



TURF HARDENER

ADVANCED
CHELATED CALCIUM
FORMULATION
STRENGTHENS TURF AND
INCREASES ABILITY TO
WITHSTAND STRESS
AND DISEASE.



Ca^{2+}

N

Mg^{2+}

B

Zn






10l

NON-PESTICIDAL DISEASE MANAGEMENT

Turf Hardener is designed to strengthen turf and increase the grass plant's ability to withstand stress. It may be applied alone or in tank mixtures with other products. The unique formulation facilitates rapid uptake of the calcium into the grass plant, producing a harder, more disease resistant sward.

Turf Hardener is specifically formulated to successfully tank mix with other elemental turf hardeners, such as **Bullet Chelated Iron** and **Bullet Phosphate**. When combined, these plant nutrients can work synergistically within the plant, to create natural non-pesticidal disease suppression, as part of an Integrated Turf Management approach.

Why choose Turf Hardener?

- 1. Uniquely chelated** with natural acid technology that is not present in other products on the market, making Maxwell Turf Hardener highly bioavailable to the plant with increased calcium movement through the xylem and into the cell walls.
 - 2. Balanced nitrogen level** in Maxwell Turf Hardener has been carefully constructed to allow plant tissues to be optimally activated, just enough to absorb the calcium, but not to excess. **Thereby not stimulating excessive, weak vegetative growth more susceptible to turf diseases such as *Microdochium nivale*.**
 - 3. Competing products** often use calcium carbonate (lime), which potentially leads to a higher pH, outside the optimal range for turf grass.
 - 4. Foliar application** allows calcium to be absorbed efficiently and reach the growing points rapidly. Preventing negative interactions in the soil where calcium can inhibit the absorption of boron, magnesium and phosphorus, and lead to the vaporization of nitrogen.
 - 5. Formulated** with three complimentary plant elements to facilitate maximum uptake efficiency and grass plant function in a natural way.
-  Magnesium – prevents an imbalance in calcium-magnesium ratio.
 -  Zinc – maximises auxin synthesis, the essential hormone for calcium uptake into actively growing plant cells.
 -  Boron – corrects deficiencies; in a similar manner to calcium, boron is immobile in the phloem, so both calcium and boron deficiencies are most commonly found under stressful conditions when xylem flow has been restricted.
- 6. Significantly less hazardous** to human health than competing products (see associated safety data sheets for further information).


Application

Turf Hardener can be applied all year round.

J	F	M	A	M	J	J	A	S	O	N	D
•	•	•	•	•	•	•	•	•	•	•	•
Rate: 20-40l/ha						Volume: 300-400l/ha					

Product analysis

Ingredient	Oxide value	Elemental value
Total nitrogen (N)		7.04%
Nitrate (N)		6.50%
Ammonium (N)		0.54%
Magnesium (MgO)	1.02%	0.615% Mg
Calcium (CaO)	15.00%	10.72% Ca
Zinc (Zn)		0.25% Zn
Boron (B)		0.40% B
Specific gravity		1.268
pH		4.8



TURF HARDENER 15% CALCIUM 10L
Danger
 Causes serious eye damage.
 Do not breathe mist/vapours/spray.
 Wear eye protection / face protection.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 If eye irritation persists: Get medical advice/attention.
 Store in accordance with local/regional/national/international regulations.
 Dispose of contents/container in accordance with local/regional/national/international regulations.
 Product contains: CALCIUM NITRATE hydrate, Calcium diformate, Zinc ammonium citrate

UFI CODE: C910-F0YY-R00J-ARUJ

Refer to the associated safety data sheet for guidance on safe transport, storage, use and disposal of this product.

