



# Maximiser Elite

Maximiser Elite is a premium soil wetting agent with penetrant and retention properties, specially designed and formulated for High Value Turf areas.

## Technical Brief

- Active Ingredient:** 100% Proprietary blend of specialty non-ionic surfactants with Premium Penetrant and Retention Properties.
- Formulation:** Liquid
- Mode of Action:** Maximiser Elite has key ingredients that penetrate and retain the moisture in the soil profile and root-zone, enabling turf managers to reduce moisture stress and dry patch (localised dry spot) and hold moisture in the root-zone that would normally drain and dry out quickly.

## Benefits

- Gives water quick and even penetration to ensure limited evaporation and runoff losses.
- Ensures uniformed distribution, movement and availability of moisture/water in the root-zone.
- Alleviates problems associated with water repellency and dry patch (localised dry spot) from hydrophobic soils in all turf areas.
- Allows hydrophobic soils to be re-wet and prevent dry patch.
- Gives even retention of moisture in the soil profile depth/root-zone ensuring plant available moisture to promote uniform turf quality, root growth and root depth whilst improving nutrient availability and uptake.

## Soil Wetting Management

Ground Application (i.e. boom spray, pedestrian application from tank, knapsack)

Situation	Application Rate	Critical Comments
<b>Turf High Value areas such as</b> Golf Greens, Bowling Greens, Croquet Lawns, Tennis Courts, High Value Golf Fairways, Premium Sports Fields, Premium Racetracks, Turf Farms, Well Maintained Lawns	10 L per ha * or 100 mL per 100 m <sup>2</sup> *	Apply in 400 to 2500 litres water per hectare (4 to 25 litres of water per 100m <sup>2</sup> ). Follow normal irrigation schedule. Apply monthly or as required. * Monthly applications are recommended for best results.
<b>Turf Broadacre areas such as</b> Golf Fairways, Sports Fields, Racetracks, Turf Farms, Reserves & Parks, Polo Fields, Cemeteries, Lawns, General Turf areas	5 to 10 L per ha * or 50 to 100 mL per 100 m <sup>2</sup> *	Maximiser Elite does not usually require watering in, however turf should be irrigated before next mowing. If applied in very dry conditions (above 28°C), irrigate immediately with 3 mm of rainfall equivalent. To ensure Maximiser Elite is not removed from the treated area prior to soil incorporation, irrigate the treated area before the next mowing with at least 4 to 6 mm of rainfall equivalent.

Note: The above table represents only a modified extract from the full product label. Always read the full product label before use.

## How to get the most out of your application

Maximiser Elite is a dual-action soil wetting agent that improves the penetration, infiltration and retention of water (irrigation and rainfall) in the soil profile.

Soil science research has shown that organic coatings surrounding soil particles inhibit the infiltration of irrigation or rainfall. Hence during high heat stress or drought periods, turfgrass can suffer drought injury or death due to the lack of plant-available soil moisture.

Maximiser Elite reduces the surface tension of the water molecule, improving the penetration and infiltration of applied irrigation water and rainfall.

Maximiser Elite is designed for use on all professionally managed turf areas and well-maintained lawns / turf surfaces. For optimum turf quality Maximiser Elite should be used in conjunction with turf management practices that promote good turf health.

## Application

### Ground Application

**Boom Sprayers:** Spray nozzles should be uniformly spaced and of the same size, and should provide accurate and uniform application. Use spray nozzles that produce a medium spray quality. To ensure accuracy, calibrate sprayer before use and calibrate frequently. Apply at a volume of >400 L of water per hectare. Good even coverage with the spray is essential for optimum results. Observe sprayer nozzles frequently during the spraying operation to ensure that the spray pattern is uniform. Avoid overlapping of spray runs. Avoid application under conditions when uniform coverage cannot be obtained or when spray drift may occur. Shut off spray booms while starting, turning slowing and when stopped.

**Pedestrian Application from Tank:** Hand nozzle (i.e. fish mouth) should have a uniformed spray pattern. Applicators should calibrate their spraying process to ensure their walking speed, pump pressure and hand nozzle movement (i.e. sweeping action) is even and consistent with the water volumes and the product application rate required.

**Knapsack:** It is important to apply the correct quantity of Maximiser Elite to a known area of turf. It is important good coverage is achieved. Apply between 5 to 10 L of water / 100 m<sup>2</sup> of turf.

This product is to be used and applied according to the label directions by professionals (turf managers / greenkeepers) trained in the use of agricultural chemicals, using properly calibrated equipment.

## Timing

Apply Maximiser Elite at approximately monthly intervals, beginning at least 1 month prior to the start of the irrigation season (before the onset of dry or heat stress conditions).

A preventive program will alleviate problems associated with the development of dry patch (localised dry spot) and ensure plant available moisture in the soil profile, whilst maximising the use of the water resources, whether that be irrigation water or rainfall.

Application is monthly or as required. Trial work and experience shows more consistent results are achieved with regular applications (i.e. monthly applications). Hence the greater the frequency of application the greater the water use efficiency.

Note: In extreme cases of water repellency and dry patch (localised dry spot) from hydrophobic soils additional applications should be applied between monthly applications, as required.

