Phynutric Calcium Propionate

Professional crop nutrition product range

- Calcium propionate was originally created for use as a livestock treatment for Milk fever and a mould inhibitor. It is also an extra calcium source for cattle, and is used as a mould inhibitor in key dietary aloe Vera holistic therapy for treating various infections. When large levels of aloe Vera liquid are added to dry feed pellets, calcium propionate is added to prevent mould growth.
- Propionic acid naturally occurs in animals and in dairy products in small amounts. It can be obtained from natural gas by the Fischer-Tropsch process, as a by product in the pyrolysis of wood, and by the action of microorganisms on a variety of materials in small yields.
- Calcium propionate has more recently been used as a calcium component in foliar crop nutrients to improve cellular growth, drought tolerance, regulation of nitrogen and sulphur assimilation.
- When Calcium propionate is foliar applied post flowering to fruit and vegetable crops, it can assist protection against fungal attack, while preventing premature fruit fall, and it can also improve the quality and the shelf life of harvested fruit and vegetables.

DYACARE™

Phynutric Calcium Propionate

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 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 - Week 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 pasts and disease

Stem and Leaf crops – Blackheart in celery, stem-rot and tip-burn in cabbage, internal stem rot in broccoli and sprouts.

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

DYACARE™

Phynutric Calcium Propionate

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

DYACARE™

Phynutric Calcium Propionate

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.

Appearance	White powder
Total Calcium as CaO	27 %
Solubility	100 %
Specific gravity	1.22
Product features	Highest concentration of pure, soluble calcium plant nutrition, with the added benefits of mould inhibition, reduced premature fruit-fall and extended shell life for fruit and vegetable crops
Packing information	25 kg bag. Keep sealed in a cool and dry store

For more information on Phynutric Calcium propionate, or any other product within our extensive portfolio, please contact us via info@Dyacare.co.uk

DYACARE™