



Frequently Asked Questions

What is CIVITAS TURF DEFENSE™?

CIVITAS TURF DEFENSE is an EPA-registered fungicide, insecticide and plant protection product with an innovative approach to turf management. This approach works from within the plant to increase the turfs ability to tolerate both abiotic and biotic stresses.

How does CIVITAS TURF DEFENSE work?

CIVITAS TURF DEFENSE works both physically and through the plant to protect it from biotic and abiotic stresses.

What is the active ingredient in CIVITAS TURF DEFENSE?

The active ingredient in CIVITAS TURF DEFENSE is a pharmaceutical-grade white mineral oil that has been highly refined to remove impurities and deliver an end product of the highest quality. It resembles the natural paraffins found on the surface of leaves, helping it to optimize turf conditions.

What is StrengthIN™?

StrengthIN is a stress tolerance technology that triggers a plant's inner strength to better protect against stresses.

Can CIVITAS TURF DEFENSE and CIVITAS HARMONIZER™ be used separately?

No, they must be used together at a 16:1 ratio by volume of CIVITAS TURF DEFENSE to CIVITAS HARMONIZER to deliver on product performance. To avoid having to add separately to a tank, you can use CIVITAS TURF DEFENSE Pre-Mixed, which provides a convenient, ready-to-use premixed formulation.

Can CIVITAS TURF DEFENSE be used in a tank mix?

Yes, CIVITAS TURF DEFENSE can be used in a tank mix as part of your IPM program. It can improve the performance of certain tank mix partners, which can allow you to decrease to their lowest label rate and/or extend spray intervals while maintaining a high level of disease control. CIVITAS TURF DEFENSE enhances the effects of iron applications so we suggest testing with lower rates of iron and slowly increasing rates until desired color is achieved. CIVITAS TURF DEFENSE has shown favorable results with up to 44.6 g Fe (example 234 g ferrous sulfate/100 m²) or 1.5 oz Fe (example 7.9 oz ferrous sulfate/1000 ft²).

CAUTION: Do not mix CIVITAS TURF DEFENSE with wetting agents, surfactants, spreader stickers, etc. Do not use CIVITAS TURF DEFENSE in combination with PCNB. Please refer to the CIVITAS TURF DEFENSE product label for specific use precautions.

When is the best time to use CIVITAS TURF DEFENSE?

CIVITAS TURF DEFENSE should be used primarily in a preventative manner. Turf must be actively growing and healthy for it to perform as intended. The key to achieving the best results is to start early. The first application in the spring should be made after the second mowing of your turf. With no known pathogen resistance issues, it can be used consistently throughout the growing season without worrying about maximum yearly application restrictions.

Does CIVITAS TURF DEFENSE reduce green speed?

With proper management practices, CIVITAS TURF DEFENSE Pre-Mixed products have minimal impact on ball roll speed.

Does CIVITAS TURF DEFENSE affect seedling germination?

Our research has shown that germination of seedlings is not impacted when used as directed.

Can CIVITAS TURF DEFENSE be used in high heat conditions?

Yes. CIVITAS TURF DEFENSE products are safe on turfgrass when used in accordance with label instructions.

1. Be sure to apply when turf is active and healthy and not under severe stress or decline.

2. Start applications before the plant experiences environmental stresses such as high heat. Best results are achieved by applying CIVITAS TURF DEFENSE products early in the spring and continuing throughout the summer to benefit from a higher tolerance to stresses.
3. Do not apply during or immediately prior to times when temperatures are expected to be very high (>90°F for cool season grasses or >100°F for warm season grasses) or near freezing (at or below 40°F), or when rain or other unsuitable weather conditions are predicted.
4. During high temperature periods complete applications during early morning or late evening hours.
5. During high temperatures use lowest label rates of CIVITAS TURF DEFENSE with a minimum number of tank mix partners. Since CIVITAS TURF DEFENSE can enhance the performance of certain tank mix partners, it is important to evaluate and understand the plant condition and requirements of each component of the tank mix. Please refer to the product labels for specific use precautions.

How should CIVITAS TURF DEFENSE be used to treat Snow Mold?

By going into the winter clean from disease, turf comes back green earlier in spring. Two applications are recommended:

1. To clean up, apply one application of CIVITAS TURF DEFENSE at full rates (16 oz CIVITAS TURF DEFENSE Ready-2-Mix + 1 oz CIVITAS HARMONIZER/1000 ft²). (Optional: add commercial fungicide as per the CIVITAS TURF DEFENSE Snow Mold recommendation chart.) This application should be made 14-21 days prior to application 2.
2. To prepare for winter, apply one application of CIVITAS TURF DEFENSE at full rates (16 oz CIVITAS TURF DEFENSE Ready-2-Mix + 1 oz CIVITAS HARMONIZER/1000 ft² or 17 oz of CIVITAS TURF DEFENSE Pre-Mixed) and tank mix commercial fungicide as per the CIVITAS TURF DEFENSE Snow Mold recommendation chart. This application should be made when average nightly low temperatures are 32°F, or soon after last mowing of the season.

CIVITAS TURF DEFENSE is available in multiple container sizes:

CIVITAS TURF DEFENSE Ready-2-Mix

- 5 gallon pail (covers approximately one fairway)
- 30 gallon drum
- 55 gallon drum
- 275 gallon intermediate bulk container

CIVITAS TURF DEFENSE Pre-Mixed

- 2.5 gallon jug (covers approximately ½ fairway)
- Available in 2 x 2.5 gallon jug carton

CIVITAS TURF DEFENSE Pre-Mixed is a pre-mixed formulation and does not need to be mixed with CIVITAS HARMONIZER prior to application. CIVITAS HARMONIZER comes in a bottle format, pre-measured for your convenience for mixing with CIVITAS TURF DEFENSE Ready-2-Mix prior to application.

Always read and follow product label instructions.

Use of the product that varies in any way from the product label instructions is a violation of federal and state law.
AS PER LABEL INSTRUCTIONS, ALWAYS USE CIVITAS TURF DEFENSE™ READY-2-MIX AND CIVITAS HARMONIZER™ TOGETHER.

Patent(s): www.suncor.com/patents

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