## Mixing

Add the required quantity of Maximiser Elite to water in the spray vat while stirring or with agitators in motion.

If mixing Maximiser Elite to help penetrate and incorporate other products into the soil profile evenly, add Maximiser Elite to the spray vat last.

## Compatibility

As formulations of other manufacturers' products are beyond the control of Turf Culture Pty Ltd, all mixtures should be tested prior to mixing commercial quantities.



All of Turf Culture's products come with a formulation guarantee, ensuring turf managers can be extremely confident they are applying a quality product.

## Packaging

Pack size: 1L, 10L, 200L, 500L, 1000L



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Maximiser Elite



The trial site is shown above after the application on February 12<sup>th</sup> 2008

### Kingston Heath Golf Club Trial location and plan

5	1	2	9	4	8	3	10	7	6	Rep 1
2	4	1	7	3	10	8	6	5	9	Rep 2
6	9	8	7	1	4	5	3	2	10	Rep 3
4	10	3	9	5	2	8	6	1	7	Rep 4

# Product Evaluation

Over the summer of 2007/2008, Turf Culture conducted a trial to evaluate the performance of a range of soil wetting products.

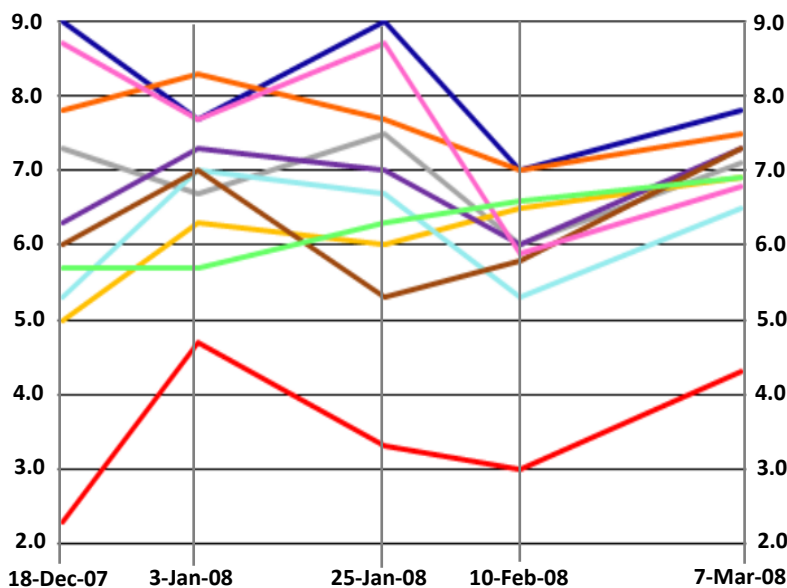
The trial site was a golf green nursery with a bentgrass surface on a sand base. The trial commenced on November 15<sup>th</sup> 2007 with monthly applications until February 12<sup>th</sup> 2008, with the assessments being made over a four-month period.

## Application Summary Treatments

Treatment No.	Product	Rate L/ha			
		1	2	3	4
1	Untreated	-	-	-	-
2	Maximiser Elite®	10	10	10	10
3	Revolution®	25	25	25	25
4	Stamina Balance®	20	20	20	20
5	Stamina 90®	25	25	25	25
6	Tournament Ready®	25	14	14	14
7	Aqua Turf®	60	60	60	60
8	Wettasoil Ultra®	50	50	50	50
9	HydroFlo Liquid®	37.5	37.5	37.5	37.5
10	Brilliance®	46.8	46.8	46.8	46.8

### Application Details

Application No.	Date	Time	Temp	Rel. Hum.	Cloud	Wind	Treatment Spray Order
1	15/11/07	6:15 - 8:10am	15 - 18 °C	63%	10%	Calm	2 - 10
2	14/12/07	6:20 - 7:40am	19 °C	58%	0%	Calm	2 - 10
3	15/1/08	6:50 - 8:05pm	26 - 31 °C	42%	0%	S-SE 1-4	2 - 10
4	2/12/08	6:30 - 7:45am	17 - 19 °C	60%	100%	Calm	2 - 10



Ratings		18-Dec-07	3-Jan-08	25-Jan-08	10-Feb-08	7-Mar-08	Total	Average	Ranking
1. Untreated		2.3	4.7	3.3	3.0	4.3	17.6	3.52	10
2. Maximiser Elite®		9.0	7.7	9.0	7.0	7.8	40.5	8.10	1
3. Revolution®		7.3	6.7	7.5	6.0	7.1	34.6	6.92	4
4. Stamina Balance®		5.0	6.3	6.0	6.5	6.9	30.7	6.14	9
5. Stamina 90®		6.3	7.3	7.0	6.0	7.3	33.9	6.78	5
6. Tournament Ready®		7.8	8.3	7.7	7.0	7.5	38.3	7.66	2
7. Aqua Turf®		5.3	7.0	6.7	5.3	6.5	30.8	6.16	8
8. Wettasoil Ultra®		6.0	7.0	5.3	5.8	7.3	31.4	6.28	6
9. HydroFlo Liquid®		8.7	7.7	8.7	5.9	6.8	37.8	7.56	3
10. Brilliance®		5.7	5.7	6.3	6.6	6.9	31.2	6.24	7

