

CopperTrain

Plant Stress Management™

Reg No: Act 36 of 1947 Pending



AFRI COMPLIANCE
CERTIFICATION NO:
AC/P/2018/143

We confirm that AgriLibrium Manufacturing Facility and Product range conforms to the standards as set down by Afri Compliance Agricultural enhancement product protocols and is certified in terms of:

- ✓ Good manufacturing practices.
- ✓ Quality assurance and traceability.
- ✓ Good corporate governance.
- ✓ Risk management and Bio Security

CopperTrain is a liquid Copper amino acid chelate for use as a foliar applied nutrient on crops to prevent and / or correct Copper deficiencies especially in relation to poor pollination and fruit set (**applied before but not during flowering**) as well as related plant physiological disorders like sub-optimal photosynthetic activity (chlorophyll formation and protection) and organelle protection as a result of anti-oxidant activity.

Product Characteristics:

Copper is a constituent of several enzyme systems involved in building and converting amino acids to proteins. Copper plays an important role in carbohydrate and protein metabolism. It is important in the formation of lignin in plant cell walls which contributes to the structural strength of cells and the plant as a whole which are important **Plant Stress Management™** actions.

CopperTrain is taken up effectively as a foliar spray and should be used on all crops with Copper deficiencies. It should be applied simultaneously where necessary with foliar applications of **BioDynoCMZ**, **BioKelp** and **BioPhos Repro**

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

Do not mix **CopperTrain** with highly alkaline products.

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

Application concentration should never be lower than **0.3% for maintenance applications up to a maximum spray concentration of 0.5%** for rectification of specific problems.

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

Composition:

Copper (Cu)	65278 mg/kg
Zinc (Zn)	667 mg/kg
Boron (B)	332 mg/kg
Amino Acids	6 %

Product Properties

S.G:	1.26 ± 0.02
pH:	2.7 ± 0.1
Appearance:	Turquoise, Green

Storage

Storage temperature: 13°C - 25°C.

Store in a cool dry area

Do not store in direct sunlight.

Use at least **0.1% FulMax (100mℓ per 100ℓ water)** in the spray mixture to enhance uptake of the nutrient through the leaf surface.

Note: in the case of crops with a thick cuticle or wax layer (Brassica's and onions), use at least 0.5% FulMax (500mℓ per 100ℓ water).

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

Apply foliar spray during cool periods of the day, do not apply on wilted plants or leaves.



AgriLibrium is a member of FERTASA and is certified for compliance in terms of set standards audited by Afri Compliance as stipulated in the FERTASA code of conduct.

Certificate Number: FERT-2018-08

Whilst every care is taken during the manufacturing of this product no responsibility can be taken by the manufacturer for any damage, loss or any other result due to the use of this product.

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).

General Recommendation:

Crop	Max rate/ha	Rate /100ℓ water	Remarks
Pome Fruit: Apples Pears	0.3% CopperTrain (up to 0.75% if applied alone) in addition to <i>Plant stress and growth stimulation treatments</i> with BioKelp, BioPhos and BioDynoMoB only from 14 days 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.	300ml CopperTrain plus 250ml BioKelp plus 250ml BioPhos plus 100ml BioDynoMoB plus 100ml FulMax /100 ℓ 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. Do not apply during flowering
Stone Fruit: Apricots, Peaches, Plums Sub-Tropical Fruit: Mango, Avocado, Macadamia, Pecan, Bananas, Litchis Citrus:	0.3% CopperTrain (up to 0.75% if applied alone) in addition to <i>Plant stress and growth stimulation treatments</i> with BioKelp, BioPhos and BioDynoMoB Add 100 - 200 ml/100ℓ FulMax to improve uptake and efficiency.	300ml CopperTrain 250-500ml BioKelp plus 250-500ml BioPhos plus 250ml BioDynoMoB 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 tablegrapes and during the lag phase (berry is pea size) for wine grapes.
Grapes: Table grapes Wine grapes	0.3% CopperTrain (up to 0.75% if applied alone) in addition to <i>Plant stress and growth stimulation treatments</i> with BioKelp, BioPhos and BioDynoMoB Add 100 - 200 ml/100ℓ FulMax to improve uptake and efficiency.	300ml CopperTrain 250-500ml BioKelp plus 250-500ml BioPhos plus 250ml BioDynoMoB Add 100 - 200 ml/100ℓ FulMax to improve uptake and efficiency.	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.
Root Vegetable: Potatoes Sweet Potato Other Vegetables: Tomatoes, Peppers	0.3% CopperTrain (up to 0.75% if applied alone) in addition to <i>Plant stress and growth stimulation treatments</i> with BioKelp, BioPhos and BioDynoMoB Add 100 - 200 ml/100ℓ FulMax to improve uptake and efficiency.	300ml CopperTrain plus 250-500ml BioKelp plus 250-500ml BioPhos plus 250ml BioDynoMoB Add 100 - 200 ml/100ℓ FulMax to improve uptake and efficiency.	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.
Grain: Wheat Maize Canola Oats Beans Soybeans Lucerne	0.3% CopperTrain (up to 0.75% if applied alone) in addition to BioDynoCMZ and BioDynoMoB Add 100 - 200 ml/100ℓ FulMax to improve uptake and efficiency.	300ml CopperTrain plus 750ml BioDynoCMZ plus 250ml BioDynoMoB 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 at flag leaf stage (if possible).

- Recommendations are also based on requirements for different crop types.

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



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