

PHYNUTRIC

Professional crop nutrition product range

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|---------|
| Calcium |
| 20 |
| Ca |
| 40.078 |

Calcium Propionate

Fully soluble powdered organic calcium acid complex providing the highest level of assimilable calcium for foliar or irrigated crop nutrition. Calcium Propionate is designed for trans laminate and stomatal crop entry and may be combined with natural pH seaweed extracts for phloem transportation through the plant.

Plants need calcium

Plants need calcium for normal cell division as a component of cellulose which forms cell walls, and as a component of salts inside cells to facilitate osmosis.

Calcium has low mobility. Its strongest concentration is within older leaves and stem through accumulation over time. Plants use it to regulate the movement, assimilation and excess of other nutrients. New growth area needs for calcium may be harder to supply from soil reserves in older, more ligneous plants.

Calcium deficiency symptoms

Calcium deficiency can cause failure of the formation and possible tissue death of terminal buds, new leaves and root tips.

Roots – Soft cell tissue with limited breadth and depth of root growth

Stem - Weak structure, reduced plant turgidity – prone to lodging

Leaf – Unfolded, undersized sticky weak growth (new leaves), Chlorosis of leaf margins, Spotted necrotic leaf areas (older leaves)

Tuber crops – Rust in potatoes, Cavity spot in carrots, greater risk of damage from pests and disease

Stem and Leaf crops – Blackheart in celery, stemrot and tipburn in cabbage, internal stem rot in broccoli and sprouts.

Fruit and salad crops – Blossom end rot in peppers, capsicum in tomatoes, blackheart in celery, bitterpit and premature fruit drop in apples, pears, etc

Possible causes of calcium deficiency

Poor plant growth can be due to antagonisms with aluminium, manganese or iron in acid soils; or by magnesium, sodium or potassium in alkaline soils.

Physical restrictions to calcium uptake from the soil may be caused by drought, waterlogged soils, or root damage caused by pests and/or disease.

Recommended application rates

| | kilos per hectare | Applications | Max dilution |
|--------------------------|-------------------|--------------|--------------|
| Top fruit | 1 | 5 - 10 | 1/1000 |
| Tomatoes and peppers | 1 | 5 - 10 | 1/750 |
| Ornamentals | 1 | 3 - 5 | 1/750 |
| Potatoes and tuber crops | 1 | 3 - 5 | 1/500 |
| Vegetables and salads | 0.5 | 3 - 5 | 1/500 |
| Celery and Capsicums | 0.5 | 3 - 5 | 1/500 |
| Soft fruit | 0.5 | 3 - 5 | 1/500 |

Tank mixing advice

To avoid any risk when using for the first time, apply a small amount of powder in tepid water within a container along with the other desired components of your spray formulation and leave for a period of 5 minutes to see if there is any precipitation or other adverse reaction prior adding to your main tank mix.

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|-----------------------------|---|
| Appearance | White powder |
| Total Calcium as CaO | 27 % |
| Solubility | 100 % |
| Specific gravity | 1.22 |
| Product features | Highest concentration of pure, soluble calcium plant nutrition |
| Packing information | 25 kg plastic / paper bag with PE liner. Keep sealed in a cool and dry store |