



Reg No B3611 * Act 36 of 1947

ZincTrain is a biological water soluble, highly penetrating, foliar liquid zinc amino acid chelate (8.4% w/v, 6.9% w/w Zn). It is used as a foliar nutrient on crops to prevent and/or correct zinc deficiencies and related plant physiological disorders like hormone imbalances (auxin synthesis) and sub-optimal photosynthetic activity (chlorophyll formation and protection). Zinc is a critical element for normal hormonal function as well as the normal functioning of the anti-oxidant system in plants in order to detoxify oxygen radicals being formed during stress situations.

Composition:

Zinc (Zn).....	69420 mg/kg
Boron (B).....	215 mg/kg

An amino acid and Fulvic acid chelated product, a slight brown residue might be present that will dissipate after shaking of the container. Shake well before use.

Product Properties:

S.G:	1.21 ± 0.02
pH:	4.9 ± 0.1
Appearance:	Dark brown, clear solution

Plant Stress Management™ Product

A Biological Equilibrium Farming Product



Product Characteristics:

Registered, Manufactured & Distributed by Suite 120, Private Bag X1, Melkbosstrand, 7437, Western Cape, South Africa | 021 553 4867 | www.agrilibrium.co.za

Zinc is directly related to plant physiological disorders like hormone imbalances (auxin synthesis) and sub-optimal photosynthetic activity (chlorophyll formation and protection). **Zinc** is a critical element for normal hormonal function as well as the normal functioning of the anti-oxidant system in plants in order to detoxify oxygen radicals being formed during stress situations. These are important **Plant Stress Management™** actions. **Zinc** in conjunction with **Phosphorous** is essential for effective ADP & ATP production and thus also for the total metabolic efficiency in plant cells.

ZincTrain is taken up very efficiently as a foliar spray or irrigation applied formulation and should be used on all crops to specifically alleviate Zinc deficiencies. It should be applied simultaneously where necessary, with foliar applications of **DynoCMZ**, **BioKelp** and **BioPhos**, and **0.2% FulMax** as chelating, wetting and uptake enhancer.

ZincTrain is compatible with most agrochemical products but it is **recommended that a compatibility drinking glass test be done before mixing with other chemicals.**

DIRECTIONS FOR USE: Use only as directed. Shake well before use.

Spray solution water must be buffered between pH 4.5 and 5.5.

Never apply ZincTrain just before or during flowering, when applying to Pome Fruit.

First applications on Pome fruit at concentration rates not exceeding 0.25% (250 ml /100ℓ water) can be done 3 – 4 weeks after fruit set.

Do not mix **ZincTrain** with highly alkaline materials.

In the case of overhead irrigation, refrain from irrigating the treated crop for at least 12 hours.

Application concentrations, except for Pome fruit, should **never be lower than 1%.**

For maintenance applications, up to a maximum spray concentration (including all other foliar products in the same tank mix) of **2.5%.**

For rectification of specific problems, 1 – 2.5 ℓ /100ℓ water.

Use **FulMax** (0.2%, 200ml/100ℓ water) in the foliar spray mixture as wetter/spreader/re-wetter to ensure efficient uptake of the nutrients through the leaf surface.

Apply foliar spray preferably during **cool periods of the day.**

ZincTrain is a **plant physiological treatment** and will be effective on all plants where **Zn** is deficient.

Optimal application dosage concentration based on dosage response results

Total tank concentration should never be lower than 0.75% (750ml/100ℓ) and preferably 1.5% (1.5ℓ/100ℓ) with the exception of Pome fruit.

General Recommendation:

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Crop	Max rate/ha	Rate /100ℓ water	Remarks
Pome Fruit: Apples Pears	0.25% ZincTrain only after fruit set. When deficient, application should be done at least 6 – 8 times during season. Add 100 - 200 mℓ/100ℓ FulMax to improve uptake and efficiency.	250mℓ ZincTrain plus 100mℓ FulMax /100ℓ tank solution	Apply as a medium to low volume (500ℓ -1000 ℓ) foliar spray in a regular program commencing during spring (after bud break). First application 2 weeks after first flush with 14 to 21 day intervals up to 3 weeks before harvest. 50% wetting sufficient. Note restrictions for use on apples and pears.
Stone Fruit: Apricots, Peaches, Plums	0.5% - 0.75% ZincTrain in addition to <i>Plant stress</i> and <i>growth stimulation treatments</i> with BioKelp, BioPhos and DynoMoB . Add 100 - 200 mℓ/100ℓ FulMax to improve uptake and efficiency.	250-500mℓ BioKelp plus 250-500mℓ ByoPhos plus 500-750mℓ ZincTrain plus 250mℓ DynoMoB	
Sub-Tropical Fruit: Mango, Avocado, Macadamia, Pecan, Bananas, Litchis		Add 100 - 200 mℓ/100ℓ FulMax to improve uptake and efficiency.	
Citrus:			
Grapes: Table grapes Wine grapes	0.5% - 0.75% ZincTrain in addition to <i>Plant stress</i> and <i>growth stimulation treatments</i> with BioKelp, BioPhos and DynoMoB Add 100 - 200 mℓ/100ℓ FulMax to improve uptake and efficiency.	250-500mℓ BioKelp plus 250-500mℓ ByoPhos plus 500-750mℓ ZincTrain plus 250mℓ DynoMoB Add 100 - 200 mℓ/100ℓ FulMax to improve uptake and efficiency.	Apply as a medium to low volume (500ℓ -1000 ℓ) foliar spray. First application between flowering and fruit set. Last application no later than veraison for table grapes and during the lag phase (berry is pea size) for wine grapes.

Root Vegetable: Potatoes Sweet potato	0.5% - 0.75% ZincTrain in addition to <i>Plant stress</i> and <i>growth stimulation treatments</i> with BioKelp, ByoPhos and DynoMoB Add 100 - 200 mℓ/100ℓ FulMax to improve uptake and efficiency.	250-500mℓ BioKelp plus 250-500mℓ ByoPhos plus 500-750mℓ ZincTrain plus 250mℓ DynoMoB	Apply as a medium to low volume (100ℓ- 250ℓ) foliar spray in a regular program commencing 2 weeks after germination or from 4 leaf stage onwards. Apply at least once every 14 days during the growing season.
Other Vegetables: Tomatoes, Peppers		Add 100 - 200 mℓ/100ℓ FulMax to improve uptake and efficiency.	
Grain: Wheat Maize Canola Oats Lucerne Beans Soybeans	0.5% - 0.75% ZincTrain in addition to <i>Plant stress</i> and <i>growth stimulation treatments</i> with BioKelp, ByoPhos and DynoMoB Add 100 - 200 mℓ/100ℓ FulMax to improve uptake and efficiency.	250-500mℓ BioKelp plus 250-500mℓ ByoPhos plus 500-750mℓ ZincTrain plus 250mℓ DynoMoB Add 100 - 200 mℓ/100ℓ FulMax to improve uptake and efficiency.	First application 2-3 weeks after germination (4-5 leaf stage). Follow up application 4-6 weeks later (Flag leaf stage for wheat, stalk borer stage for maize).

- Due to the variation of soil and soil types from area to area, a full recommendation will only be possible once a **soil analysis and 1:2 water extract** analysis has been done.
- Recommendations are also based on requirements for different crop types.

Contact your **Agribrium** representative to obtain a crop specific Plant Stress Management™ recommendation.