

Manganese Essentials™

Liquid manganese chelated with organic acids for enhanced plant uptake.



**ORGANIC
TRACE
ESSENTIALS**

Manganese plays an essential role in photosynthesis and adequate levels are critical for optimum plant production. This key element is also critical for improving crop resilience. Manganese deficiencies are widespread particularly in light, sandy soils. Typical deficiency symptoms include interveinal chlorosis and, ultimately, reduced yield and increased disease susceptibility. Now you can address your manganese requirements with an ACO Registered Farm Input.

Manganese Essentials™ contains 10.9% manganese organically chelated with fulvic acid and amino acids. This revolutionary mix of biological chelating agents improves plant uptake and assimilation of manganese.

BENEFITS

- Australian Certified Organic (ACO) Registered Farm Input 456AI (Restricted).
- 10.9% manganese with natural chelating agents including fulvic acid and amino acids for enhanced uptake.
- Manganese is essential for the photosynthesis reaction.
- Increase plant structural resistance.
- Improve crop stress tolerance.
- Includes natural plant growth and microbial promotants.

PACKAGING:

1 L, 5 L, 20 L,
200 L, 1000 L

Product Code:
MANGESS



Manganese Essentials™

APPLICATION RATES

Foliar Spray:

Vegetables

0.5 L per 100 L water up to 2.5 L/ha equivalent
Apply twice prior to flowering or as required

Orchards & Vineyards

0.5 L per 100 L water up to 5 L/ha equivalent
Apply twice prior to flowering or as required

Ornamentals

0.5 L per 100 L water up to 3 L/ha equivalent
Apply twice prior to flowering or as required

Turf

0.5 L per 100 L water up to 3 L/ha equivalent
Apply every 4 weeks or as required

Broadacre Crops

0.5 – 1 L/ha in 60 – 100 L water, depending on
canopy closure
Apply just prior to flowering or as required

Pasture

0.5 – 1 L/ha in 60 – 100 L water, apply as required

Spot-Spraying

25 mL per 10 L water, apply as required

Fertigation:

Vegetables & Ornamentals

3 L/ha, twice prior to flowering or as required

Orchards & Vineyards

3 – 5 L/ha, twice prior to flowering or as required

Turf

3 L/ha, every 4 weeks or as required

Seed Treatment:

2 L/tonne of seed mixed with sufficient water to just
coat the seed.

Home Garden Application:

Dilute 7.5 mL per 9 L watering can and apply the
diluted mix at a rate of 1 litre per square metre
Do not apply more than 6 times per year without
demonstrated trace element requirement.

TYPICAL ANALYSIS W/W

Manganese (Mn)	10.96%
Total Nitrogen (N) (as organic)	0.12%
Total Potassium (K) (as organic)	0.13%
Sulfur (S)	6.52%
Calcium (Ca)	247 mg/L
Magnesium (Mg)	352 mg/L
SG	1.2
pH	2.5 – 3.5
Conductivity	35 – 55 mS/cm
Appearance	Brown liquid

INSTRUCTIONS

Stir well before use. Rates and frequencies should be adjusted according to crop monitoring. Where higher water rates are required for good foliar coverage, do not exceed maximum product rate per hectare. Sensitive foliage or plants should be test sprayed prior to full scale application. Ensure suitable spray conditions (e.g. temperature, humidity, wind-speed), prior to foliar application. Compatibility and/or performance cannot be guaranteed when combined with other products. Jar test for compatibility and spray test on small area before wide-spread use.

IMPORTANT

- Not compatible with soluble calcium or phosphate based inputs.
- Avoid spraying close to harvest if produce is susceptible to staining.
- **Note:** Product in 1000 L tanks may weigh over 1 tonne. Forklift with 2 tonne lifting capacity is recommended.

STORAGE & HANDLING

- Read safety directions before use.
- Store in a cool dry area out of direct sunlight. This product has been tested to store safely down to 5°C. Crystallisation or sedimentation may occur below 5°C. Do not pre-mix or store in diluted form. Seal lid/cap immediately after use.

Disclaimer: Any recommendations provided by Nutri-Tech Solutions Pty Ltd (NTS) or its Distributors are advice only. As no control can be exercised over storage, handling, mixing, application or use, or weather, plant or soil conditions before, during or after application (all of which may affect the performance of our program), no responsibility for, or liability for any failure in performance, losses, damages, or injuries (consequential or otherwise), arising from such storage, mixing, application, or use will be accepted under any circumstances whatsoever. NTS recommend you contact an Agronomist prior to product application. The Buyer assumes all responsibility for the use of any NTS products.

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