

Omex Bio Zn

FUNCTION

Zinc is a key element in plant metabolism which has many functions including:

- Formation and modulation of various enzymes. This activity is important throughout the life of the plant but is critical at germination and early root and shoot development.
- Protein synthesis. The presence of zinc is very important at times of rapid tissue growth when it is involved directly in conversion of amino acids into protein. Zinc deficient plants accumulate amino acids and do not produce sufficient protein to develop.
- Production of essential plant hormones. Zinc deficient plants display symptoms of stunted growth associated with disturbed auxin production.
- Membrane integrity. It is thought that zinc is important in reducing membrane permeability, thus improving the plant's ability to withstand oxidative stress.
- High levels of phosphorus can induce zinc deficiency in soils with low zinc levels.



DESCRIPTION

Omex Bio Zn is a highly concentrated single element suspension to correct specific deficiencies. It is formulated with uptake enhancers to optimise performance over time. The particle size profile for Omex Bio Zn is constantly monitored during the production process to ensure a homogenous formulation. The use of unique 'uptake enhancers' allows nutrients to enter the plant by two main pathways, one acting quickly and the other more slowly. This provides a mechanism for sustained uptake over time.

The 'quick uptake' is achieved by direct entry via the stomata on the surface of the leaf, due to the small particle size profile of the product. The 'slower sustained uptake' is facilitated by the 'uptake enhancers' in the formulation. These work by stimulating the microbes which live naturally on the surface of the leaf. These are also known as epiphyllic microorganisms which help solubilise the remaining foliar spray. Once in ionic form, it then passes into the plant by diffusion through the leaf cuticle.

The seaweed extract stimulates rapid root development by providing natural auxins and cytokinins in the correct ratio.

Analysis of Omex Bio Zn

| | | Wt/Wt | Wt/Vol |
|------------------|---------------|--------|--------|
| Zinc | Zn | 40.50% | 70.00% |
| Seaweed Extract | | 20.00% | 34.50% |
| Specific Gravity | 1.71-1.75g/ml | | |
| pH(10% Dilution) | 8.3-9.3 | | |

DIRECTIONS FOR USE

The spray tank should be filled with half of the required amount of water. After shaking the container, measure the required amount of Omex Bio Zn and add to the tank whilst maintaining constant agitation. Add remaining water to correct dilution. Spray.



TECHNICAL INFORMATION

DILUTION: Recommended water rate is 500-1500 litres per hectare.

Always shake container before opening.

Recommendations for Use:

| CROP | RATE OF USE | TIMING |
|-------------------------|--|--|
| Coffee | 0.5-1.0 litre/ha | Early in crop cycle |
| Potatoes | 0.5-1.0 litre/ha | Early in crop cycle |
| Vegetables | 0.5-1.0 litre/ha | Early in crop cycle |
| Avocadoes & Fruit trees | 0.5-1.0 litre/ha | Early in crop cycle |
| Bananas | 0.5-1.0 litre/ha | Early in crop cycle |
| Cotton | 0.25-0.5 litre/ha | Early in crop cycle |
| Maize | 0.6-1.2 / 100kg seed 0.5-1.0 litre/ha | Seed Treatment Early in crop cycle |
| Rice | 0.8-1.6 litre / 100 kg seed | Seed Treatment |
| Sugarcane | 9ml/ msq | Sprayed onto seed sets in planting furrows |

TANK MIXING COMPATIBILITY

Omex Bio Zn is compatible with most, but not all, pesticides, growth regulators and micro-nutrients with regard to physical tank mixing and biological effects on the crop. However, Omex cannot accept any liability for any loss or damage as not all pesticides have been tested and because the efficacy of any mix will depend on, among other factors, the pesticide concerned, crop conditions, growth stage, weather and volumes used.

PRECAUTIONS

Omex Bio Zn should be stored in frost free conditions with optimum storage range between 5-40°C. Omex Bio Zn is non-hazardous and non-flammable foliar fertiliser. Gloves and face shield should be worn when handling the concentrate. In situations of prolonged storage there may be slight settling of the nutrient particles. This is reversible on shaking.

PACKING

Omex Bio Zn is available in HDPE drums of 0.25L, 0.5L, 1L, 3L, 5L, 10L capacity. Drums are fitted with TE closures. 200L/1000L mini-bulk available.



Omex Agrifluids Limited
Saddlebow Road, King's Lynn, Norfolk, PE34 3JA, UK
T: +44 (0)1553 817500 T: +44 (0) 1553 817501
E: agrifluids@omex.com www.omex.co.uk