

VITALise – Liquid organic complex

- **Increases nutrient availability in soil and on foliage.**
- **Improves heat and drought tolerance.**
- **Strengthens turfgrass defence systems.**
- **Enhances root growth and delays senescence.**
- **Reduces stress and shock from transplant.**
- **Increases chlorophyll production.**
- **Improves photosynthetic efficiency.**
- **Formulated from refereed scientific research.**
- **Developed and manufactured in Australia**



MATCHplay quality stands alone ...

Foliar use: When applied in sufficient volume of water and allowed to remain in contact with foliage, Vitalise delivers biologically active plant extracts into the cells of leaf and stem tissue. Substances including seaweed extracts, L-form Amino acids (low molecular weight) and short chain humic acids act to increase cellular antioxidant levels, strengthen turfgrass defense systems, enhance chlorophyll production and subsequent photosynthetic efficiency.

Soil application: When applied as a drench or when lightly watered into the turf root zone, Vitalise will act to increase the availability of bound-up soil nutrients. Uptake via roots will impart some of the benefits which are more obvious from direct foliar application, however other soil benefits include stimulated microbial activity, increased respiration of turfgrass roots and improved general soil health.

Product specifications ...

1.6%	Seaweed extract concentrate
5%	Fulvic Acid
93.4%	Naturally derived substances containing L-form amino acids (low molecular weight), humic acid, stabilisers and surfactants.

General Information

Composition:
Liquid biostimulant

Volume:
20 Litres

Coverage:
0.5 – 1 hectare

Nutrient Analysis

Nitrogen	1.21%
Phosphorus	0.10%
Potassium	1.47%
Sulphur	0.31%
Calcium	310ppm
Boron	280ppm
Iron	280ppm
Magnesium	220ppm
Copper	27ppm
Manganese	2.7ppm

General information...

Biostimulants are a naturally derived plant substance that can be re-applied to turf grass in order to obtain positive growth benefits. Research demonstrates that some of these materials produce best results when used with each other, in a regular application strategy (Zhang, 1997).

Materials that are considered to be the most efficacious in this category of products include;

- Sea kelp extracts (best known as seaweed) are particularly rich in phytohormones, complex organic compounds, vitamins and proteins. Seaweed extracts have long been recognized for their high concentration of cytokinins and auxins.
- Humic acid is widely credited with regulating hormone levels, improving turf growth and stress tolerance. However it is not widely recognized that the Fulvic fraction is considered to be the most biologically active and beneficial for turf.
- Amino acid complexes are also useful compounds. L-form amino acids have the lowest molecular weight, are the smallest and are considered to be the most beneficial.



Low application rates mean that these materials are very cost effective, however coordination of their application often requires messy measuring and tank mixing. Not with VITALise.

The VITALise formula is an extension of scientific investigation that screened various biostimulants for their influence on turfgrass physiology. This research identified the most useful compounds along with their optimum use rates (Zhang 1997).

VITALise - for an integrated approach to turf culture.

Directions for use...

SITUATION	RATE	LONGEVITY	COMMENTS
Foliar application: Greens and fine turf, Fairways, Sportsturf, lawns and landscape.	20 L / ha	2-4 weeks depending on clipping harvest	Apply at least one month in advance of expected turfgrass stress and increase frequency of application with severity of stress conditions. Apply in 400-800L of water and leave on foliage for at least 12 hours.
Soil application: Greens and fine turf, Fairways, Sportsturf, lawns and landscape.	40 L / ha	4-8 weeks depending on soil type.	Apply in sufficient volume of water to avoid drying on foliage and schedule irrigation as soon as is practicable to wash the ingredients down into the root zone without excessive flushing.
General nursery and greenhouse potting soils	2L / 500L	4 weeks	Apply as a foliar spray in sufficient volume to achieve thorough wetting of plant foliage, or drench into root zone.