



agrichem[®]

Resilience **TURF**

Specially developed concentrated silica, calcium and potassium formulation to increase turfgrass tolerance to wear, disease and salinity, while improving the quality of the playing surface.

5% K, 11% Si, 7% Ca, 4.1% S

Benefits of Resilience Turf

- Contains the three key nutrients that provides turfgrass strength; silica, potassium, and calcium.
- Improves rigidity of plant cell walls to improve wear tolerance of turfgrass, resist attack from disease, and defend against decline from salinity.
- Due to a more upright and rigid leaf, a better cut is achieved resulting in improved ball roll on greens.
- Ideal for use when turfgrass is under high pressure from traffic or harsh environmental conditions (high or low temperatures).
- Ideal for use on greens in preparation for tournaments.
- Ideal for high use sportsfields.

THE ROLE OF SILICA

Silica enters turfgrass and accumulates around the epidermis of roots, stems and shoots. It plays a central role in the plant's strength and upright structure, resulting in a better quality cut and therefore improves ball roll on greens. Silica forms a gel and associates with calcium and pectins to stabilise cell walls that increases the turf's ability to handle stress conditions. Applying silica will modify the physiology of turfgrass to help it better cope with abiotic stresses such as salinity, whereby the uptake of sodium is reduced.

THE ROLE OF CALCIUM

Calcium is required for the cellulose precursors for cell wall formation in turfgrass. It also stabilises cell membranes and protects them - an important attribute under stress conditions. It is also known that when plants are threatened by infection, calcium binds to a protein called calmodulin that prompts plants to manufacture salicylic acid (SA), a close chemical relative of aspirin. SA acts as a signal molecule that kicks off a series of reactions that help defend against external threats (SAR response). Calcium also has a role to play in sodic and saline soils by displacing the detrimental salt sodium from the soil particles.

THE ROLE OF POTASSIUM

Potassium regulates water, electrolytes and turgidity of plant cells. In conjunction with silica, the two elements work synergistically controlling water relations and reducing plant water demand. Potassium is also vital for cell division, protein and carbohydrate formation, and thus turfgrass growth.



- With added bio-stimulants to extend and enhance uptake of foliar and soil applied macro and micro nutrients



NOTE: The suggested rates of application are designed for typical Australian conditions and such should be used as a guide only. Each Turf Managers climatic conditions, water quality, soil types, application processes and practices may differ and therefore necessitate corrections to ensure optimum results. Good agricultural practice requires that application be avoided under extreme weather conditions such as temperatures over 28°C, high humidity, frost, rain etc. It is recommended that when applying to a crop or area for the first time, or in combination with other chemicals, a small test area should be sprayed and observed prior to the total spray. Where possible, it is recommended that regular leaf (sap) tests are conducted to determine actual plant nutrient availability during each growth cycle. Soil tests at least once per year are essential.

Product Characteristics

Specific Gravity: 1.21 - 1.23 **Colour:** Brown Liquid

Analysis	Australia (w/v%)	International (w/w%)
Potassium (K)	5.0	4.9 (K ₂ O)
Calcium (Ca)	7.0	5.8
Sulphur (S)	4.1	3.4
Silica (SiO ₂)	11.0	9.1

Directions for Use

Agitate contents well before dilution. Suitable for application by:




Foliar Spray



Fertigation

CROP	Rate/ha	MIN DILUTION 	COMMENTS
Greens, Tees, Fairways, Sportsfields	5 - 10L/ha 50 - 100ml/100m ²	1 : 50	Apply at fortnightly or monthly intervals for turf hardiness, greater tolerance to heat, cold, drought, disease resistance and increased stimp speed.

 Minimum Dilution: A dilution of 1 : 100 means 1 part product : 100 parts water
In hot weather, use the higher dilution rate where applicable