Plant health promotion, suppression of bacterial wilt and control of Pythium root dysfunction
- Signature™ XTRA Stressgard® is a true systemic fungicide that enhances plant health and reduces stress from both abiotic and biotic sources. Signature XTRA Stressgard is an improved formulation of fosetyl-AL. Fosetyl-AL that includes an antioxidant to help with stress mitigation. Fosetyl-AL, the same active ingredient used in Chipco® Signature, 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 is often used as the cornerstone for anthracnose management programs on annual bluegrass and creeping bentgrass golf greens. Plus, it can be tank-mixed with other fungicides for controlling leaf spot and bermudagrass decline on ultra-dwarf greens.

Attributes of Signature XTRA Stressgard

- Enhanced Stressgard for proven plant health effects
 - Optimized formulation reduces oxidative stress
 - Quicker 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 color 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
- Signature XTRA Stressgard:
 - Reduces the negative effects of low light conditions in warm-season grasses
 - Provides preventive control of Pythium blight and Pythium root rot
 - Can be used to manage symptoms of bacterial wilt
- Signature XTRA Stressgard tank-mixes are effective for:
 - Leaf spot diseases of bermudagrass greens

How to Use Signature™ XTRA Stressgard®

Alone: Signature XTRA Stressgard should be used preventatively for the control of Pythium diseases on a 7 - 21 day interval. Apply at higher water volumes or irrigate in with 0.1 inch of water for root-infecting Pythium spp. without affecting the benefits to turf quality typically gained from Stressgard.

In a tank-mix: Signature XTRA Stressgard tank-mixes should be applied preventatively for disease and stress management.

NOTE: Always mix other products in the spray tank with water before adding Signature XTRA Stressgard. Adding it last will help ensure avoidance of product incompatibilities*.

CAUTION: Do not mix Signature XTRA Stressgard with Spectro™ 90 WDG or copper-containing fungicides such as Junction® fungicide. If there are doubts for any other product used in a tank-mix with Signature XTRA Stressgard, perform a small jar test to identify an incompatible reaction. See the Signature XTRA Stressgard label for full information on performing a compatibility test and the compatibility chart available via your sales distributor.

*Please consult the Signature XTRA Stressgard compatibility chart for additional mixing suggestions, however this should not replace a jar test for compatibility.

For diseases of bermudagrass greens: Tank-mix with Daconil Ultrex® or mancozeb products such as Fore® Rainshield® and Dithane® Rainshield for Microdochium patch, leaf spot and melting-out, Pythium and algae.

For the prevention of root-infecting Pythium spp.: Tank-mix with Banol® 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. (http://www.turffiles.ncsu.edu/diseases/Pythium_Root_Dysfunction.aspx)

For summer decline and anthracnose control: Tank-mix with Daconil Ultrex or other Stressgard fungicides such as Interface® Stressgard, Mirage® Stressgard, Exteris® Stressgard and Tartan® Stressgard. Non-Stressgard fungicides such as 26GT® and Densicor® can also be used.

Key Diseases Controlled ¹	Rate (per 1,000 sq. ft.)	Application Interval
Pythium Diseases •• / Yellow Tuft •	2.0 - 6.0 oz. Signature XTRA Stressgard	7 - 21 days
Anthracnose • / Summer Decline ••	4.0 oz. Signature XTRA Stressgard + 3.2 oz. Daconil Ultrex	14 days
Summer Decline ••	4.0 oz. Signature XTRA Stressgard + 3.0 - 7.0 oz. Interface Stressgard or 2.0 - 4.0 oz. 26GT	14 - 28 days
Bacterial Wilt •	6.0 oz. Signature XTRA Stressgard	14 days

• = cool-season turf diseases •• = warm-season turf diseases

¹See the Signature XTRA Stressgard label for the complete list of diseases controlled. Refer to the Signature XTRA Stressgard label for application information. Always read and follow label instructions carefully.

Signature XTRA Stressgard treated turf under irrigation deficit. Plots replenished with 60% ET (40% deficit).



Untreated control following 10 days drought stress in Rutgers University research trial. (Envu)



Signature Xtra Stressgard was applied twice at 4 fl. oz. per 1,000 sq. ft. on a 14-day interval prior to initiation of drought stress. Signature Xtra Stressgard alleviated drought stress and enhanced turf quality. (Envu)