

# Primo Maxx: Everything You Wanted to Know (But Were Afraid to Ask)

Primo Maxx (trinexapac-ethyl) is a plant growth regulator widely used on golf courses. It slows vertical grass growth, improves turf quality, reduces mowing, and helps turf resist stress. This guide gives you the essentials: how it works, why to use it, how to calculate day degrees (GDD), how to combine it with nitrogen, and practical application tips.

## How to Calculate Growing Degree Days (GDD)

Formula:  $(T_{max} + T_{min}) / 2 - T_{base}$

$T_{max}$  = daily maximum temperature

$T_{min}$  = daily minimum temperature

$T_{base}$  = 0 °C (for turf)

If negative, count as 0.

Example:

Day 1:  $T_{max}$  20 °C,  $T_{min}$  10 °C → Avg 15 °C → 15 GDD

Day 2:  $T_{max}$  22 °C,  $T_{min}$  12 °C → Avg 17 °C → 17 GDD

Running total = 32 GDD

Reapply Primo Maxx:

150 GDD in cooler conditions

200 GDD in warmer summer conditions

## How to Calculate Nitrogen from Urea (46-0-0)

Urea contains 46% nitrogen. Formula:

$\text{kg product/ha} = \text{Target N (kg/ha)} \div (0.46)$

Examples:

2 kg N/ha → 4.35 kg urea/ha

4 kg N/ha → 8.7 kg urea/ha

At 400 L/ha water volume:

2 kg N/ha → 10.9 g/L

4 kg N/ha → 21.8 g/L

## Nitrogen Reference Table (Urea 46-0-0)

Target N (kg/ha)	Urea Required (kg/ha)	g/L at 400 L/ha
1	2.2	5.5
2	4.4	10.9
3	6.5	16.3
4	8.7	21.8
5	10.9	27.3

Primo Maxx is a precision tool for golf course management. By tracking day degrees, applying correct nitrogen rates, and starting applications in spring, you can improve turf quality, reduce mowing, and strengthen resilience. Used wisely, it supports both playability and sustainability.