

## **ESTABLISHED WARM SEASON TURFGRASS - KYLLINGA GREEN (SUPPRESSION ONLY), NUTSEGE PURPLE**

### General Information

Treatment on Turfgrass Species Not Listed on the Label for Sapphire Users who wish to use Sapphire on turfgrass species not listed on this label may determine the suitability for use by treating a small area at a specified rate. Prior to treatment of larger areas, the treated area should be observed for any sign of herbicidal injury during 30 days of normal growing conditions to determine if the target turfgrass species is not sensitive.

### Restrictions for Footnotes

Established Cool Season Turfgrass: 1. Use no more than 1 pint of Sapphire (0.04 lb ai penoxsulam) per acre per application.

Fescue tall, Ryegrass perennial, Fescue tall: 2. Use Sapphire on these species at a maximum rate of 0.5 pint (0.02 lb ai penoxsulam) per acre per application and only if some injury can be tolerated. A yellowing of turfgrass may occur within two weeks of application. The discoloration is generally gone within four weeks of treatment under adequate growing conditions.

Stress to the turfgrass such as heat and drought may increase the potential for turfgrass injury. Under these conditions, more injury may be possible to perennial ryegrass and tall fescue. Use of 0.25 pint (0.01 lb ai penoxsulam) per acre may reduce potential for turfgrass injury.

Established Warm Season Turfgrass: 3. Use no more than 1.5 pints of Sapphire (0.06 lb ai penoxsulam) per acre per application.

### Broadleaf Weeds Controlled or Suppressed

The best weed control with Sapphire is obtained by application to weeds early postemergence when weeds are small and actively growing. Any cultural practices, cultivation, or disturbance of the soil surface after application may decrease the weed control provided by Sapphire.

Application rates at the lower end of the rate range will be satisfactory for young,

succulent growth of sensitive weed species. For less sensitive species, perennials, and under conditions where control is more difficult (plant stress conditions such as drought or extreme temperatures, dense weed stands and/or larger weeds), the higher rate within the rate range or repeat applications will be needed. Weeds growing in the absence of competition from other vegetation generally require higher rates or repeat applications to obtain satisfactory control or suppression.

### Application Directions

#### Standard Volume Broadcast Application

Apply in a spray volume of 20 gpa or more (0.5 gallons or more per 1000 sq ft). Use a higher application volume when complete and uniform application must be ensured, i.e., when Sapphire is tank mixed with foliar fertilizers. If required, spray volume up to 200 gpa may be used.

#### Low Volume Application

Apply in a spray volume of 5 to 20 gpa (0.08 to 0.5 gallons per 1000 sq ft). Use low pressure and application equipment capable of delivering a uniform spray droplet. To improve spray coverage, the addition of a nonionic surfactant at a rate of 1/4 to 1/2 pint per acre is suggested. Use the higher rate of surfactant for lower rates of Sapphire and lower spray volumes.

#### Spot Treatments and/or Hand-Held Sprayers

Spot treatments shall be applied at rates equivalent to broadcast applications.

**Hand-Held Sprayers:** When treating a small area, apply Sapphire with a calibrated sprayer that assures accurate, uniform spray distribution. In general, Sapphire should be mixed thoroughly with clean water and applied at 20 to 40 psi in a minimum of 1 gallon of water per 1000 sq ft.

#### Rates and Timing of Application

Apply Sapphire to turfgrass at the rate of 0.25 to 1.5 pint per acre as a ground broadcast treatment or spot treatment. Calibrate application equipment prior to use according to manufacturer's directions. Avoid skips or overlaps as poor weed control or plant injury may occur.

Best weed control results are obtained when Sapphire is applied to small, actively growing weeds. Extreme growing conditions or stress such as drought or near freezing temperatures prior to, at, or following time of application may reduce weed control. Broadleaf weed species germinate at different times.

Apply Sapphire to newly seeded cool season turfgrass only after the third mowing or after the turfgrass seedlings have tillered and developed an adequate secondary root system. Reseeding is not advised for at least four weeks after application.

This product may also be applied to newly established warm season turfgrass. Delay treatments until two to four weeks after sodding, sprigging or plugging.

#### Limitations, Restrictions, and Exceptions

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#### Method

[Broadcast/Foliar Ground](#)

[Spot treatment](#)

Restricted Entry Interval

12 hours

#### Timings

[Postemergence \(Weed\)](#)