



Xonerate® Sports Turf Technical Bulletin

Chemical family: Triazolinone

Mode of Action: PSII Inhibitor

Uptake: Occurs through both roots and shoots

Overview: Xonerate® Herbicide, which contains the active ingredient Amicarbazone, is a post emergent herbicide for annual bluegrass control (*Poa annua*) and other selected hard to control grassy weeds in cool and warm season turfgrasses. It is labeled for use on golf courses, seed and sod production fields, residential and commercial sites (including home lawns), parks, and sports fields.

Labeled Use Sites: Sports Fields

Target Weeds: *Poa annua*, Tropical Signalgrass.

General Use Notes:

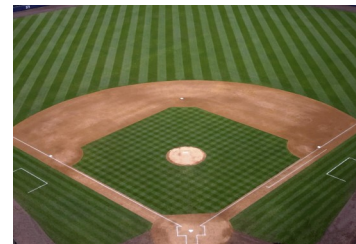
Assess how much *Poa annua* you truly have and educate your management on the potential for large, temporary voids in the desirable turf. Develop a plan to fill these voids through seeding and sound agronomics to encourage desirable turf to grow.

Application Guidelines:

- Timing - Spring applications are most effective. Temperatures should consistently be in the 55F° - 85F° degree range.
- Ensure the root zone of the desirable turf is healthy and actively growing.
- Avoid mowing a day after application to allow for full foliar uptake.
- Soil Moisture – Adequate soil moisture must be present at time of application. If desirable turf is exhibiting signs of drought stress, do not apply until the desirable turf has recovered.
- Soil pH – At or below 7.4. If soil pH is higher, solubility of Amicarbazone increases, which may increase the chances of the application to move laterally. Risk of injury may also increase since the product is more water soluble resulting in a quicker uptake by the plant.
- Re-seeding – wait 7 days after last application before re-seeding.
- If you do begin seeing signs of injury to the desirable turf, cease applications until the desirable turf has shown signs of recovery.

SPORTS TURF RECOMMENDATIONS

- Very short window of opportunity to make applications due to timing of sports schedules.
- KY Bluegrass should be established for 12 months prior to beginning applications.
- Wait 7 days after last application to seed.
- Avoid cultural practices during times of application that would cause additional stress on the turf.



Cool Season Sports Fields recommendations - Spring Applications

Turf Type	Application Rate	Intervals	# of applications	Irrigation	Air Temps (F)
Bluegrass/Ryegrass	1 oz per acre	14 days	4	N/A	55° - 85°

Tank Mix Recommendations - Spring Applications

Turf Type	Xonerate Application Rate	Tank Mix Partner	Rate	Intervals	# of applications	Irrigation	Air Temps (F)
Bluegrass/Ryegrass	1 oz per acre	Tenacity®	4 oz per acre	14 days	2 - 3*	N/A	55° - 85°

* 3rd application can be made if air temperatures remain below 85°F



Cool Season Sports Fields Recommendations - Fall

Turf Type	Application Rate	Intervals	# of applications	Irrigation	Air Temps* (F)
Bluegrass/Ryegrass	1 oz per acre	14 days	4	N/A	55° - 85°

*Pay close attention to the temperatures especially once it begins to cool down

Tank Mix Recommendations - Spring Applications

Turf Type	Xonerate Application Rate	Tank Mix Partner	Rate	Intervals	# of applications	Irrigation	Air Temps (F)
Bluegrass/Ryegrass	1 oz per acre	Tenacity®	4 oz per acre	14 days	2 - 3*	N/A	55° - 85°
Overseded Bermuda with Ryegrass	3 oz per acre			21 days	2 - 3*	N/A	Temps not to exceed 85°

* 3rd application can be made if air temperatures remain below 85°F



Xonerate® Lawn Care Technical Bulletin

Chemical family: Triazolinone

Mode of Action: PSII Inhibitor

Uptake: Occurs through both roots and shoots

Overview: Xonerate® Herbicide, which contains the active ingredient Amicarbazone, is a post emergent herbicide for annual bluegrass control (*Poa annua*) and other selected hard to control grassy weeds in cool and warm season turfgrasses. It is labeled for use on golf courses, seed and sod production fields, residential and commercial sites (including home lawns), parks, and sports fields.

Labeled Use Sites: Lawn Care including residential and commercial sites

Target Weeds: *Poa annua*, Tropical Signalgrass.

General Use Notes: Assess how much *Poa annua* you truly have and educate your client on the potential for large, temporary voids in the desirable turf. Develop a plan to fill these voids through seeding and sound agronomics to encourage desirable turf to grow.



Application Guidelines:

- Timing - Spring applications are most effective. Temperatures should consistently be in the 55F° - 85F° degree range.
- Ensure the root zone of the desirable turf is healthy and actively growing.
- Avoid mowing a day after application to allow for full foliar uptake.
- Soil Moisture – Adequate soil moisture must be present at time of application. If desirable turf is exhibiting signs of drought stress, do not apply until the desirable turf has recovered.
- Soil pH – At or below 7.4. If soil pH is higher, solubility of Xonerate increases, which may increase the chances of the application to move laterally. Risk of injury may also increase since the product is more water soluble resulting in a quicker uptake by the plant.
- Re-seeding – wait 7 days after last application before re-seeding.
- If you do begin seeing signs of injury to the desirable turf, cease applications until the desirable turf has shown signs of recovery.

COOL SEASON LAWN RECOMMENDATIONS

- When dealing with a blend that contains Kentucky Bluegrass do not exceed 2 oz per acre per application
- Seed 7 days after last application



Cool Season Turf - Spring or Fall applications

Turf Type	Height of Cut	Application Rate	Intervals	# of applications	Irrigation	Air Temps (F)
KY Bluegrass	2" – 3"	2 oz per acre	21 days	2	N/A	55° - 85°
Fescue*/Ryegrass	2" – 3"	3 oz per acre	21 days	2	N/A	55° - 85°

** Includes Fine Fescues and Tall Fescue*



WARM SEASON LAWN RECOMMENDATIONS

- Xonerate may be applied postemergence to dormant, partially dormant, or actively growing warm season turf
- Consult the label for tank mix compatibility

Warm Season Turf - Spring or Fall applications

Turf Type	Height of Cut	Application Rate	Intervals	# of applications	Irrigation	Air Temps (F)
Bermuda	2" - 3"	3 oz per acre	21 days	2	N/A	N/A
Zoysia	2" - 3"	3 oz per acre	21 days	2	N/A	N/A
St. Augustinegrass	2" - 3"	3 oz per acre	21 days	2	N/A	Do not apply above 90°
Centipedegrass	2" - 3"	3 oz per acre	21 days	2	N/A	N/A