



# Ethic 480

Turfgrass Growth Regulator



Product Information



## What is Ethic 480 Turfgrass Growth Regulator?

*Ethic 480 TGR is a plant growth regulator containing 480g/L of the active ingredient Ethephon.*

*It is registered for the control of wintergrass (*Poa annua*) seedhead in Cool Season turf and Golf Green situations. Ethic 480 TGR also helps to control growth of desirable cool season turfgrasses, providing a denser, tighter-knit and more playable surface in sportsturf swards.*



## Features of Ethic 480 TGR

- ✓ Unique Mode of Action.
- ✓ Prevents wintergrass seedhead emergence.
- ✓ Reduces the quantity of wintergrass seed entering the soil's seed bank.
- ✓ Enhances playability characteristics of sportsturf surfaces.
- ✓ Improves aesthetic appearance of sportsturf surfaces.
- ✓ Safe for use on all turfgrass species.
- ✓ Liquid form for ease of use and application accuracy.
- ✓ Manufactured in Australia.

## Ethic 480 at a glance

Active Ingredient	480g/L Ethephon
Pack Size	20L
Turf Applicator Rate	40-80mL per 100m <sup>2</sup> (4-8L/ha)
Poison Schedule	Schedule 6 (Poison)
Mode of Action	Group C Herbicide

## › Ethic 480 Mode of Action

Ethic 480 TGR is classified as having a Class E mode of action. Ethephon, the active ingredient in Ethic 480 TGR, breaks down to ethylene within both wintergrass (*Poa annua*) and other cool season turfgrasses.

As daylength increases in spring, Wintergrass undergoes a reproductive phase in its lifecycle, where the seedhead forms, emerges and becomes viable.

The start of this phase is called 'boot stage'. The boot stage occurs within the wintergrass plant, when ethylene levels decline during this early spring period.

By applying Ethic 480 TGR, which breaks down to ethylene inside the plant in early spring, the levels of ethylene within the plant are artificially higher than normal at that time of the year.

This therefore tricks the wintergrass plant into delaying or preventing the initial boot stage in the reproductive phase from taking place. As a result, wintergrass seedhead emergence is restricted and the negative impacts that it usually provides in sportsturf surfaces, such as poor ball roll and reduced aesthetic appearance is *no longer a problem*.



### ➤ Ethic 480 Application Information

The critical step in applying Ethic 480 TGR is to ensure that the first application is made in early spring prior to seedhead emergence. If applied after the wintergrass has initiated the boot stage, seedhead control performance will be lessened.

Apply Ethic 480 TGR at a rate of 40-80mL/100m<sup>2</sup> (4-8L/ha). Use the higher rates where the application interval needs to be extended out to 28 days or where wintergrass infestation is very high. Apply the lower use rates where the application interval is shorter (14-21 days) or where the wintergrass infestation is lower. It is important to apply at least 2 applications of Ethic 480 TGR to ensure optimal seedhead suppression performance.

Ethic 480 TGR is foliar absorbed and is most effective on actively growing turf. For best results apply in sufficient volume of water to provide uniform coverage. Ideally this is between 4-8L/100m<sup>2</sup> or 400-800L/ha. Ethic 480 TGR is rainfast within 8 hours.

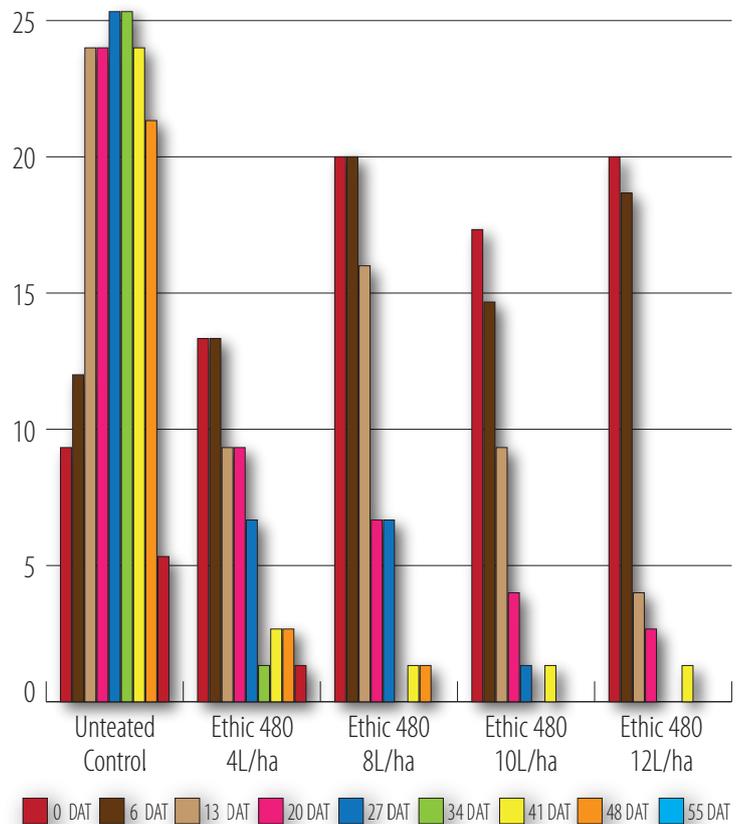
For maximum performance, delay mowing until the day after application.

#### Maximising Ethic 480 Performance

- ✓ DO NOT mix Ethic 480 TRG with Ammonium Thiosulphate. Such tank mixtures may result in formation of toxic fumes.
- ✓ DO NOT treat turf with poor root systems or growing under stress due to poor soil conditions, drought, disease or insect damage.
- ✓ DO NOT use Ethic 480 TGR in areas where excessive thatch has accumulated.
- ✓ DO NOT use Ethic 480 TGR through any type of irrigation system.

### ➤ Ethic 480 Field Performance

Below is a field trial conducted at Katoomba golf club in 2011. Two applications of Ethic 480 were applied 28 days apart to a green with a small existing seedhead presence. Results of the trial indicate that Ethic 480 TGR provided significantly improved reduction in seedhead presence after the 2nd application was made when compared to the untreated control.



#### Other products available from Amgrow

##### Chloronil Pro Fungicide

Chloronil Pro is a broad spectrum, contact or protectant fungicide containing 720g/L of the active ingredient Chlorothalonil.

It is registered for the control of Brown Patch, Dollar Spot and Grey Leaf Spot in all recreational turf situations. It is also registered for the control of Botrytis, Grey Mould, Rust and Septoria and Alternaria Leaf Blight in ornamental plant applications.



##### Transact Pro Fungicide

Transact Pro is a premium locally systemic, broad spectrum fungicide containing 250g/L of the active ingredient Iprodione.

Transact Pro contains a unique adjuvant package for improved coverage, plant uptake and residual performance. A unique green pigment in the formulation enhances turf colour and improves turf health for optimised disease recovery.

